EUROPEAN AND MEDITERRANEAN PLANT PROTECTION ORGANIZATION
ЕВРОПЕЙСКАЯ И СРЕДИЗЕМНОМОРСКАЯ ОРГАНИЗАЦИЯ ПО КАРАНТИНУ И ЗАЩИТЕ РАСТЕНИЙ
ORGANISATION EUROPEENNE ET MEDITERRANEENNE POUR LA PROTECTION DES PLANTES

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Forest pests on the territories of the former USSR

As part of a broader programme of analysis of the risk of forest pests in the former USSR to other parts of EPPO region, the EPPO Secretariat has made a collection of information concerning the pests of forest trees in the former USSR. The table first presented at the Panel meeting in Helsinki (2000-02-8/10) and then in Perm' (2000-07-04/07), Paris (2001-03-13/15), Zagreb (2001-07-03/05), Vilnius (2002-03-12/14), Paris (2002-09-24/26), Riga (2003-04-01/04), Venezia (IT, 2003-10-1/3) and Grisslehamn (SE, 2004-09-27/29) was devided into 10 tables: (1) the most important (for non-European part of the EPPO region) pests for which PRA was performed by the Panel; (2) forest pests causing significant damage on the territory of the former USSR (intended to be included into the PQR system), for which either more information is needed, or for which pathways do not at present exist, or whose host plants are not of importance for Central and Western Europe; (3a) less important (for non-European part of the EPPO region) pests which are present in Central/Western Europe; (3b) forest pests causing significant damage on the territory of the former USSR, which may present risk only or mainly to plants, which are not considered as forest trees and shrubs in most of the non-Asian part of the EPPO region; (4) pests causing significant damage on the territory of the former USSR added to the data base and not yet prioritised; (5) first priority (for non-European part of the EPPO region) forest diseases; (6) forest diseases, for which more information is needed; (7a) forest diseases causing significant damage on the territory of the former USSR, but which are already present in other parts of the EPPO region; (7b) forest diseases causing significant damage on the territory of the former USSR, which may present risk only or mainly to plants, which are not considered as forest trees and shrubs in most of the non-Asian part of the EPPO region; (8) forest diseases causing significant damage on the territory of the former USSR added to the data base and not yet prioritised. The information is presented in the form of tables which, it is intended, will finally include all recorded forest pests. The data has been obtained mainly from a study of the major forestry publications in the Russian language, and continue by an analysis of regionally-oriented literature in order to ensure that those pests are included that may be of concern to only a relatively small part of this large geographic area or that may attack host plants of minor importance.

The further continuation of this programme will be to prioritize these pests into categories of importance as potential quarantine pests to the rest of EPPO region; thereafter, more detailed information will be collected about the priority pests in order to perform PRAs to decide whether these pests should be quarantine pests and what measures should be taken to prevent their introduction.

Structure of the table

The table is arranged in order of the following pest groups, insects, mites, nematodes, fungi and bacteria, and then subdivided according to the taxonomy of the groups. It presents the identity of each pest, with the scientific name, (as verified by the Arthropod Name Index (ANI) data base of CABI, or the EPPO Plant Protection Thesaurus), as well as the name generally used in Soviet literature (placed in square brackets).

Information on distribution of the pest covers distribution in the former USSR and distribution in other countries. The distribution in the former USSR covers the fifteen Soviet Socialist Republics (Armenia, Azerbaijan, Belarus, Estonia, Georgia, Kazakhstan, Kyrgyzstan, Latvia, Lithuania, Moldova, Russian Federation, Tadjikistan, Turkmenistan, Ukraine and Uzbekistan). In this report, because of its large geographic area, the Russian Federation is subdivided into the following arbitrary units, which do not correspond exactly with the administrative subdivisions[1] (see Figure 1):

1. **North European Russia** (N.E.Russia) – republics of Karelia and Komi; oblast's of Arkhangel'sk and Murmansk;
2. **Central European Russia** (C.E.Russia) – republics of Bashkiria, Chuvashia, Maryi, Mordovia, Tatarstan and Udmurtia; oblast's of Bryansk, Vladimir, Gor'ki, Ivanovo, Kaliningrad, Kaluga, Kirov, Kostroma, Leningrad, Lipetsk, Moscow, Novgorod, Oryol, Penza, Perm', Ryasan', Smolensk, Tambov, Tula, Tver', Ulianovsk, Vologda and Yaroslavl';
3. **South European Russia** (S.E.Russia) – krays of Krasnodar and Stavropol'; republics of Chechnya, Dagestan, Kabardino-Balkaria, Kalmykia and North Ossetia; oblast's of Astrakhan', Belgorod, Kursk, Nizhnii Novgorod, Orenburg, Rostov, Samara, Saratov, Volgograd and Voronezh;
4. **North – Western Siberia** (N.W.Siberia) – north-west of Krasnoyarsk kray; north of Tyumen' oblast';
5. **North – Eastern Siberia** (N.E.Siberia) – republic of Sakha; north-east of Krasnoyarsk kray;
6. **Southern Siberia** (S.Siberia) – republic of Tuva; Altay kray, south of Krasnoyarsk kray; oblast's of Chelyabinsk, Irkutsk, Kemerovo, Kurgan, Novossibirsk, Omsk, Sverdlovsk and Tomsk; south of Tyumen' oblast';
7. **Transbaikalia** (Transbaik.) – republic of Buryatia; oblast' of Chita;
8. **North of the Russian Far East (N.FarEast)** – oblast's of Kamchatka and Magadan;
9. **South of the Russian Far East (S.FarEast)** – krays of Khabarovsk and Primorie; oblast's of Amur and Sakhalin.

Also for convenience, some of the other Soviet Socialist Republics are grouped as follows:
Baltic countries – 3 countries: Estonia, Latvia and Lithuania and Kaliningrad oblast' of Russia;
Central Asia – 4 countries: Kyrgyzstan, Tadjikistan, Turkmenistan and Uzbekistan;
Transcaucasus – 3 countries: Armenia, Azerbaijan and Georgia.

The table contains a column giving the main host genera, in order of host importance, and a column with the parts of the host plants that are damaged by the pest (e.g. fruits, seeds, leaves, trunks and branches, roots, cut wood). Then the economic significance of the pest damage in the areas of origin is given according to the following broad categories: **VH** – very high; **H** – high; **M** – medium; **L** – low; **VL** – very low, often with a range (e.g. L – H) showing differences in importance in different parts of the region. If the pest is regarded as a quarantine pest in another part of the world, this is noted in the next column. Finally, the last column presents some remarks concerning damage, host plants or vector status.

[1] Note that the Russian Federation is divided into territorial units each called either "republic", "oblast'" or "kray", the differences between these units depending on their level of autonomy.

Figure 1. The area of the former USSR.
Countries are shown by their two-letter country codes: AM – Armenia; AZ – Azerbaijan; BY – Belarus; EE – Estonia; GE – Georgia; KG- Kyrgyzstan; KZ – Kazakhstan; LT – Lithuania; LV – Latvia; MD – Moldova; RU – Russian Federation; TJ – Tajikistan; TM – Turkmenistan; UA – Ukraine; UZ – Uzbekistan. For the purposes of displaying pest distribution in this project, the Russian Federation is divided into nine sub-units (as described in the text).

Table 1. Most important forest pests causing significant damage on the territory of their actual distribution for wich PRA has been conducted

N°	Pest	Group of organisms	Distribution			Main host plants in the former USSR	Damaged parts of plants	Economic signifi-cance in the area of origin	Remarks
			In the former USSR	In North America	In other countries				
Insecta									
Coleoptera									
1.1	*Agrilus planipennis* (=*Agrilus feretrius* Obenberger = *Agrilus marcopili* Obenberger = *Agrilus marcopoli ulmi* Kurowasa) **	*Buprestidae*	Not known, but according to Haack et al. (2002) is present in the Far East of Russia	Introduced: Canada (Ontario: Essex county), USA (Michigan: Livingston, Macomb, Oakland, Monroe, Washtenaw and Wayne counties; Ohio: Lucas county)	North-eastern China (Jilin, Liaoning, Heilogjiang, Inner Mongolia, Hebei and Shandong Provinces), Japan, Korea Republic, Mongolia and Taiwan	*Fraxinus americana, F. chinensis, F. japonica, F. lanunginosa, F. mandshuriana, F. mandshurica, F. nigra, F. pennsylvanica, F. rhynchophylla, Juglans mandshurica, Pterocarya rhoifolia, Ulmus davidiana* and *U. propinqua*. No data is given on the susceptibility of ash species commonly growing in Europe (e.g. *F. excelsior, F. angustifolia*).	Trunks (under bark)	M – H	
1.2	*Melanophila guttulata* Gebler (= *Phaenops guttulatus* Gebler = *Phaenops guttulata* Gebler = *Melanophila discopunctata* Fald. = *Melanophila fulvoguttata* Kerr. = *Phaenops fulvoguttata* Jacobs.) *	*Buprestidae*	Russia (Eastern half of European Russia, Siberia, Transbaïkalia, Far East)	Absent	Absent, intercepted in 1985 in pine wood (*Pinus sylvestris*) imported from Russia to Finland	Attacks mainly larch (*Larix sibirica, L. gmelinii* and other larch species), but also *Abies* (*A. sibirica, A. sp.*), *Picea* (*P. abies, P. ajanensis, P. obovata, P. sp.*), *Pinus* (*P. sibirica, P. sylvestris, P. sp.*)	Trunks (under bark)	M – VH	

Table 1. INSECTS *COLEOPTERA*

1.3	*Aeolesthes sarta* Solsky **	*Cerambycidae*	Turkmenistan, Uzbekistan, Tajikistan, Kyrgyzstan (south)	Absent	India (Western Himalayas), Pakistan (north), Afghanistan, Iran	Many species of *Ulmus*, *Populus*, *Salix*, *Platanus*, *Malus*, *Prunus*, *Pyrus*, *Juglans*, *Quercus*, *Betula*, *Fraxinus*, *Acer*, *Morus*, *Gleditsia*, *Robinia*, *Elaeagnus* and many other hardwoods and fruit trees. Its preferred hosts are: *Ulmus minor*, *Ulmus pumila*, *Populus diversifolia*, *Populus euphratica*, *Populus talassica*, *Populus alba*, *Populus X euroamericana*, *Salix acmophylla*, *Salix turanica*, *Salix aongarica*, *Platanus orientalis*, *Platanus acerifolia*, *Malus pumila* and *Juglans regia*.	Trunks (wood)	M – VH	Main damage – in mountains and in city plantations
1.4	*[Corymbia succedanea* L. (= *Leptura succedanea* L. = *Anoplodera succedanea* Lew.)*]* *	*Cerambycidae*	Russia (Transbaikalia, South Far East)	Absent	Northern China, Japan, Koreas	All available of conifer species, but prefers *Pinus koraiensis*, *Pinus pumila* and *Picea* species (*P. abies*, *P. ajanensis*, *P. obovata*, *P. sp.*)	Trunks (wood)	VL – L	
1.5	*Dokhtouroffia* (= *Dokhturovia* = *Dochturovia*) *baeckmanni* Yankovskii *	*Cerambycidae*	Kyrgyzstan; Kazakhstan; Uzbekistan	Absent	Absent	Spruce and fir, especially *Picea schrenkiana* and *Abies semenovii*	Trunks (wood)	L – M	
1.6	*Hesperophanes campestris* (=*Trichoferus campestris* Faldermann = *Trichoferus turkestanicus* Heyden = *Trichoferus flavopubescens* Kolbe = *Trichoferus rusticus* Ganglbauer) **	*Cerambycidae*	Armenia (recently), southern Kazakhstan, Kyrgyzstan, Russia (south-east of European part - recently, Transbaikalia, Eastern Siberia, Far East), Tajikistan, Uzbekistan.	Absent	Japan, Northern China, Northern Korea, northern Mongolia	Attacks *Malus* (*M. domestica*, *M. sp.*), *Morus*, *Sorbus (= Micromeles) alnifolia*, *Astragalus*, *Gleditsia*, *Salix*, *Betula*, *Broussonetia papirifera* and other fruit and deciduous trees, preferring mainly *Malus* and *Morus*, may attack cut wood of *Picea* (*P. schrenkiana*) and *Pinus*		L – H	
1.7	*Monochamus impluviatus* Motschulsky *	*Cerambycidae*	N.E.Russia (East), C.E.Russia (East), N.E.Siberia, N.W. Siberia, S.Siberia, Transbaikalia, S.Far East	Absent	Northern Mongolia; Northern China; Japan; Korea	Attacks all available species of coniferous in its natural area (*Larix*, *Pinus*, *Picea*, *Abies* and others), but prefers *Larix* (*L. gmelinii*, *L. sibirica*, *L. sp.*) and *Pinus sibirica*	Trunks (wood)	L – M	

Table 1. INSECTS *COLEOPTERA*

1.8	*Tetropium gracilicorne* Reitter **	*Cerambycidae*	N.E. Siberia (introduced to Kamchatka where it spread rapidly and is now an important pest), N.W. Siberia, S. Siberia, S. Far East, Kazakhstan	Absent	Northern China, northern Japan (Hokkaido, Honshu), northern Mongolia, Koreas. In 1998 intercepted in Austria in larch wood originating from Siberia	All available species of spruce, fir, larch and pine, but prefers *Larix gmelinii, Larix sibirica, Pinus sibirica, P. koraiensis, P. sylvestris, Abies nephrolepis, Picea ajanensis*	Trunks (under bark)	L – H	
1.9	*Tetropium staudingeri* Pic. (= *Tetropium tjanshanicum* Semenov = *Tetropium staudingeri* Plavilstshikov) *	*Cerambycidae*	Kyrgyzstan, Kazakhstan, Uzbekistan	Absent	Northwestern China	Attacks spruce, especially *Picea schrenkiana*. Many authors note only *Picea schrenkiana* as a host plant	Trunks (under bark)	L – M	
1.10	*[Turcmenigena* (= *Turkmenigena*) *varentzovi* Melgunov*]* *	*Cerambycidae*	Kazakhstan, Turkmenistan, Uzbekistan	Absent	Absent	Attacks mainly saxauls, especially *Haloxylon aphyllum* and *H. persicum*, but also *Salsola*, especially *S. richteri*	Trunks and roots (under bark)	L – M	
1.11	*Xylotrechus altaicus* Gebler (= *Xyloclytus altaicus* Gebler) **	*Cerambycidae*	N. E. Siberia, N. W. Siberia, S. Siberia, N. Far East, Transbaïkalia, S. Far East	Absent	Northern Mongolia	Attacks only larch: *Larix sibirica, L. gmelinii, L. olgensis, L. kamtschatica, L. x maritima* and other larch species present in its natural range	Trunks (wood)	L – H	
1.12	*Xylotrechus namanganensis* Heyden **	*Cerambycidae*	Kyrgyzstan, Kazakhstan, Tajikistan, Turkmenistan, Uzbekistan.	Absent	Afghanistan, China, possibly Iran	*Juglans, Prunus, Malus, Morus, Crataegus, Elaeagnus, Populus, Ulmus, Celtis, Salix, Betula, Alnus, Platanus*, other deciduous trees	Trunks (wood)	L – H	
1.13	*Agelastica alni orientalis* Baly (= *A. orientalis* Baly) *	*Chrysomelidae*	Kazakhstan (South-East); Kyrgyzstan; Uzbekistan, Tajikistan, Turkmenistan	Absent	China, Iran, possibly Afghanistan	Attacks *Salix, Populus* (*P. alba, P. sp.*), *Prunus dulcis*, *Malus* and *Betula*	Leaves	L – M	Main damage - to young trees
1.14	*Hylobius albosparsus* Boheman *	*Curculionidae*	Russia (North-East of the European part, Siberia, Transbaikalia, Far East, including Sakhalin, Kamchatka and Magadan)	Absent	China, Japan, Korea, Mongolia	Attacks all available species of conifers within its natural range, but prefers *Larix* (*L. gmelinii, L. sibirica, L. lubarskii, L. olgensis, L. sp.*), *Pinus* (*P. sibirica, P. sylvestris, P. sp.*) and *Picea* (*P. abies, P. obovata, P. sp.*)	Trunks (under bark)	L – M	
1.15	*Polyphylla* (= *Xerasiobia*) *alba* Pallas (= *Polyphylla hololeuca* Pallas) *	*Scarabaeidae*	C.E.Russia, S.E.Russia, S. Siberia; Azerbaijan, Armenia, Georgia, Kazakhstan, North of Turkmenistan, Uzbekistan, Ukraine	Absent	Northern and central China (Djungaria, Gobi desert, Guansi), Mongolia	Feeds on roots of many plants including forest trees. Among agricultural crops, the most often damages roots of fruit trees, grape wine, potato, beet and strawberry	Roots	L – M	Main damage – to young plantations

Table 1. INSECTS *COLEOPTERA*

1.16	*Ips golovjankoi* Pjatnitzkii (*Orthotomicus golovjankoi* Pjatnitzkii) *	*Scolytidae*	N. E. Siberia, S. Siberia (East), Transbaik.; S. Far East	Absent	Northern China, northern Japan, northern Korea	Attacks pine, especially *Pinus koraiensis, P. sibirica* and *P. x funebris,* and spruce, especially *Picea ajanensis* and *P. obovata*	Trunks (under bark)	VL – L	
1.17	*Ips hauseri* Reitter **	*Scolytidae*	S. Siberia (Altai Kray); Kyrgyzstan, Kazakhstan, Tajikistan	Absent	Absent	Attacks spruce, pine and larch, especially *Picea schrenkiana, Larix sibirica, Pinus sylvestris* and *Pinus pallasiana*	Trunks (under bark)	M – H	Main damage – to forests in mountains
1.18	*Ips spessivtsevi* Lebedev (= *Pityogenes spessivtsevi* Lebedev = *Pityogenes perfosus* Bees.) *	*Scolytidae*	Kazakhstan, Kyrgyzstan, Tadjikistan	Absent	Absent	Attacks spruce, especially *Picea schrenkiana*	Trunks (under bark)	M – H	
1.19	*Ips subelongatus* Motschulsky (=*Ips fallax* Egg.) **	*Scolytidae*	Russia (north-east of European Russia, all Siberia, Transbaikalia and Far East)	Absent	Northern Mongolia; Northern China	Attacks mainly larch: *Larix sibirica, L. gmelinii, L. olgensis,* and other larch species, but also *Pinus* (*P. sylvestris, P. sibiricus, P. koraiensis*), *Picea*, *Abies* and other coniferous present in its natural range	Trunks (under bark)	L – H	
1.20	*Scolytus morawitzi* Semenow (=*Eccoptogaster morawitzi* Semenow = *Scolytus pini* Eggers) **	*Scolytidae*	Russia (centre and north of European Russia, Southern Siberia, south of N. E. Siberia, south of N. W. Siberia, Transbaikalia, Far East)	Absent	Northern Mongolia	Attacks mainly larch: *L. gmelinii, L. olgensis, L. kamtschatica, Larix sibirica, L. x maritima* and other larch species present in its natural range, but also *Pinus sibiricus, P. koraiensis* and other coniferous	Trunks (under bark)	L – M	

Table 1. INSECTS *DIPTERA & HOMOPTERA*

Diptera									
1.21	*Strobilomyia [= Lasiomma] luteoforceps* Fan & Fang (=*Lasiomma jurtschenkoi* Elberg)*	*Anthomyiidae*	S. Far East	Absent	Northeastern China	*Larix gmelini*, *L. olgensis*, and *L. cajanderi*	Cones and seeds	M - H	
1.22	*Strobilomyia viaria* Huckett (= *Lasiomma melaniola* Fan. = *Strobilomyia melaniola* Fan.) **	*Anthomyiidae*	N. E. Siberia, S. Siberia (Baikal area), Transbaikalia, N. Far East (Kamtchatka)	Widespread in Western Canada and USA	Northeastern (Lianoning, Jilin, Heilongjiang Inner Mongolia) and Central China	Attacks cones of larch species: *Larix gmelini*, *L. olgensis*, *L. principis-rupprechti*, and *L. cajanderi*	Cones and seeds	M – H	Data of Dr. Alain Roques
1.23	*Cecidomyia pumila* Mamaev*	*Cecidomyiidae*	N. Far East	Absent	China	*Pinus pumila*, may also occasionnally infest *Pinus sibirica*	Cones and Seeds	M-H	Data of Dr. Alain Roques
1.24	*Resseliella ingrica* Mamaev (= *Thomasiniana ingrica* Mamaev) *	*Cecidomyiidae*	C. E. Russia (Leningrad region), S. Siberia (Krasnoyarsk territory)	Absent	Absent	Infests cones of spruce, *Picea abies* and *P. obovata*	Cones and seeds	M - H	Data of Dr. Alain Roques
Homoptera									
1.25	*Adelges lapponicus* Kholodkovskii (= *Chermes lapponicus* var. *praecox* Kholodkovskii = *Adelges laplanicus* Kholodkovskii) *	*Adelgidae*	N. E. Russia, C. E. Russia; Baltic countries; Belarus	Absent	Estonia (in parks), Finland, Kyrgyzstan (introduced)	Prefers *Picea abies* but may develop on *P. obovata, P. glauca, P. mariana, P. schrenkiana, P. pungens, P. ajanensis* and other spruce species	Young sprouts and needles	L – M	Main damage - to young trees in plantations and nurseries
1.26	*Ceroplastes japonicus* Green (= *Cerostegia japonicus* Green = *Ceroplastes floridensis* Comst. = *Ceroplastes floridensis var. japonicus* Green) *	*Coccidae*	S. E. Russia (introduced); Transcaucasus, Azerbaijan (introduced), Georgia including Adzharia and Abkhasia (introduced), China, Japan, Republic of Korea	Not yet checked	China, Japan, Republic Korea, New Zealand, Great Britain (introduced), south-eastern France (introduced), Italy (introduced), Slovenia (introduced)	Damages 95 to 121 plant species, prefers *Laurus nobilis, Diospyros kaki, Camellia sinensis* and *Morus* spp. Less preferable are *Prunus laurocerasus*, *Citrus reticulata*, *Citrus unshiu* and some other *Citrus* spp., then come *Malus* spp., *Magnolia* spp., *Poncirus trifoliata*, *Camellia* spp., *Pittosporum*, *Crataegus* spp.	Trunks, leaves & branches	L – H	*Coccidae*
1.27	*Ceroplastes sinensis* Del Guercio *	*Coccidae*	Southern Russia (introduced); Azerbaijan (introduced), Georgia including Adzharia and Abkhasia (introduced), Tajikistan (introduced), Uzbekistan (introduced)	Mexico, USA	Algeria, Australia, Benin, Brazil, China, Cot d'Ivoire, Egypt, France, Hawaii, India, Iran, Italy, Japan, Morocco, Mozambique, New Zealand, Portugal, Spain, Syria, Togo, Tunisia, Turkey, Viet Nam	Damages 30 to 137 species of plants. It prefers different *Citrus* species (especially *Citrus sinensis*), *Punica granatum*, *Laurus nobilis*, *Diospyros kaki*, *Camellia sinensis*, *Eriobotrya japonica*, *Juglans regia*, *Prunus persica*, *Pyrus* spp. and many other plants. On herbaceous plants, the pest may develop only larvae of the first and the second stages.	Trunks, leaves & branches	L – H	*Coccidae*

Table 1. INSECTS HOMOPTERA, HYMENOPTERA & ISOPTERA

1.28	*Lepidosaphes ussuriensis* Borchsenius (= *Paralepidosaphes ussuriensis* Borchsenius) **	*Diaspididae*	Russia (South of the Far East and Sakhalin)	Not known	Northern China, Japan (Hokkaido, Honshu)	Polyphagous pest, damaging *Ulmus, Alnus, Malus, Populus, Betula, Euonymus, Syringa,* and many other plants	Trunks & branches (on the bark)	L – M	Main damage - to young plants
				Hymenoptera					
1.29	*Dryocosmus* (=*Biorhiza*) *kuriphilus* Yasumatsu **	*Cynipidae*	Absent	USA. (south east: Georgia, Alabama, North Carolina and Tennessee)	China, Italy (Piedmont region, South of Cuneo province) Japan, Korea	Attacks *Castanea crenata, C. dentata, C. mollissima, C. sativa* and their hybrids. Infests also *C. seguinii* in China, but not yet other wild North American species of *Castanea*: *C. pumila* and *C. alnifolia*, which are often grown adjacent to infested chestnuts	Twigs & nuts	L – M	
1.30	*Sirex ermak* Semenov-Tian-Shanskii (=*Paururus ermak* Semenov) **	*Siricidae*	N. W. Siberia, N. E. Siberia, S. Siberia, Transbaikalia, S. Far East (including Sakhalin island)	Absent	Not known. Possibly northern Mongolia and northern China	Attacks several species of *Larix (L. gmelinii, L. sibirica*, preferred hosts, *L. sp.), Picea* (*P. ajanensis, P. obovata, P. sp.*), *Pinus (P. sibirica, P. sp.)* and *Abies* (*A. sibirica, A. sp.*)	Trunks (wood)	VL – M	
				Isoptera					
1.31	*Anacanthotermes (= Hodotermes = Acanthotermes) ahngerianus* Jacobson *	*Termitidae*	Kyrgyzstan, southern Kazakhstan, Tajikistan, Turkmenistan, Uzbekistan	Absent	Iran	Attacks all available kinds of wood (coniferous and deciduous) paper and cardboard, cotton textile and other materials containing cellulose; also may damage plastic materials: peno-polyurethane, polyethylene, foam plastic, glass-fibre plastics, etc. Known to damage seeds and plants of *Haloxylon* sp., *Salsola* (*S. richteri, S. gemmascens, S. arbuscula, S. dendroides, S.* sp.), *Artemisia* (*A. harba alba, A. kemrudica, A.* sp.), *Alhagi persarum, Lagonychium farctum, Gossypium* sp., *Ephedra strobilacea, Astrogalus unifoliolatus, Euclidium syriacum, Carex pachistilis, Koelpinia linearis, Lepidium perfoliatum, Reaumuria* sp., *Malcolmia* sp., *Alyssum* sp., *Gramineae*, and some other	Wood	M – H	Main damage - to telegraph-poles, wood in buildings, etc.

Table 1. INSECTS ISOPTERA & *LEPIDOPTERA*

1.32	*Anacanthotermes (= Hodotermes = Acanthotermes) turkestanicus* Jacobson *	*Termitidae*	Tajikistan, Turkmenistan, Uzbekistan	Absent	Iran	Attacks all available kinds of wood (coniferous and deciduous) paper and cardboard, cotton textile and other materials containing cellulose; also may damage plastic materials: peno-polyurethane, polyethylene, foam plastic, glass-fibre plastics, etc. Known to damage seeds and plants of *Salsola dendroides* and *S.* sp., *Alchagi persarum*, *Morus alba*, *Vitis vinifera*, *Malus domestica*, *Gleditsia*, *Gramineae*, cotton and some other	Wood	M – H	Main damage - to telegraph-poles, wood in buildings, etc.
				Lepidoptera					
1.33	*Coleophora dahurica* Fal'kovich *	*Coleophoridae*	N.E. Siberia, S. Siberia (East), Transbaik., N. Far East, S. Far East	Absent	China, Mongolia	Attacks larch, especially *Larix gmelinii*, *L. sibirica* and *L. olgensis*	Needles	L – M	
1.34	*Erannis jacobsoni* Diakonoff *(= Hybernia jacobsoni* Diakonoff *	*Geometridae*	N.E. Siberia (South), S. Siberia (East), Transbaik., N. Far East, S. Far East (South)	Absent	Mongolia	Attacks only larch, especially *Larix gmelinii* and *Larix sibirica*	Leaves	L – H	
1.35	*Phyllonorycter* (= *Lithocolletis* = *Phyllorycter*) *issikii* Kumata *	*Gracillariidae*	C. E. Russia (introduced), S. E. Russia (introduced), S. Far East; Ukraine (introduced)	Absent	Korea, Japan, Lithuania (introduced), Czekia (introduced), Germany (introduced), Austria (introduced), Poland (introduced)	Make plicated mines in the lower side of leaves of *Tilia cordata* (preferred host), *T. amurensis*, *T. mandshurica*, *T. maximowicziana* and other *Tilia*, but also *Betula platyphylla*	Leaves	L – H	Main damage – in city plantations
1.36	*Dendrolimus sibiricus* Tschetverikov (= *D. superans sibiricus* Tschetverikov) (= *D. laricis* Tschetverikov) **	*Lasiocampidae*	N.E.Russia, C.E. Russia, N.E.Siberia, N.W. Siberia, S. Siberia, Transbaik., N. Far East, S. Far East; Kazakhstan	Absent	Northern China; Korea Democratic People's Republic, Korea Republic; Northern Mongolia	Attacks more than 20 species of *Abies*, *Pinus*, *Larix*, *Picea* and *Tsuga*. Develops on practically all coniferous species in its natural area but prefers *Abies sibirica*, *Abies nephrolepis*, *Pinus sibirica*, *Pinus koraiensis*, *Larix gmelinii*, *Larix sibirica*, *Picea ajanensis*, *Picea obovata*	Needles	H – VH	

Table 1. INSECTS *LEPIDOPTERA*

1.37	***Dendrolimus superans*** Butler *(= D. superans albolineatus* Butler = *Dendrolimus albolineatus* Matsumura = *Dendrolimus jezoensis* Matsumura = *Dendrolimus yezoensis* Matsumura = *Odonestis superans* Butler) **	*Lasiocampidae*	S. Far East (Sakhalin, Kuril islands)	Absent	Korea; Japan	Attacks many species of *Abies, Pinus, Larix, Picea* and *Tsuga*. Develops on practically all coniferous species in its natural area but prefers *Pinus pumila, Larix kamtschatica, Larix maritima, Picea ajanensis* and *Abies sachalinensis*	Needles	H – VH	
1.38	*Malacosoma parallela* Staudinger**	*Lasiocampidae*	Armenia, eastern Kazakhstan, Kyrgyzstan, Uzbekistan, Tajikistan, and Turkmenistan.	Absent	Northern Iran, Syria, Turkey	*Atraphaxis pyrifolia, Berberis integerrima, Cerasus verrucosa, Chaenomeles japonica, Cotoneaster acutiuscula, C. insignis, C. suavis, Crataegus hissarica, C. pontica, C. turkestanica, Cydonia oblonga, Fraxinus sogdiana, Hippophae rhamnoides, Juglans regia, Lonicera korolkowii, L. nummulariifolia, Malus domestica, M. sieversii, Myricaria bracteata, Populus alba, P. tremula, Prunus mahaleb, P. avium, P. armeniaca, P. bucharica, P. cerasus, P. divaricata, P. dulcis, P. padus var. pubescens, P. persica, Pyrus communis, Quercus boissieri, Q. macranthera, Q. robur subsp. robur, Ribes nigrum, R. rubrum, Rosa canina, R. corymbifera, R. kokanica, R. maracandica, Rubus idaeus, R. turkestanicus, Salix excelsa, S. tenuijulis, Sorbus persica, S. turkestanica* and *Ulmus* sp. The most important damage occurs on almond, oak and wild apple trees. Important damage also occurs on *Berberis, Chaenomeles, Cotoneaster, Crataegus, Cydonia, Malus, Prunus, Pyrus, Rosa, Salix* and *Sorbus* species. Other plants are damaged occasionally	Leaves	L – M	

Table 1. INSECTS *LEPIDOPTERA*

1.39	*Dasychira albodentata* Bremer *	*Lymantriidae*	N.E.Siberia (south), N.W. Siberia, S. Siberia (east), Transbaïkalia, S. Far East	Absent	north of Mongolia, north of China	Attacks several species of *Larix* (mainly *Larix gmelinii*), *Pinus* (mainly *Pinus sylvestris, Pinus pumila* and *Pinus koraiensis*) and some other coniferous. Preferred hosts are *Larix gmelinii* and *Pinus sylvestris*	Needles	L – M	
1.40	*Euproctis (= Porthesia) kargalika* Moore *(=Euproctis karghalica* Moore = *Porthesia karghalika* Strand = *Euproctis kargalica* Grum-Grzhimailo = *Porthesia flavosulphurea* Grum-Grzhimailo) *	*Lymantriidae*	S. Siberia (Altai Kray); Kazakhstan, Kyrgyzstan, Uzbekistan, Tajikistan and Turkmenistan	Absent	Iran, China (north-west)	*Acer campestre, A. regelii, A. tataricum, A. turkestanicum, Alhagi* sp., *Atraphaxis pyrifolia, Betula pendula, Betula pubescens, Caragana arborescens, Cerasus verrucosa, Cotoneaster acutiuscula, C. insignis, C. suavis, Crataegus turcestanica, Cydonia oblonga, Elaeagnus angustifolia, Fragaria* sp., *Hippophae rhamnoides, Irga* sp., *Malus domestica, M. sieversii, Pistacia vera, Prunus armeniaca, P. avium, P. bucharica, P. cerasus, P. divaricata, P. dulcis, P. mahaleb, P. persica, Punica granatum, Pyrus bucharica, P. communis, Quercus* sp., *Rhucs coriaria, Ribes nigrum, R. rubrum, Robinia pseudoacacia, Rosa canina, R. corymbifera, R. kokanica, R. maracandica, Rubus caesius, R. idaeus, Rumex sp., Salix excelsa, S. tenuijulis, Spirea hypericifolia, Ulmus effusa, Ulmus foliacea* var. *campestris.* Other plants are damaged occasionally	Leaves	L – M	
1.41	*Lymantria* (=*Porthetria* = *Ocneria*) *mathura* Moore (= *Lymantria aurora* Butler = *Lymantria fusca* Leech = *Lymantria mathura aurora* Butler) **	*Lymantriidae*	S. Far East (South)	Absent	China (Western and Northern), India (Northern), Nepal, Japan, Koreas, Pakistan	Attacks many species of *Quercus, Juglans, Malus, Ulmus, Tilia, Salix, Betula, Castanea* and other deciduous trees. Preferred hosts are: *Juglans mandshurica, Malus mandshurica, Quercus mongolica, Quercus dentata, Ulmus japonica, Ulmus macrocarpa, Ulmus pumila, Tilia amurensis, Tilia mandshurica, Tilia pekinensis, Tilia taquetii*	Leaves	L – M	

Table 1. INSECTS *LEPIDOPTERA*

1.42	*Erschoviella* (= *Sarrothripus* = *Nycteola*) *musculana* Ershov **	*Noctuidae*	Southern Kazakhstan, Kyrgyzstan, Uzbekistan, Tajikistan, Turkmenistan Kazakhstan; Central Asia	Absent	Probably Afghanistan and Iran	Wild and cultivated varieties *Juglans regia*	Leaves, sprouts & nuts	L - M	
1.43	*Sphinx (= Hyloicus) morio* Rotsch. et Jord (=*H. laricis* Rozh.) *	*Sphingidae*	N. W. Siberia, N. E. Siberia, S. Siberia, N. Far East, S. Far East, Kazakhstan	Absent	China, Japan	Attacks mainly larch (*Larix sibirica, L. gmelinii* and other larch species) and *Pinus* (*Pinus sylvestris, P. sibiricus, P. koraiensis*).	Needles	L – M	
1.44	*Cydia (=Laspeyresia = Grapholitha*) *illutana ssp dahuricolana* Kuznetsov *	*Tortricidae*	N.E.Siberia, N.W. Siberia, S. Siberia, Transbaikalia	Absent	Absent	Attacks cones of larch, especially *Larix gmelinii* and *L. sibirica*, spruce, especially *Picea obovata*, fir and other coniferous	Cones and seeds	M – H	

* - species for which PRA was provided by the Panel but not recommended for inclusion into the EPPO lists
** - species for which PRA was provided by the Panel and recommended for inclusion into the EPPO lists

Table 2. Transition table: Forest pests to be included into the PQR system causing significant damage on the territory of the former USSR, for which either more information is needed, or for which pathways do not at present exist, or whose host plants are not of importance for Central and Western Europe

N°	Pest	Group of organisms	Distribution			Main host plants in the former USSR	Damaged parts of plants	Economic signifi-cance in the area of origin	Remarks
			In the former USSR	In North America	In other countries				
Acari (Arachnida)									
2.1	*Trisetacus kirghisorum* Shevchenko	*Phytoptidae* (Acariformes, Tetrapodili)	Armenia (introduced), Kazakhstan, Kyrgyzstan, Tadjikistan, Turkmenistan, Uzbekistan	Absent	Absent	*Juniperus semiglobosa, J. sabina, J. turkestanica, J. foetidissima, J. polycarpos*	Seeds	L - H	
Insecta									
Coleoptera									
2.2	*Dinoderus minutus* Fabr.	*Bostrichidae*	Ukraine (Crimea, introduced)	In tropical regions	Cosmopolitan in tropical regions	All deciduous and coniferous wood	Wood	L – M	Main damage – to wood in buildings
2.3	*[Enneadesmus scopini* Fursov.*]*	*Bostrichidae*	Kyrgyzstan, Tadjikistan, Turkmenistan, Uzbekistan & Kazakhstan	Absent	Absent	All deciduous and coniferous wood & *Elaeagnus angustifolia, E. orientalis*	Wood, branches of *Elaeagnus*	L – M	Main damage – to wood in buildings
2.4	*Psoa dubia ?*	*Bostrichidae*	Ukraine (Crimea, introduced)	Not known	Not yet checked	All deciduous and coniferous wood & *Vitis vinifera*	Wood	L – M	Main damage – to wood in buildings
2.5	*Xylogenes dilatatus* Rtt.	*Bostrichidae*	Kyrgyzstan, Tadjikistan, Turkmenistan, Uzbekistan & Kazakhstan	Absent	Syria, Iran	*Tamarix* (*T. laxa, T. ramosissima, T. hispida, T. pallasii, T. arceuthoides*) and other deciduous	Wood, under bark	L – M	Main damage – to wood in buildings
2.6	*Agrilus graminis* C. G (= *A. disparicornis* Bed.)	*Buprestidae*	C. E. Russia, S. E. Russia ; Baltic countries; Belarus; Moldova; Ukraine; Transcaucasus	Absent	Italy, Bulgaria	*Quercus cerris, Quercus sp., Castanea sativa, Rosa damascena*, other plants	Trunks (under bark)	L	
2.7	*Agrilus hastulifer* Ratz.	*Buprestidae*	N. E. Russia, C. E. Russia, S.E. Russia; Baltic countries; Belarus; Moldova; Ukraine; Transcaucasus	Absent	Italy	*Quercus* sp.	Trunks (under bark)	L	
2.8	*Anthaxia (= Melanthaxia) conradti* Semenov	*Buprestidae*	Kyrgyzstan, Tadjikistan, Turkmenistan, Uzbekistan (mainly mountains)	Absent	Absent	*Juniperus sabina, J. turcomanica, Juniperus* sp.	Trunks (under bark)	L – H	

Table 2. INSECTS *COLEOPTERA*

2.9	*Anthaxia manca* L. (= *Cratomerus mancus* L = *Trichocratomerus mancus* L)	*Buprestidae*	S. E. Russia, Azerebaijan, Armenia, Estonia, Georgia, Moldova, Latvia, Lithuania, Ukraine	Absent	Algeria, Austria, Bosnia, Bulgaria, Croatia, Czekia, France, Germany, Hungary, Italy, Iran, Macedonia, Poland, Portugal, Romania, Serbia, Slovakia, Slovenia, Spain, Switzerland, Turkey	*Ulmus* sp., *Robinia pseudoacacia, Populus tremula, Rhamnus alaternus*	Trunks (under bark)	VL – M	
2.10	*Cratomerus (= Trichocratomerus) aurulentus* F. *(= Anthaxia aurulenta* F.*)*	*Buprestidae*	S. E. Russia ; Moldova; Ukraine	Absent	West of Mediterranean region, south-eastern and eastern Europe	*Ulmus* sp., *Salix alba*	Trunks (under bark)	VL – M	
2.11	*Lampra mirifica* Mulsant	*Buprestidae*	C. E. Russia, S. E. Russia ; Baltic countries; Belarus; Moldova; Ukraine; Transcaucasus	Absent	Mediterranean region	*Ulmus*	Trunks (under bark)	L – M	
2.12	*Monochamus grandis* Waterhouse	*Cerambycidae*	S. Far East (Kurile islands: Kunashir, Shikotan)	Absent	Japan	*Pinus koraiensis, P. parviflora, P. pumila, P. funebris, Abies sachalinensis, A. holophylla, A. nephrolepis, A. mariesii, A. firma, Picea ajanensis, P. glehnii, P. koraiensis, Tsuga* sp., other conif.	Trunks (wood)	L – H	
2.13	*Monochamus nitens* Bates	*Cerambycidae*	S. Far East (Sakhalin, Kunashir)	Absent	China (North), Japan	*Picea ajanensis, P. glehnii, P. koraiensis, Pinus koraiensis, P. parviflora, P. pumila, P. funebris, Abies mariesii, A. firma, Larix leptolepis*	Trunks (wood)	L – M	
2.14	*Semanotus semenovi* Okunev	*Cerambycidae*	Kyrgyzstan, Tadjikistan, Turkmenistan, Uzbekistan	Absent	Absent	*Juniperus semiglobosa, J. polycarpa, J. sabina, J. turcomanica, , J. turkestanica, J. foetidissima, J.* sp.	Trunks (wood)	L – M	
2.15	*Pissodes cembrae* Motsch.	*Curculionidae*	S. Siberia, N.E. Siberia, N. Far East, S. Far East	Absent	Northern China; Japan	*Pinus sibirica* (preferred host), *P. koraiensis, P. pumila, P.* sp., *Larix* sp., *Picea* sp., *Abies* sp.	Trunks and roots (under bark), twigs (at the additional feeding)	L – H	
2.16	*[Pissodes gallosi ? (= P. galloisi)]*	*Curculionidae*	S. Far East	No data	No data	*Pinus*, other coniferous	Trunks and roots (under bark)	L	

Table 2. INSECTS *COLEOPTERA*

2.17	*[Pissodes insignitus* Boh. *(= P. insignatus)]*	*Curculionidae*	N.E. Siberia, S. Siberia, Transbaik., N. Far East, S. Far East	Absent	Absent	*Pinus sibirica, P. pumila, Larix gmelinii, Larix sibirica, Larix* sp.	Trunks (under bark)	L – M	
2.18	*Pissodes irroratus* Reiit.	*Curculionidae*	N.E. Siberia, N. Far East, S. Far East	Absent	Absent	*Pinus sibirica, P. pumila, Larix gmelinii, Larix sibirica, Larix* sp., *Abies* sp., other coniferous	Trunks (under bark)	L – M	
2.19	*Pissodes (=P. strobi* Say.*) nemorensis* Germ.	*Curculionidae*	S. Far East	Canada, USA	Japan, South Africa	*Pinus funebris, P. koraiensis, P.* sp., *Picea*	Trunks (under bark)	L – M	
2.20	*Pissodes nitidus* Roel.	*Curculionidae*	N. Far East, S. Far East	Absent	Japan, China	*Pinus funebris, P. sylvestris, P. densiflora, P. koraiensis, P.* sp.	Trunks (under bark)	L – M	
2.21	*Agriotes gurgistanus* Faldermann	*Elateridae*	S. E. Russia ; Moldova; Ukraine; Transcaucasus; Turkmenistan	Absent	Balcanians; Turkey, south-eastern Europe	Deciduous, coniferous and other plants, mainly agricultural crops (cereals, etc.)	Roots	L – M	Main damage - to young plants and in nurseries
2.22	*Selatosomus latus* F	*Elateridae*	C. E. Russia, S. E. Russia, S. Siberia (West), Transbaik., S. Far East; Baltic countries; Belarus; Moldova; Ukraine; Transcaucasus	Absent	Central and southern Europe, China, Iran, Japan, Mongolia, Turkey	Deciduous, coniferous and other plants, mainly agricultural crops (sugarbeet, cereals, vegetables, etc.) except tomato and cabbage	Roots	L – M	Main damage - tn young plants and in nurseries
2.23	*Lethrus apterus* Laxmann	*Geotrupidae*	S. E. Russia, S. Siberia; Baltic countries; Belarus; Moldova; Ukraine, Tadjikistan	Absent	China, Netherlands	Deciduous, coniferous and other plants, mainly agricultural crops	Roots	L – M	Main damage - to young plants and in nurseries
2.24	*[Carphoborus jurinskii* Eggers*]*	*Scolytidae*	N.E.Siberia, N.W. Siberia, S. Siberia	Absent	Absent	*Picea, Pinus*	Trunks (under bark)	VL – L	
2.25	*[Cryphalus (=C. punctulatus* Eggers*) kurenzovi* Stark*]*	*Scolytidae*	S. Far East (including Sakhalin & Kuril islands)	Absent	Absent	*Abies nephrolepis* (preferred host), *Pinus pumila, Picea* sp.	Trunks (under bark)	VL – L	
2.26	*Cryphalus latus* Eggers	*Scolytidae*	Transbaik., S. Far East (including Sakhalin)	Absent	North-west China	*Larix gmelinii, Larix olgensis* (preferred hosts), *Picea ajanensis, Picea obovata, Abies nephrolepis, Abies holophylla*	Trunks (under bark)	VL – L	
2.27	*Cryphalus orientalis* Eggers	*Scolytidae*	Transcaucasus	Absent	Absent	*Abies nordmanniana, Picea orientalis,* other coniferous	Trunks & branches (under bark)	L – M	Main damage – to young trees

Table 2. INSECTS *COLEOPTERA*

2.28	*Cryphalus piceus* Eggers	*Scolytidae*	S. Far East (including Sakhalin)	Absent	North-east China, Japan	*Picea ajanensis, P. obovata, P. koraiensis* (preferred hosts), *Abies nephrolepis, A. holophylla* (preferred hosts), *Pinus funebris, Larix gmelinii, Larix olgensis*	Trunks (under bark)	VL – L	
2.29	*Cryphalus redikorzevi* Berger	*Scolytidae*	S. Far East (including Sakhalin & Kuril islands)	Absent	North-east China, Koreas	*Abies nephrolepis, A. holophylla* (preferred hosts), *Abies* spp., *Picea* spp.	Trunks (under bark)	VL – L	
2.30	*[Cryphalus sichotensis* Kur.*]*	*Scolytidae*	S. Far East (Primorie) (including Sakhalin)	Absent	Absent	*Picea ajanensis* (preferred host), *Picea* spp.	Trunks (under bark)	VL – L	
2.31	*[Cryphalus ussuriensis* Eggers*]*	*Scolytidae*	S. Far East (Primorie)	Absent	Absent	*Abies* spp.	Trunks (under bark)	VL – L	
2.32	*Crypturgus tuberosus* Niis.	*Scolytidae*	S. Far East (Primorie) (including Sakhalin)	Absent	Northern Japan	*Picea ajanensis* (preferred host), *P. glehnii, Pinus pumila, P. koraiensis*	Trunks (under bark)	VL – L	
2.33	*Dryocoetes abietinus* Kono et Tamanuki (= *D. striatus* Eggers)	*Scolytidae*	S. Far East (Sakhalin)	Absent	Japan	*Abies sachalinensis, A. nephrolepis, A. holophylla*	Trunks (under bark)	VL – L	
2.34	*Dryocoetes baicalicus* Reitter *(=D. budkovi* Sem.*)*	*Scolytidae*	Russia: widespread in coniferous area	Absent	Mongolia	*Larix sibirica, L. gmelinii, L. plgensis,* (preferred hosts), *Larix* spp., *Pinus korajensis, P. sibirica, Pinus* spp., *Abies nephrolepis, A. holophylla, Abies* spp.	Trunks (under bark)	VL – L	
2.35	[*Dryocoetes orientalis* Kur.]	*Scolytidae*	S. Far East (Primorie)	Absent	Absent	*Pinus korajensis* (preferred host), *Pinus* spp., *Abies* spp.	Trunks (under bark)	VL – L	
2.36	[*Dryocoetes pini* Niijima]	*Scolytidae*	S. Far East (Sakhalin)	Absent	Japan	*Pinus pumila* (preferred host), *Pinus* spp., *Larix* spp., *Abies* spp., *Picea* spp.	Trunks (under bark)	VL – L	
2.37	*Dryocoetes rugicollis* Eggers	*Scolytidae*	S. Far East (including Sakhalin & Kuril islands)	Absent	North-east China, Japan	*Picea obovata* (preferred host), *Picea* spp., *Abies nephrolepis, Abies* spp.	Trunks (under bark)	VL – L	
2.38	[*Hylurgops imitator* Reitter]	*Scolytidae*	N.E.Siberia, N.W. Siberia, N. Far East, S. Far East	Absent	China, Koreas, Japan	*Pinus korajensis* (preferred host), *Pinus* spp., *Picea ajanensis, Picea* spp., *Larix* spp.	Trunks (under bark)	VL – L	
2.39	[*Hylurgops interstitialis* Chapuis]	*Scolytidae*	S. Far East, N.E. Siberia (introduced)	Absent	Absent	*Pinus korajensis, Abies holophylla* (preferred hosts), *Abies nephrolepis, Abies* spp., *Pinus funebris, Pinus* spp., *Picea ajanensis, Picea* spp.	Trunks (under bark)	VL – L	
2.40	*Hylurgops longipilis* Reitt.	*Scolytidae*	N. Far East (introduced), S. Far East (including Sakhalin)	Absent	Absent	*Pinus korajensis* (preferred host), *Pinus* spp., *Larix gmelinii, Larix* spp., *Picea ajanensis, Picea* spp.	Trunks (under bark)	VL – L	

Table 2. INSECTS *COLEOPTERA*

2.41	*Hylurgops palliatus* Gyll. (= *H. parvus* Eggers = *H. helferi* Villa)	*Scolytidae*	N. E. Russia, C. E. Russia, N. W. Siberia, N. E. Siberia, S. Far East (Primorie) (including Sakhalin & Kuril islands); Kazakhstan	Absent	W. Europe, Japan, Koreas, China	*Pinus korajensis* (preferred host), *Pinus sibirica, P. pumila, Pinus* spp., *Picea* spp.	Trunks (under bark)	VL – L	
2.42	[*Hylurgops spessivtzevi* Eggers (= *H. tuberculatus* = *H. transbaicalicus*)]	*Scolytidae*	N.E.Siberia, N.W. Siberia, N. Far East, S. Far East (including Sakhalin)	Absent	North-east China	*Pinus korajensis* (preferred host), *P. sylvestris, Pinus* spp., *Picea obovata, Picea* spp., *Larix gmelinii, Larix* spp.	Trunks (under bark)	VL – L	
2.43	[*Hylurgops starki* Eggers (= H. cunicularius)]	*Scolytidae*	N. E. Russia, C. E. Russia, N.W. Siberia	Absent	Finland, Sweden	*Picea abies, Pinus sylvestris* (preferred hosts), *Picea* spp., *Pinus* spp., *Larix* spp.	Trunks (under bark)	VL – L	
2.44	[*Ips ussuriensis* Reitter]	*Scolytidae*	S. Far East (Primorie)	Absent	Absent	*Pinus* spp., *Picea* spp., *Abies* spp., *Larix* spp.	Trunks (under bark)	L – M	
2.45	*Phloeosinus turce-stranicus* Semenov	*Scolytidae*	Central Asia	Absent	Absent	*Juniperus pseudosabina, J. polycarpos, J excelsa, J. communis, Juniperus* spp.	Trunks (under bark)	L – H	
2.46	[*Phloeotribus caucasicus* Reitter]	*Scolytidae*	S.E. Russia; Baltic countries; Belarus; Moldova; Ukraine; Transcaucasus; Central Asia	Absent	Absent	*Fraxinus excelsior, Fraxinus* spp.	Trunks (under bark)	L	
2.47	[*Pityogenes aizawai* Kôno]	*Scolytidae*	S. Far East (Sakhalin)	Absent	Absent	*Picea* spp., *Abies* spp.	Trunks (under bark)	VL – L	
2.48	[*Pityogenes foveolatus* Eggers]	*Scolytidae*	N.E.Siberia, N.W. Siberia, S. Siberia, Transbaik., N. Far East, S. Far East	Absent	Japan	*Pinus pumila, Pinus* spp., *Picea ajanensis, Picea* spp.	Trunks (under bark)	L	
2.49	[*Pityogenes rudnevi* Sok.]	*Scolytidae*	S. Far East (Primorie)	Absent	Absent	*Picea* spp.	Trunks (under bark)	VL – L	
2.50	[*Pityogenes seirindensis* Murayama]	*Scolytidae*	S. Far East	Absent	Koreas, northern Japan	*Picea ajanensis*, *Picea obovata* (preferred hosts), *Picea* spp., *Abies nephrolepis, Abies* spp.	Trunks (under bark)	VL – L	
2.51	[*Pityophthorus jucundus* Blandford]	*Scolytidae*	S. Far East (Sakhalin)	Absent	Koreas, Japan	*Picea ajanensis* (preferred host), *Picea* spp., *Pinus* spp.	Trunks (under bark)	VL – L	
2.52	[*Pityophthorus kurenzovi* Krivolutskaja (= *P. abietis* Kurentzov = P. sibiricus Nunberg)]	*Scolytidae*	S. Far East (Primorie)	Absent	Absent	*Abies holophylla, Abies nephrolepis, Abies* spp.	Trunks (under bark)	VL – L	
2.53	[*Pityophthorus lapponicus* Stark]	*Scolytidae*	N. E. Russia, C. E. Russia, S. Far East	Absent	Absent	*Picea abies, Picea obovata, Picea* spp.	Trunks (under bark)	VL – L	

Table 2. INSECTS *COLEOPTERA*

2.54	[*Pityophthorus pini* Kurentzov]	*Scolytidae*	N.E.Siberia, N.W. Siberia, S. Siberia, N. Far East, S. Far East	Absent	Absent	*Pinus sibirica, P. koraiensis, Pinus* spp., *Picea* spp.	Trunks (under bark)	VL – L	
2.55	[*Pityophthorus rossicus* Eggers]	*Scolytidae*	C. E. Russia (Tambov)	Absent	Absent	*Pinus sylvestris, Pinus* spp.	Trunks (under bark)	VL – L	
2.56	[*Pityophthorus sachalinensis* Kriv.]	*Scolytidae*	S. Far East (Sakhalin)	Absent	Absent	*Abies sachalinensis, Abies* spp.	Trunks (under bark)	VL – L	
2.57	[*Pityophthorus sichotensis* Kurentzov]	*Scolytidae*	N.E.Siberia, N.W. Siberia, S. Siberia, S. Far East	Absent	Absent	*Picea ajanensis, Picea* spp.	Trunks (under bark)	VL – L	
2.58	*Polygraphus gracilis* Niijima	*Scolytidae*	S. Far East (including Sakhalin & Kuril islands)	Absent	Japan	*Picea ajanensis, Picea glehnii, Picea* spp., *Abies sachalinensis, Abies* spp.	Trunks (under bark)	VL – L	
2.59	*Polygraphus griseus* Eggers	*Scolytidae*	N. E. Russia (Kolsk peninsula)	Absent	Sweden, Finland	*Picea obovata, Picea* spp.	Trunks (under bark)	VL – L	
2.60	*Polygraphus jezoensis* Niijima	*Scolytidae*	N. Far East, S. Far East (including Sakhalin)	Absent	Japan	*Picea ajanensis, Picea glehnii, Picea* spp., *Pinus* spp.	Trunks (under bark)	VL – L	
2.61	*Polygraphus proximus* Blandford (= P. *abietis* Kurentzov = *P. laticollis* Eggers = *P. miser* Blandford)	*Scolytidae*	S. Far East (including Sakhalin & Kuril islands)	Absent	North Korea, Japan, China	*Abies holophylla, A. sachalinensis, A. nephrolepis* (preferred hosts), *A.* spp., *Pinus koraiensis, Pinus* spp., *Picea ajanensis, Picea* spp., *Tsuga* spp.	Trunks (under bark)	L – M	
2.62	*Polygraphus subopacus* Thoms (= *P. sachalinensis* Eggers)	*Scolytidae*	N.E. Siberia, N. Far East, S. Far East (including Sakhalin & Kuril islands)	Absent	Japan, Koreas, Mongolia, Europe	*Picea ajanensis, P. koraiensis* (preferred hosts), *P.* spp., *Pinus* spp.	Trunks (under bark)	VL – L	
2.63	*Pteleobius kraatzi* Eichhoff	*Scolytidae*	C. E. Russia, S. E. Russia; Baltic countries; Belarus; Moldova; Ukraine; Transcaucasus	Absent	Southern and central Europe, Turkey	*Ulmus campestris, U. effusa, U. montana, Ulmus* spp., *Sorbus aucuparia, Sorbus* spp.	Trunks (under bark)	VL – L	
2.64	*Pteleobius vittatus* F	*Scolytidae*	C. E. Russia, S. E. Russia; Belarus; Ukraine; Transcaucasus	Absent	Southern and central Europe, Turkey	*Ulmus campestris, U. effusa, U. montana, U. pumila, Ulmus* spp.	Trunks (under bark)	VL – L	
2.65	*Scolytoplatypus tycon* Blandford	*Scolytidae*	S. Far East (including Sakhalin & Kuril islands)	Absent	China, Japan, Koreas	*Picea ajanensis, P.* spp., *Abies holophylla, A.* spp., *Pinus koraiensis, P.* spp., *Juglans mandshurica, J.* spp., *Populus tremula, P.* spp., *Fraxinus mandshurica, F.* spp., *Phellodendron amurense, Acer mandshuricum, A. mono, A. pictum, A. pseudosieboldianum, A. barbinerve, Acer* spp., *Lindera thunbergi, Alnus hirsuta, Alnus* spp.	Trunks (under bark)	L – M	

Table 2. INSECTS *COLEOPTERA*

2.66	[*Scolytus amurensis* Eggers]	*Scolytidae*	S. Siberia (East), Transbaik., N. Far East, S. Far East (including Sakhalin)	Absent	Absent	*Betula verrucosa, B. costata, B. japonica, Betula* spp.	Trunks (under bark)	L – M	
2.67	*Tomicus (=Blastophagus) pilifer* Spessivtsev	*Scolytidae*	S. Far East	Absent	Absent	*Pinus korajensis* (preferred host), *P.* spp.	Trunks (under bark)	L	
2.68	*Tomicus puellus* Reitter (=*Blastophagus starki)*	*Scolytidae*	S. Far East (mountains)	Absent	Absent	*Picea ajanensis*, (preferred host), *P.* spp., *Abies holophylla, A. nephrolepis, Abies* spp., *Pinus* spp., *Larix* spp., *Tsuga* spp.	Trunks (under bark)	L – M	
2.69	[*Trypodendron granulatum* Eggers]	*Scolytidae*	N.E.Siberia, N.W. Siberia, S. Siberia, Transbaik., N. Far East, S. Far East (including Sakhalin)	Absent	Mongolia	*Pinus sibirica, Pinus korajensis* (preferred hosts), *Pinus* spp., *Larix* spp.	Trunks (wood)	L – M	
2.70	[*Trypodendron pubipennis* Blandford (T. *pubipennum*)]	*Scolytidae*	S. Far East (including Sakhalin & Kuril islands)	Absent	Japan, Koreas	*Betula japonica, Betula* spp., *Phyllanthus flexuosus, Phyllanthus* spp., *Ficus caria, Ficus* spp., other broadleaves	Trunks (wood)	VL – L	
2.71	[*Xyleborus aequalis* Reitter] (=*Anisandrus aequalis* Reitter)	*Scolytidae*	N.E. Siberia, Transbaik.; S. Far East	Absent	Absent	*Abies holophylla, A. nephrolepis, A.* spp., *Picea ajanensis, Pinus korajensis, P. pumila, P. funebris, P.* spp., *Juniperus communis, J.* spp., *Taxus cuspidata, Populus tremula, Paulownia tomentosa, Ailantes glandulosa, Kalopanax ricinifolium, Akebia quinata, Aralia manshurika, Phellodendron amurense, Fraxinus mandshurica, Betula alba, B. costata, B. dahurica, B. japonica, B.* spp., *Taxus japonica, Vitis amurensis, Gingko biloba, Vistaria sinensis, Carpinus japonica, C. cortada, Malus* spp., *Quercus mongolica, Salix* spp., *Acer ukurunduense, A. mono, A. pictum, A. mandshuricum, A. barbinerve, A.* spp., *Schisandra chinensis, Corylus mandshurica, C. heterophylla, Tilia cordata, T. amurensis, Alnus hirsuta, A. fruticosa, Juglans mandshurica, Rhododendron dahuricum, Sorbus amurensis, Syringa amurensis, Acanthopanax sessiliflora, Rhus succedanea, Spiraea mongolica, S. amurensis, Prunus padus, Morus alba*, etc.	Trunks (under bark)	VL – L	

Table 2. INSECTS COLEOPTERA, *DIPTERA* & HYMENOPTERA

2.72	*Xyleborus eurygraphus* Ratzeburg	*Scolytidae*	N. E. Russia, C. E. Russia, S.E. Russia; Baltic countries; Belarus; Moldova; Ukraine; Transcaucasus	Absent	Southern and central Europe (Poland, Czeckia, Slovakia, Germany, Austria, France, Italy, Yugoslavia, etc.)	*Pinus sylvestris*	Trunks (under bark)	VL – L	
					Diptera				
2.73	*Strobilomyia [Lasiomma] baicalense ?*	*Anthomyiidae*	S. Siberia, Transbaik.	Absent	Absent	*Larix* spp.	Cones and seeds	L	
2.74	*Strobilomyia [Lasiomma) sibirica ??*	*Anthomyiidae*	S. Siberia, Transbaik	Absent	Finland	*Larix* spp.	Cones and seeds	L-M	Data of Dr. Alain Roques
2.75	*Strobilomyia [Lasiomma) svenssoni ??*	*Anthomyiidae*	S. Siberia, Transbaik	Absent	Sweden, Mongolia, China	*Larix* spp., *Picea* spp.	Cones and seeds	L-M	Data of Dr. Alain Roques
2.76	*Resseliella [Thomasiniana] sibirica* Mam. *[Camptomyia laricis]*	*Cecidomyiidae*	Russia: widespread in the *Larix* area; Baltic countries; Belarus, Ukraine	Absent	Absent	*Larix sibirica, Larix* spp.	Cones and seeds	L	
					Hymenoptera				
2.77	*Megastigmus bipunctatus* Swederus (= M. kuntzei Kapuscinski)	*Torymidae*	N. E. Russia, C. E. Russia, S.E. Russia; Baltic countries; Belarus, Ukraine	Absent	Western Europe	*Juniperus communis, J.* spp.	Seeds	L – M	
2.78	*Megastigmus borriesi ??*	*Torymidae*	S. Far East	Absent	Japan, Denmark	*Abies* spp.	Seeds	L-M	Data of Dr. Alain Roques
2.79	*Megastigmus certus ?*	*Torymidae*	Central Asia	Absent	Absent	*Juniperus* spp.	Seeds	L – M	
2.80	*Megastigmus fidus ?*	*Torymidae*	N.E.Siberia, N.W. Siberia, S. Siberia, Transbaik.	Absent	Absent	*Juniperus* spp.	Seeds	L – M	
2.81	*Megastigmus gravis ??*	*Torymidae*	Transcaucasus	Absent	Absent	*Juniperus* spp.	Seeds	L – M	Data of Dr. Alain Roques
2.82	*Megastigmus juniperi* Nik.	*Torymidae*	Central Asia	Absent	Absent	*Juniperus* spp.	Seeds	L – M	
2.83	*Megastigmus validus ?*	*Torymidae*	Central Asia	Absent	Absent	*Juniperus* spp.	Seeds	L – M	

Table 2. INSECTS LEPIDOPTERA

				Lepidoptera					
2.84	*Coleophora sibiricella ? [= C. sibirica ?]*	*Coleophoridae*	S. Siberia	Absent	Absent Finland - ?	*Larix*	Needles	L – M	Main damage – esthetic damage
2.85	*[Anacampsis blattariella* Hbn.*]*	*Gelechiidae*	N. E. Russia, C. E. Russia, S. Siberia (East); Transbaik., S. Far East	Absent	Northern and central Europe	*Betula mandshurica, B. pendula, B. pubescens, Betula* spp.	Leaves	L - M	
2.86	*Eupithecia gigantea ?*	*Geometridae*	S. Far East, N. Far East	Absent	Japan	*Abies*	Cones and seeds	L	Data of Dr. Alain Roques
2.87	*Semiothisa pumila* Kusnezov *[= Semiothisa (= Macaria) continuaria* Ev.*]*	*Geometridae*	S. Siberia, Transbaik., S. Far East	Absent	Absent	*Larix*	Needles	L – M	
2.88	*Vanessa xanthomelas* Esp.	*Nymphalidae*	C. E. Russia, S. E. Russia, S. Siberia, S. Far East; Baltic countries; Belarus; Moldova; Ukraine	Absent	Absent	*Salix, Betula, Alnus*	Leaves	L	
2.89	*Barbara fulgens* Kuznetsov	*Tortricidae*	S. Far East	Absent	Northern China	*Picea obovata, P. sibirica, P. koraiensis, P. ajanensis, Picea* spp., *Abies holophylla, Abies* spp.	Cones and seeds	VL - L	Data of Dr. Alain Roques
2.90	*Retinia* (= *Petrova = Semasia*) *perangustana* Snelb (= *Eucosma impropria = Laspeyresia zonovae* Flor)	*Tortricidae*	C.E. Russia (introduced), N.E. Siberia, N.W. Siberia, S. Siberia, Transbaik., S. Far East	Absent	Widespread in Europe (Czeckia, Slovakia, Poland - introdiced), north-eastern China, Mongolia	*Larix sibirica, L. gmelinii* (preferred hosts), *Larix* spp.	Cones and seeds	L – H	According to Dr. A. Roques
2.91	*Retinia lemniscata* Kuznetsov	*Tortricidae*	S. Far East	Absent	Absent	*Picea koraiensis, Picea* spp.	Cones and seeds	L	Data of Dr. Alain Roques]
2.92	*Retinia monopunctata [R.pini]*	*Tortricidae*	S. Far East	Absent	Japan, China	*Pinus koraiensis* (preferred host), *P. strobus, Pinus* spp., *Abies holophylla, A. sachalinensis, A. homolepis, Abies* spp., *Picea glehnii, P. polita, P. abies, P. ajanensis, Picea* spp., *Larix kaempferi, Larix* spp.	Cones and seeds	L-M	Data of Dr. Alain Roques

Table 3a. INSECTS COLEOPTERA

Table 3a. Forest pests causing significant damage on the territory of the former USSR, which are also present in Central/Western Europe

N°	Pest	Group of organisms	Distribution			Main host plants in the former USSR	Damaged parts of plants	Economic significance in area of origin	Remarks
			In the former USSR	In North America	In other countries				
Insecta									
Coleoptera									
3a.1	*Anobium punctatum* Deg. *[= A. domesticum* Geoffr.*]*	*Anobiidae*	Russia: widespread except Far East; Baltic countries; Belarus; Moldova; Ukraine; Transcaucasus	Present	Western Europe; New Zealand	Coniferous	Wood	M – VH	Main damage – to wood in buildings, furniture, etc.
3.2	*Hadrobregmus pertinax ? [Anobium pertinax* F.*]*	*Anobiidae*	N Russia: widespread except Far East; Baltic countries; Belarus; Moldova; Ukraine; Transcaucasus	Not known	Western Europe, HU	Coniferous	Wood	L – H	Main damage – to cut trees, wood in buildings, furniture, etc.
3a.3	*Amphicerus bimaculatus ?.[Schistoceros bimaculatus* Ol.*]*	*Bostrichidae*	Ukraine; Transcaucasus; Central Asia	Not known	Southern Europe; Northern Africa; Syria	Deciduous and coniferous	Wood, *Vitis* and fruit trees branches	L – M	Main damage – to wood in buildings
3a.4	*Bostrichus capucinus* L.	*Bostrichidae*	C. E. Russia, S. E. Russia, S. Siberia; Baltic countries; Belarus; Moldova; Ukraine; Transcaucasus; Central Asia	USA (limited distribution – NJ)	Western Europe	*Quercus*, other deciduous	Wood, trunks of *Quercus, Morus, Vitis*	L – H	Main damage – to parquet, wood in buildings, telegraph poles, sleepers
3a.5	*Lichenophanes varia* ? *[L. varius ?]*	*Bostrichidae*	C. E. Russia, S. E. Russia; Ukraine; Transcaucasus	Not known	South and Centre of Western Europe	*Buxus*, *Quercus*, other deciduous	Wood	L – M	Main damage – to wood in buildings
3a.6	*Rhyzopertha [Rhizopertha] dominica ?*	*Bostrichidae*	Ukraine	Widespread	Cosmopolitan	Deciduous and coniferous	Wood	L – M	Main damage – to wood in buildings
3a.7	*Scobicia pustulata* Kies.*[= S. chevrieri* Vill.*]*	*Bostrichidae*	S. E. Russia; Ukraine; Transcaucasus; Central Asia	Not known	Southern Europe; Northern Africa; Syria; Iran	Deciduous and coniferous	Wood	L – M	Main damage – to wood in buildings
3a.8	*Stephanopachys linearis* Kug.	*Bostrichidae*	S. E. Russia, S. Siberia; Ukraine; Transcaucasus; Central Asia	Not known	Western Europe	*Pinus*, *Picea*, some other coniferous	Wood, under bark	L – M	Main damage – to wood in buildings
3a.9	*Sinoxylon perforans* Schrnk.	*Bostrichidae*	S. E. Russia ; Ukraine; Transcaucasus; Central Asia	Absent	Balcans	*Quercus*, *Vitis*, other deciduous	Wood and stems of young plants	L – H	Main damage – to wood in buildings and to vineyards
3a.10	*Xylopertha retusa ?. [Xylonites retusus* Ol.*]*	*Bostrichidae*	S. E. Russia, S. Siberia; Moldova; Ukraine; Transcaucasus; Central Asia	Absent	South and Centre of Western Europe	*Quercus* and other deciduous	Wood	L – M	Main damage – to wood in buildings

Table 3a. INSECTS COLEOPTERA

3a.11	*Agrilus angustulus* Ill.	*Buprestidae*	C. E. Russia, S. E. Russia, S. Siberia; Baltic countries; Belarus; Moldova; Ukraine; Transcaucasus	Not known	Western Europe; Northern Africa; Turkey	*Quercus, Fagus, Castanea*	Trunks (under bark)	L – M	Main damage – to plantations in the steppes
3a.12	*Agrilus ater* L.	*Buprestidae*	N. E. Russia, C.E. Russia, S.E. Russia; Baltic countries; Belarus; Moldova; Ukraine	Not yet checked	FI, HU	*Populus, Salix*	Trunks (under bark)	L	
3a.13	*Agrilus betuleti* Rtzb.	*Buprestidae*	Russia: widespread in forest zone; Baltic countries; Belarus	Not yet checked	Northern and Central Europe	*Betula*	Trunks (under bark)	L	
3a.14	*Agrilus elongatus* Hbst.	*Buprestidae*	N. E. Russia, C. E. Russia, S.E. Russia; Baltic countries; Belarus; Moldova; Ukraine; Transcaucasus	Not yet checked	Not yet checked	*Quercus, Fagus*	Trunks (under bark)	VL – L	
3a.15	*Agrilus pannonicus ? [Agrilus biguttatus* F.*]*	*Buprestidae*	N. E. Russia, C. E. Russia, S.E. Russia; Baltic countries; Belarus; Moldova; Ukraine; Transcaucasus	Not yet checked	HU, UK	*Quercus*	Trunks (under bark)	L	
3a.16	*Agrilus viridis* L.	*Buprestidae*	Russia: widespread; Baltic countries; Belarus; Moldova; Ukraine; Transcaucasus	Not known	Western Europe; IT; Northern Africa	*Populus* (including *P. tremula*), *Acer, Salix, Fagus,* other deciduous	Trunks (under bark)	L – H	
3a.17	*Chrysobothris affinis* F.	*Buprestidae*	N. E. Russia, C. E. Russia, S.E. Russia; Baltic countries; Belarus; Moldova; Ukraine; Transcaucasus; Kazakhstan; Central Asia	Not yet checked	HU	*Quercus, Fagus, Ulmus*	Trunks (under bark)	L	
3a.18	*Melanophila [= Phaenops] cyanea* F.	*Buprestidae*	Russia: widespread in pine area; Baltic countries; Belarus; Moldova; Ukraine; Transcaucasus; Kazakhstan; Central Asia	Not yet checked	DE; HU	*Pinus*	Trunks (under bark)	L	
3a.19	*Poecilonota variolosa* Payk.	*Buprestidae*	Russia: widespread except Far East; Baltic countries; Belarus; Moldova; Ukraine; Transcaucasus; Kazakhstan	Not yet checked	SE; NO; Northern Africa	*Populus*	Trunks (under bark)	L – M	
3a.20	*Trachypteris decostigma [= Melanophila decastigma* F.*]*	*Buprestidae*	S. E. Russia ; Ukraine; Transcaucasus	Absent	South of Europe; Northern Africa; Turkey; Syria	*Populus, Salix, Fraxinus*	Trunks (under bark)	L – M	
3a.21	*Trachypteris [= Melanophila] picta* Pall.	*Buprestidae*	C. E. Russia (East), S. E. Russia (East), S. Siberia (West); Kazakhstan; Central Asia	Absent	Iran; Northern China; HU	*Populus, Salix*	Trunks (under bark)	L – M	Main damage – on 1-2 year-old plantations
3a.22	*Acanthocinus aedilis* L.	*Cerambycidae*	Russia: widespread in pine area; Baltic countries; Belarus; Moldova; Ukraine	Not yet checked	Europe	*Pinus*	Trunks (under bark)	L	

Table 3a. INSECTS COLEOPTERA

3a.23	*Acanthocinus griseus* F.	*Cerambycidae*	N.E.Siberia, N.W. Siberia, S.Siberia, S. Far East	Not yet checked	Europe; Japan	*Picea*	Trunks (wood)	VL – L	
3a.24	*Arhopalus rusticus* (повтор)	*Cerambycidae*	Russia: widespread in coniferous area	Not yet checked	Western Europe, Japan	*Picea*, *Pinus*, other coniferous	Trunks (wood)	VL – L	
3a.25	*Arhopalus [= Criocephalus] rusticus* L.	*Cerambycidae*	Russia: widespread in pine area; Baltic countries; Belarus; Moldova; Ukraine	Not yet checked	Not yet checked	*Pinus*	Trunks and roots (under bark)	VL – L	
3a.26	*Callidium violaceum* L.	*Cerambycidae*	Russia: widespread; Baltic countries; Belarus; Moldova; Ukraine; Transcaucasus	Not known	Western Europe; Northern Mongolia; Northern China; Korea; Japan	Coniferous and deciduous	Wood (under bark)	L – M	The main damage – to dead trees, cut trees with bark, etc.
3a.27	*Callipogon relictus* Sem.	*Cerambycidae*	S. Far East	Not yet checked	China, Japan	*Quercus*, *Fraxinus*, *Ulmus* and other trees	Trunks (wood)	VL – L	
3a.28	*Cerambyx cerdo* L.	*Cerambycidae*	S. E. Russia ; Ukraine; Transcaucasus	Absent	Western Europe; Northern Africa	*Quercus*, other deciduous	Trunks (wood)	L – H	In the former USSR – two subspecies
3a.29	*Cerambyx scopoli ? [C. scopolii* Füssl.*]*	*Cerambycidae*	S. E. Russia; Ukraine; Transcaucasus	Absent	Western Europe; Northern Africa	*Quercus*, *Fagus*, other deciduous	Trunks (wood)	L – M	
3a.30	*Clytus arietis* L.	*Cerambycidae*	N. E. Russia, C. E. Russia, S.E. Russia; Baltic countries; Belarus; Moldova; Ukraine; Transcaucasus; Turkmenistan	Not yet checked	Europe	*Quercus*, *Vitis*, other deciduous including fruit trees	Trunks (wood and under bark)	VL – L	
3a.31	*Hylotrupes bajulus* L.	*Cerambycidae*	Russia: widespread except Far East; Baltic countries; Belarus; Moldova; Ukraine; Transcaucasus	Present	Western Europe; Northern Africa; China	Coniferous and deciduous	Wood	M – VH	Main damage – to wood in buildings, telegraph poles, sleepers, etc.
3a.32	*Lamia textor* L.	*Cerambycidae*	Russia: widespread except Far East; Baltic countries; Belarus; Moldova; Ukraine; Transcaucasus; Kazakhstan (North)	Absent	Western Europe	*Salix*, *Populus*, *Alnus*	Trunks (under bark)	L - M	
3a.33	*Mesosa curculionoides* L.	*Cerambycidae*	Russia: widespread; Baltic countries; Belarus; Moldova; Ukraine; Kazakhstan	Not yet checked	Europe	*Quercus*, *Ulmus*, *Populus*, other deciduous	Trunks (under bark)	VL – L	
3a.34	*Mesosa myops* Dalm.	*Cerambycidae*	Russia: widespread; Baltic countries; Belarus; Moldova; Ukraine; Kazakhstan	Not yet checked	Europe	*Quercus*, *Ulmus*, *Populus*, other deciduous	Trunks (under bark)	VL – L	

Table 3a. INSECTS COLEOPTERA

3a.35	*Monochamus galloprovincialis* Ol.	*Cerambycidae*	Russia: widespread in pine area; Baltic countries; Belarus; Moldova; Ukraine; Transcaucasus	Absent	Western Europe; Turkey; Northern Mongolia	*Pinus*, other coniferous	Trunks (wood)	L – H	Vector of *Bursaphelenchus mucronatus*
3a.36	*Monochamus saltuarius* Gebl.	*Cerambycidae*	Russia: widespread in coniferous area; Baltic countries; Belarus; Ukraine	Absent	Western Europe; Northern Mongolia; Northern China; Japan; Korea	*Pinus*, *Picea*, *Abies*, other coniferous	Trunks (wood)	L – M	Vector of *Bursaphelenchus mucronatus*
3a.37	*Monochamus sartor* F.	*Cerambycidae*	Ukraine (Carpathians)	Absent	Western Europe	*Picea*, *Abies*	Trunks (wood)	L – M	
3a.38	*Monochamus sutor* L.	*Cerambycidae*	Russia: widespread in spruce area; Baltic countries; Belarus; Moldova; Ukraine	Absent	Western Europe; Mongolia; Northern China; Japan; Korea	*Picea*, *Abies*, other coniferous	Trunks (wood)	M – VH	Vector of *Bursaphelenchus mucronatus*
3a.39	*Monochamus urussovii* ? *[M. urussovi* Fisch.*]*	*Cerambycidae*	Russia: widespread in spruce area; Baltic countries; Belarus; Moldova	Absent	Western Europe; Mongolia; Northern China; Japan; Korea	*Picea*, *Abies*, other coniferous	Trunks (wood)	M – VH	
3a.40	*Oberea oculata* L.	*Cerambycidae*	Russia: widespread except Far East; Baltic countries; Belarus; Moldova; Ukraine; Transcaucasus; Kazakhstan	Not known	Western Europe	*Salix*, *Populus*	Trunks (wood)	L - M	
3a.41	*Plagionotus arcuatus* L.	*Cerambycidae*	N. E. Russia, C. E. Russia, S.E. Russia; Baltic countries; Belarus; Moldova; Ukraine; Transcaucasus	Not yet checked	Europe	*Quercus*, *Carpinus*, *Pyrus*, *Castanea*, *Fagus*	Trunks (under bark)	VL – L	
3a.42	*Rhagium inquisitor* L.	*Cerambycidae*	Russia: widespread except Far East; Baltic countries; Belarus; Ukraine	Nova Scotia (CA)	Europe	*Pinus*, *Picea*, other coniferous	Trunks (under bark)	VL – L	
3a.43	*Saperda carcharias* L.	*Cerambycidae*	Russia: widespread in aspen area; Baltic countries; Belarus; Moldova; Ukraine; Transcaucasus	Not known	Western Europe	*Populus tremula*, other *Populus*, *Salix*	Trunks (wood)	L – M	The main damage – on 20-30 year-old plantations
3a.44	*Saperda populnea* L.	*Cerambycidae*	Russia: widespread except Far East; Baltic countries; Belarus; Moldova; Ukraine; Transcaucasus	West of Canada (introduced); West of USA (introduced)	Western Europe	*Populus tremula*, other *Populus*, *Salix*	Trunks and branches (wood)	L – H	The main damage - to young trees
3a.45	*Saperda punctata* L.	*Cerambycidae*	C. E. Russia, S. E. Russia ; Baltic countries; Belarus; Moldova; Ukraine; Transcaucasus	Not known	Southern Europe	*Ulmus*	Trunks (under bark)	L - M	
3a.46	*Saperda scalaris* L.	*Cerambycidae*	Russia: widespread except Far East; Baltic countries; Belarus; Moldova; Ukraine; Transcaucasus	Not yet checked	Europe	*Alnus*, *Populus*, *Betula*, *Quercus*, other deciduous	Trunks (under bark)	L	

Table 3a. INSECTS COLEOPTERA

3a.47	*Spondylis buprestoides* L.	*Cerambycidae*	Russia: widespread in pine area; Baltic countries; Belarus; Moldova; Ukraine	Not yet checked	Western Europe, Japan, China	*Pinus*	Trunks and roots (under bark)	VL – L	
3a.48	*Stromatium fulvum* Vill. *[=S. unicolor* Oliv.*]*	*Cerambycidae*	S. E. Russia (North Caucasus); Ukraine (Crimea); Transcaucasus	Present (no data on distribution); Cuba (introduced)	Southern Europe; Northern Africa; Brazil (introduced)	Deciduous and coniferous	Wood	L – H	The main damage - to wood in buildings, furniture, etc.
3a.49	*Tetropium aquilonium* ?	*Cerambycidae*	Russia: widespread except Far East; Baltic countries; Belarus; Moldova; Ukraine	Not yet checked	Europe	*Pinus*, other coniferous	Trunks (under bark)	VL – L	
3a.50	*Tetropium castaneum* L.	*Cerambycidae*	Russia: widespread in spruce area; Baltic countries; Belarus; Moldova; Ukraine	Not yet checked	Europe	*Picea*, other coniferous	Trunks (under bark)	L	
3a.51	*Tetropium fuscum* F.	*Cerambycidae*	Russia: widespread in spruce area; Baltic countries; Belarus; Moldova; Ukraine	Halifax, Nova Scotia (CA) – under eradicat.	Europe	*Picea*, other coniferous	Trunks (under bark)	L	
3a.52	*Tetropium gabrieli* Weise.	*Cerambycidae*	N. E. Russia, C. E. Russia, S.E. Russia; Baltic countries; Belarus; Moldova; Ukraine	Not yet checked	Europe	*Larix*, other coniferous	Trunks (under bark)	L	
3a.53	*Xylotrechus rusticus* L.	*Cerambycidae*	Russia: widespread; Baltic countries; Belarus; Moldova; Ukraine; Transcaucasus; Kazakhstan; Central Asia	Not yet checked	Europe	*Populus*, *Salix*, many other deciduous	Trunks (under bark)	L	
3a.54	*[Haltica saliceti* Wse.*] (*possibly - *H. quercetorum* Foudr.*)*	*Chrysomelidae*	S. E. Russia; Moldova; Ukraine; Transcaucasus	Absent	Southern and Central Europe	*Quercus*	Leaves	L – M	Main damage - to young trees
3a.55	*Chrysomela [Melasoma] populi* L.	*Chrysomelidae*	C.E. Russia, S.E. Russia, N.E. Siberia, N.W. Siberia, S. Siberia, S. Far East; Baltic countries; Belarus; Moldova; Ukraine; Transcaucasus; Central Asia	Not known	Western Europe	*Populus* (including *P. tremula*), *Salix*	Leaves	L – M	Main damage - to young trees in plantations and nurseries
3a.56	*Chrysomela tremula ? [Melasoma tremulae* F.*]*	*Chrysomelidae*	Russia: widespread except Far East; Baltic countries; Belarus; Moldova; Ukraine; Transcaucasus; Central Asia	Present	Western Europe	*Populus* (including *P. tremula*), *Salix*	Leaves	L – M	Main damage - to young trees in plantations and nurseries
3a.57	*Pyrrhalta [Galerucella] luteola* Müll.	*Chrysomelidae*	S. E. Russia ; Moldova; Ukraine; Transcaucasus; Central Asia	USA (widespread, introduced)	Western Europe; Turkey; Iran; Algeria	*Ulmus*	Leaves	L – M	Main damage - to young trees
3a.58	*Apoderus coryli*	*Curculionidae (= Attelabidae)*	Widespread except extreme North	Not yet checked	All Europe, China, Japan, Koreas, Mongolia	*Corylus*, *Alnus*, *Fagus*, *Carpinus*, *Quercus*, *Betula*	Leaves	L – M	
3a.59	*Bradybatus creutzeri* Germ.	*Curculionidae*	S. E. Russia ; Ukraine	Absent	South of Western Europe	*Acer*, *Quercus*	Fruits	L - M	

Table 3a. INSECTS COLEOPTERA

3a.60	*Bradybatus tomentosus ?*	*Curculionidae*	S. E. Russia ; Ukraine	Not yet checked	Europe	*Acer*	Fruits	L	
3a.61	*Byctiscus betulae* L. (=*B. betuleti* F.)	*Curculionidae*	Russia: widespread; Baltic countries; Belarus; Moldova; Ukraine; Transcaucasus; Turkmenistan; Kazakhstan (North)	Absent	Western Europe; Turkey; Syria	*Populus, Betula, Tilia, Fagus, Acer, Ulmus,* other deciduous	Leaves	L – M	Main damage – to young trees
3a.62	*Cryptorhynchus [Cryptorrhynchus] lapathi* L.	*Curculionidae*	Russia: widespread; Baltic countries; Belarus; Moldova; Ukraine	USA (introduced)	Western Europe; Japan	*Salix*, *Populus*, *Alnus*	Trunks (wood and under bark)	L – M	Main damage – to young trees
3a.63	*Curculio glandium* Marsh.	*Curculionidae*	Russia: widespread; Baltic countries; Belarus; Ukraine; Moldova; Transcaucasus	Not known	Western Europe	*Quercus*	Acorns	M - H	
3a.64	*Curculio nucum* L.	*Curculionidae*	Russia: widespread; Baltic countries; Belarus, Ukraine, Moldova, Transcaucasus	Not known	Western Europe; Syria; Algeria	*Corylus, Quercus*	Fruits	L - M	
3a.65	*Hylobius abietis* L.	*Curculionidae*	Russia: widespread in pine area; Baltic countries; Belarus; Moldova; Ukraine; Transcaucasus; Kazakhstan	Not known	Western Europe; Japan	*Pinus*, *Picea*, other coniferous	Trunks (under bark), buds and young sprouts	L – H	The main damage – to young trees and young plantations
3a.66	*Lignyodes enucleator* Panz.	*Curculionidae*	S. E. Russia; Ukraine; Transcaucasus	Not known	Western Europe	*Fraxinus, Quercus*	Fruits	M	
3a.67	*Magdalis armigera* Geoffr.	*Curculionidae*	S. E. Russia; Moldova; Ukraine	Not yet checked	Europe	*Ulmus*	Trunks (under bark)	VL – L	
3a.68	*Pissodes castaneus* ? *[P. notatus* F.*]*	*Curculionidae*	Russia: widespread in pine area; Baltic countries; Belarus; Moldova; Ukraine; Transcaucasus	Not known	Europe (widespread); Turkey, Algeria, Morocco	*Pinus*, other coniferous	Trunks (under bark)	L – H	Main damage - to young trees and 4 – 15 year-old plantations
3a.69	*Pissodes gyllenhali* Gyll.	*Curculionidae*	N. Far East, S. Far East	Not known	Not known; Europe	*Pinus pumila*, other coniferous	Trunks and roots (under bark)	L – M	
3a.70	*Pissodes harcyniae* Hrbst.	*Curculionidae*	Russia: widespread in spruce area; Baltic countries; Belarus; Moldova; Ukraine	Not known	Europe	*Picea*	Trunks (under bark)	L – H	
3a.71	*Pissodes piceae* Ill.	*Curculionidae*	Ukraine (the Carpathians), Transcaucasus	Not known	Western Europe	*Abies*, *Picea*, *Pinus*	Trunks (under bark)	L – M	
3a.72	*Pissodes pini* L.	*Curculionidae*	Russia: widespread in pine area; Baltic countries; Belarus; Moldova; Ukraine; Transcaucasus	Not yet checked	Europe	*Pinus*	Trunks (under bark)	L	
3a.73	*Pissodes piniphilus* Hrbst	*Curculionidae*	Russia: widespread in pine area; Baltic countries; Belarus; Moldova; Ukraine	Not known	Western Europe	*Pinus*	Trunks (under bark)	L – M	Main damage - to young pine plantations

Table 3a. INSECTS COLEOPTERA

3a.74	*Pissodes scabricollis* Mill.	*Curculionidae*	Russia: widespread in pine and larch area; Baltic countries; Belarus; Moldova; Ukraine	Not yet checked	Europe	*Pinus*, *Larix*, *Picea*	Trunks (under bark)	L	
3a.75	*Pissodes validirostris* Gyll.	*Curculionidae*	Russia: widespread in pine area; Baltic countries; Belarus, Ukraine, Kazakhstan	Not known	Widespread in Europe	*Pinus*	Cones and seeds	M - H	
3a.76	*Pselactus [= Codiosoma] spadix* Hrbst.	*Curculionidae*	N. E. Russia, C. E. Russia, S.E. Russia; Baltic countries; Belarus; Moldova; Ukraine	Present	Western Europe; Australia; New Zealand	*Pinus*, other coniferous	Wood	L – M	Main damage - to damp wood in buildings
3a.77	*Stereonychus fraxini* Deg.	*Curculionidae*	Moldova	Absent	Bulgaria; France; Romania; UK; Yugoslavia; HU; Northern Africa	*Fraxinus*	Leaves	M – H	
3a.78	*Agriotes lineatus* L.	*Elateridae*	N. E. Russia, C. E. Russia, S.E. Russia, N.W. Siberia, S. Siberia (West); Baltic countries; Belarus; Moldova; Ukraine; Transcaucasus; Kazakhstan; Turkmenistan	Canada (limited distribution – BC, NF, NS); USA (limited distribution)	Europe (widespread); Iran; Israel	Deciduous, coniferous and other plants	Roots	L	Main damage - tn young plants and in nurseries
3a.79	*Agriotes sputator* L.	*Elateridae*	S. E. Russia, S. Siberia (West); Moldova; Ukraine; Transcaucasus	Not known	Western Europe	Deciduous, coniferous and other plants	Roots	L – M	Main damage - to young plants and in nurseries
3a.80	*Agrypnus [Brachylacon] murinus ?*	*Elateridae*	Russia: widespread; Baltic countries; Belarus; Moldova; Ukraine; Transcaucasus; Kazakhstan; Central Asia	Not yet checked	Europe	Deciduous, coniferous and other plants	Roots, seeds	L	Main damage - to young plants and in nurseries
3a.81	*Lyctus linearis* Goeze.	*Lyctidae*	C. E. Russia, S. E. Russia ; Baltic countries; Belarus; Moldova; Ukraine; Transcaucasus	USA (introduced)	Western Europe; Algeria	*Quercus*, other deciduous	Wood	L – H	Main damage - to parquet, wood in buildings, furniture, etc.
3a.82	*[Elateroides flabellicornis* Schn.*]*	*Lymexylidae*	Russia: widespread in fir and spruce area; Baltic countries; Belarus	Not yet checked	Europe	*Abies*, *Picea*	Trunks (wood)	L	
3a.83	*Hylecoetus [Elateroides] dermestoides* L.	*Lymexylidae*	?	Not yet checked	Europe	*Betula*, other deciduous	Trunks (wood)	L	
3a.84	*Lytta vesicatoria* L.	*Meloidea*	C. E. Russia, S. E. Russia, S. Siberia; Belarus; Moldova; Ukraine; Transcaucasus; Central Asia	USA (introduced for cantharidin production)	Western Europe	*Fraxinus*, some other deciduous	Leaves	M – H	Main damage – to young trees
3a.85	*Amphimallon solstitiale ? [A. solstitialis* L.*]*	*Scarabaeidae*	Russia: widespread except Far East; Baltic countries; Belarus; Moldova; Ukraine; Transcaucasus; Kazakhstan; Central Asia	Absent	Western Europe; Turkey; Iran; Northern Mongolia; China	*Pinus*, other plants	Roots	L – M	Main damage – to young pine plantations

Table 3a. INSECTS COLEOPTERA

3a.86	*Anoxia pilosa* F.	*Scarabaeidae*	S. E. Russia; Moldova; Ukraine; Transcaucasus; Kazakhstan	Absent	Western Europe; Northern Iran	*Pinus*, *Vitis*, other plants	Roots	L – M	Main damage – to young plantations
3a.87	*Melolontha hippocastani* F.	*Scarabaeidae*	Russia: widespread; Baltic countries; Belarus; Moldova; Ukraine; Kazakhstan	Absent	Western Europe; Northern China	*Pinus*, other plants	Roots	L – H	Main damage – to young pine plantations
3a.88	*Melolontha melolontha* L. (=*M. vulgaris* F.)	*Scarabaeidae*	C. E. Russia, S. E. Russia ; Baltic countries; Belarus; Moldova; Ukraine	Absent	Europe (widespread); Turkey	*Quercus*, *Pinus*, other plants	Roots	L – H	Main damage – to young plantations
3a.89	*Miltotrogus [Rhizotrogus] aequinoctialis* Hrbst.	*Scarabaeidae*	S. E. Russia ; Moldova; Ukraine; Transcaucasus; Kazakhstan	Absent	Western Europe	*Quercus*, *Acer*, *Fraxinus*, other plants	Roots	L – M	Main damage – to young plantations
3a.90	*Pentodon idiota* Hrbst.	*Scarabaeidae*	S.E. Russia; Belarus; Moldova; Ukraine; Transcaucasus; Kazakhstan	Absent	Western Europe; Turkey	*Quercus*, fruit and other plants	Roots	L – M	Main damage – to young plantations and nurseries
3a.91	*Phyllopertha horticola* L.	*Scarabaeidae*	Russia: widespread; Baltic countries; Belarus; Moldova; Ukraine; Transcaucasus; Kazakhstan; Central Asia	Not yet checked	Europe	Deciduous and coniferous trees	Roots	L	Main damage – to young plants
3a.92	*Polyphylla fullo* L.	*Scarabaeidae*	S.E. Russia; Moldova; Ukraine	Not known	Western Europe; Northern Africa - ?	*Pinus*, *Vitis*, other plants	Roots	L – M	Main damage – to young plantations
3a.93	*Rhizotrogus aestivus* Ol.	*Scarabaeidae*	S. E. Russia; Moldova; Ukraine; Transcaucasus; Kazakhstan	Absent	Southern Europe; Turkey; Iran	*Pinus*, other plants	Roots	L – M	Main damage – to young plantations
3a.94	*Serica brunnea* L.	*Scarabaeidae*	C. E. Russia, S. E. Russia, S. Siberia; Baltic countries; Belarus; Moldova; Ukraine	Not yet checked	Europe	Deciduous and coniferous trees	Roots	L	Main damage – to young plants and in nurseries
3a.95	*Carphoborus cholodkovskyi* Spess.	*Scolytidae*	Russia: widespread in coniferous area; Baltic countries; Belarus; Moldova; Ukraine; Transcaucasus; Kazakhstan	Not yet checked	Europe	*Picea*, *Pinus*	Trunks (under bark)	VL – L	
3a.96	*Carphoborus minimus* Fabr.	*Scolytidae*	N. E. Russia, C. E. Russia; Baltic countries; Belarus; Moldova; Ukraine	Not yet checked	Europe	*Pinus*	Trunks (under bark)	VL – L	
3a.97	*Carphoborus rossicus* Sem.	*Scolytidae*	N. E. Russia, C. E. Russia, N.W. Siberia, S. Siberia (West)	Not yet checked	Europe	*Picea*	Trunks (under bark)	VL – L	
3a.98	*Carphoborus teplonchovi ? [C. teplouchovi* Spess.*]*	*Scolytidae*	Russia: widespread in coniferous area; Baltic countries; Belarus; Moldova; Ukraine; Transcaucasus; Kazakhstan	Not yet checked	Not yet checked	*Picea*, *Larix*	Trunks (under bark)	VL – L	

Table 3a. INSECTS COLEOPTERA

3a.99	*Cryphalus abietis* Ratz.	*Scolytidae*	N. E. Russia, C. E. Russia, S.E. Russia; Baltic countries; Belarus; Moldova; Ukraine; Transcaucasus	Not known	Western Europe	*Abies*, *Picea*, other coniferous	Trunks & branches (under bark)	L – M	The main damage – to young trees
3a.100	*Cryphalus piceae* Ratz.	*Scolytidae*	N. E. Russia, C. E. Russia ; Baltic countries; Belarus; Moldova; Ukraine	Not yet checked	Europe	*Picea*, *Abies*	Trunks (under bark)	VL – L	
3a.101	*Cryphalus saltuarius* Wse.	*Scolytidae*	Russia: widespread in coniferous area; Baltic countries; Belarus; Moldova; Ukraine; Transcaucasus; Kazakhstan	Not yet checked	Europe	*Picea*, *Pinus*, *Abies*	Trunks (under bark)	VL – L	
3a.102	*Crypturgus cinereus* Hrbst.	*Scolytidae*	Russia: widespread in coniferous area; Baltic countries; Belarus; Moldova; Ukraine; Transcaucasus; Kazakhstan	Not yet checked	Europe	*Pinus*, *Picea*, *Abies*	Trunks (under bark)	VL – L	
3a.103	*Crypturgus hispidulus* Thoms.	*Scolytidae*	Russia: widespread in coniferous area; Baltic countries; Belarus; Moldova; Ukraine; Transcaucasus; Kazakhstan	Not yet checked	Europe	*Pinus*, *Picea*, *Abies*, *Larix*	Trunks (under bark)	VL – L	
3a.104	*Crypturgus maulei* Roubal. *(*probably – *C. pusillus* Gyll.*)*	*Scolytidae*	N. W. Siberia, S. Siberia (West)	Not yet checked	Europe	*Picea*, *Abies*	Trunks (under bark)	VL – L	
3a.105	*Crypturgus pusillus* Gyll.	*Scolytidae*	Russia: widespread in coniferous area; Baltic countries; Belarus; Moldova; Ukraine; Transcaucasus; Kazakhstan	Not yet checked	Europe	*Pinus*, *Picea*, *Abies*, *Larix*	Trunks (under bark)	VL – L	
3a.106	*Crypturgus subcribrosus* Egg.	*Scolytidae*	N. E. Russia, C. E. Russia, S.E. Russia, S. Far East; Baltic countries; Belarus; Moldova; Ukraine	Not yet checked	Europe	*Pinus*	Trunks (under bark)	VL – L	
3a.107	*Dendroctonus micans* Kugel.	*Scolytidae*	Russia: widespread in pine area; Baltic countries; Belarus; Moldova; Ukraine; Georgia	Absent	Europe (widespread); China, Japan, Turkey	*Picea*, *Pinus*, other coniferous	Trunks (under bark)	M – VH	
3a.108	*Dryocoetes autographus* Ratz.	*Scolytidae*	Russia: widespread in coniferous area; Baltic countries; Belarus; Moldova; Ukraine; Transcaucasus; Kazakhstan	Not yet checked	Europe	*Pinus*, *Picea*, *Abies*, *Larix*	Trunks (under bark)	VL – L	
3a.109	*Dryocoetes hectographus* Reitt.	*Scolytidae*	Russia: widespread in coniferous area; Baltic countries; Belarus; Moldova; Ukraine; Transcaucasus; Kazakhstan	Not yet checked	Europe	*Pinus*, *Picea*, *Abies*, *Larix*	Trunks (under bark)	VL – L	

Table 3a. INSECTS COLEOPTERA

3a.110	*Hylastes angustatus* Herbst.	*Scolytidae*	C.E. Russia; Belarus; Moldova; Ukraine	Not known	Western Europe; Bulgaria	*Picea, Pinus*	Trunks (under bark)	L – M	
3a.111	*Hylastes angusticollis* Egg.	*Scolytidae*	N.E. Russia, C.E. Russia; Baltic countries; Belarus	Not known	Not known	*Pinus*	Trunks (under bark)	L – M	
3a.112	*Hylastes ater* Payk.	*Scolytidae*	C.E. Russia, S.E. Russia, N.E.Siberia, N.W. Siberia, S. Siberia; Baltic countries; Belarus; Moldova; Ukraine	Not known	Western Europe	*Picea, Pinus,* other coniferous	Trunks (under bark)	L – H	Main damage - to young trees and young plantations
3a.113	*Hylastes attenuatus* Er.	*Scolytidae*	C. E. Russia; Belarus; Ukraine; Transcaucasus	Not known	Central Europe	*Pinus*	Trunks (under bark)	L – M	
3a.114	*Hylastes brunneus* Eg.	*Scolytidae*	Russia: widespread in coniferous area; Baltic countries; Belarus	Not known	Poland; Germany; Austria	*Picea, Pinus*	Trunks (under bark)	L – M	
3a.115	*Hylastes cunicularius* Erich.	*Scolytidae*	Russia: widespread in coniferous area; Baltic countries; Belarus; Moldova; Ukraine; Transcaucasus; Kazakhstan	Not known	Western Europe	*Picea, Pinus, Larix*	Trunks (under bark)	L – H	Main damage - to young trees and young plantations
3a.116	*Hylastes opacus* Er.	*Scolytidae*	Russia: widespread in coniferous area; Baltic countries; Belarus; Ukraine	Not known	Central and Eastern Europe	*Picea, Pinus*	Trunks (under bark)	L – M	
3a.117	[*Hylastes plumbeus* Blandf.]	*Scolytidae*	Russia: widespread in coniferous area; Kazakhstan	Not known	Finland; Sweden; Japan; Korea	*Picea, Pinus, Larix*	Trunks (under bark)	L – M	
3a.118	*Hylesinus crenatus* Fabr.	*Scolytidae*	C. E. Russia, S. E. Russia ; Baltic countries; Belarus; Moldova; Ukraine; Transcaucasus; Central Asia	Not yet checked	Europe	*Fraxinus*	Trunks (under bark)	VL – L	
3a.119	*Hylesinus fraxini* Panz.	*Scolytidae*	C. E. Russia, S. E. Russia; Baltic countries; Belarus; Moldova; Ukraine	Absent	Western Europe	*Fraxinus, Quercus,* other deciduous	Trunks (under bark)	L – M	
3a.120	*Hylesinus oleiperda* Fabr.	*Scolytidae*	C. E. Russia, S. E. Russia ; Baltic countries; Belarus; Moldova; Ukraine; Transcaucasus	Not yet checked	Europe	*Fraxinus, Olea, Syringa, Fagus,* other deciduous	Trunks (under bark)	L	
3a.121	*Hylurgops glabratus* Zett.	*Scolytidae*	Russia: widespread in coniferous area; Baltic countries; Belarus; Moldova; Ukraine; Transcaucasus; Kazakhstan	Not yet checked	Europe	*Picea, Pinus, Abies*	Trunks (under bark)	VL – L	
3a.122	*Hylurgops palliatus* Gyll.	*Scolytidae*	Russia: widespread in spruce area; Baltic countries; Belarus; Moldova; Ukraine	Not yet checked	Europe	*Picea, Pinus, Abies, Larix, Juniperus*	Trunks (under bark)	VL – L	

Table 3a. INSECTS COLEOPTERA

3a.123	*Hylurgus ligniperda* Fabr.	*Scolytidae*	N. E. Russia, C. E. Russia, S.E. Russia, S. Siberia; Baltic countries; Belarus; Moldova; Ukraine	Not yet checked	Europe	*Pinus*	Trunks (under bark)	L	
3a.124	*Ips acuminatus* Gyll.	*Scolytidae*	Russia: widespread in pine area; Baltic countries; Belarus; Moldova; Ukraine; Transcaucasus	Not yet checked	Europe	*Pinus*, other coniferous	Trunks (under bark)	L	
3a.125	*Ips amitinus* Eichh.	*Scolytidae*	N. E. Russia, C. E. Russia; Baltic countries; Ukraine	Not yet checked	Europe (widespread); Tunisia	*Pinus*, *Picea*	Trunks (under bark)	L	
3a.126	*Ips duplicatus* Sahlb.	*Scolytidae*	Russia: widespread in spruce area; Baltic countries; Belarus; Moldova; Ukraine; Georgia; Kazakhstan	Not known	Europe (widespread); Japan	*Picea*, *Pinus sibirica*, other coniferous	Trunks (under bark)	L – M	
3a.127	*Ips sexdentatus* Boern.	*Scolytidae*	Russia: widespread in pine area; Baltic countries; Belarus; Moldova; Ukraine; Transcaucasus	Not known	Europe (widespread); China; Korea; Thailand; Turkey	*Pinus*, *Picea*, other coniferous	Trunks (under bark)	L – H	
3a.128	*Ips typographus* L.	*Scolytidae*	Russia: widespread in spruce area; Baltic countries; Belarus; Moldova; Ukraine; Georgia; Tadjikistan	Canada (introduced); USA (introduced)	Europe (widespread); China; Japan; Korea; Turkey	*Picea*, *Pinus sibirica*, other coniferous	Trunks (under bark)	L – VH	
3a.129	*Orthotomicus laricis* Fabr.	*Scolytidae*	Russia: widespread in pine area; Baltic countries; Belarus; Moldova; Ukraine; Transcaucasus; Kazakhstan	Not yet checked	Europe	*Pinus*, *Picea*, *Abies*, *Larix*	Trunks (under bark)	VL – L	
3a.130	*Orthotomicus longicollis* Gyll.	*Scolytidae*	N.E. Russia, C.E. Russia, S.E. Russia; Baltic countries; Belarus; Moldova; Ukraine	Not yet checked	Europe	*Pinus*	Trunks (under bark)	VL – L	
3a.131	*Orthotomicus proximus* Eichh.	*Scolytidae*	Russia: widespread in pine area; Baltic countries; Belarus; Moldova; Ukraine; Transcaucasus; Kazakhstan	Not yet checked	Europe	*Pinus*, *Picea*, *Abies*, *Larix*	Trunks (under bark)	VL – L	
3a.132	*Orthotomicus starki* Spess.	*Scolytidae*	N. E. Russia, C. E. Russia, S.E. Russia, N.E.Siberia, N.W. Siberia, S. Siberia, Transbaik.; Baltic countries; Belarus; Moldova; Ukraine	Not yet checked	Not yet checked	*Pinus*, *Picea*, *Larix*	Trunks (under bark)	VL – L	
3a.133	*Orthotomicus suturalis* Gyll.	*Scolytidae*	Russia: widespread in pine area; Baltic countries; Belarus; Moldova; Ukraine; Transcaucasus; Kazakhstan	Not yet checked	Europe	*Pinus*, *Picea*, *Abies*, *Larix*	Trunks (under bark)	VL – L	
3a.134	*Phthorophloeus* [*Phtorophloeus*] *spinulosus* Rey.	*Scolytidae*	Russia: widespread in coniferous area; Baltic countries; Belarus; Moldova; Ukraine; Transcaucasus; Kazakhstan	Not yet checked	Europe	*Picea*	Trunks (under bark)	VL – L	

Table 3a. INSECTS COLEOPTERA

3a.135	*Pityogenes bidentatus* Hrbst. (=*P. bidens* F.)	*Scolytidae*	Russia: widespread in coniferous area; Baltic countries; Belarus; Moldova; Ukraine; Transcaucasus; Kazakhstan; Central Asia	Not known	Europe	*Pinus*, *Picea*, *Abies*, *Larix*	Trunks (under bark)	L – M	
3a.136	*Pityogenes chalcographus* L.	*Scolytidae*	Russia: widespread in spruce area; Baltic countries; Belarus; Moldova; Ukraine; Transcaucasus	Not known	Western Europe; Japan	*Picea*, other coniferous	Trunks (under bark)	L – M	
3a.137	*Pityogenes conjunctus* Reitt. [*P. baikalicus* Egg.]	*Scolytidae*	N.E.Siberia, N.W. Siberia, S. Siberia, Transbaik., N. Far East, S. Far East	Not known	Alps; Bulgaria; Poland	*Pinus pumila*, *P. sibirica*, *Picea*	Trunks (under bark)	L – M	
3a.138	*Pityogenes irkutensis* Egg.	*Scolytidae*	Russia: widespread in pine area; Baltic countries; Belarus; Moldova; Ukraine	Not yet checked	Europe	*Pinus*	Trunks (under bark)	VL – L	
3a.139	*Pityogenes quadridens* Hart.	*Scolytidae*	Russia: widespread except Far East; Baltic countries; Belarus; Moldova; Ukraine	Not yet checked	Europe	*Picea*, *Pinus*, *Larix*	Trunks (under bark)	VL – L	
3a.140	*Pityogenes saalasi* Egg.	*Scolytidae*	N.E. Russia, C.E.Russia, S.E. Russia, S. Siberia (Baikal), Transbaik.; Baltic countries; Belarus; Moldova; Ukraine	Not yet checked	Europe	*Pinus*	Trunks (under bark)	VL – L	
3a.141	*Pityogenes trepanatus* Nördl.	*Scolytidae*	N. E. Russia, C. E. Russia; Baltic countries; Belarus; Moldova; Ukraine	Not yet checked	Europe	*Picea*	Trunks (under bark)	VL – L	
3a.142	*Pityokteines curvidens* Germ.	*Scolytidae*	S.E. Russia, N.E. Siberia, N.W. Siberia; Ukraine; Transcaucasus	Not known	Western Europe; Japan (?)	*Abies*, *Picea*, other coniferous	Trunks (under bark)	L – M	
3a.143	*Pityokteines spinidens* Reitt.	*Scolytidae*	Ukraine (the Carpathians), Transcaucasus	Not known	Western Europe	*Abies*, *Picea*, other coniferous	Trunks (under bark)	L – M	
3a.144	*Pityokteines vorontzowi* ? [*P. vorontzovi* Jacobs.]	*Scolytidae*	Ukraine (the Carpathians), Transcaucasus	Not known	Central and Southern Europe	*Abies*, *Picea*, other coniferous	Trunks (under bark)	L – M	
3a.145	*Pityophthorus glabratus* Eichh.	*Scolytidae*	N. E. Russia, C. E. Russia, S.E. Russia; Baltic countries; Belarus; Moldova; Ukraine	Not yet checked	Europe	*Pinus*, *Larix*	Trunks (under bark)	VL – L	
3a.146	*Pityophthorus lichtensteini* Ratz.	*Scolytidae*	Russia: widespread except Far East; Baltic countries; Belarus; Moldova; Ukraine	Not yet checked	Europe	*Pinus*, *Picea*, *Abies*	Trunks (under bark)	VL – L	
3a.147	*Pityophthorus micrographus* L.	*Scolytidae*	Russia: widespread except Far East; Baltic countries; Belarus; Moldova; Ukraine	Not yet checked	Europe	*Pinus*, *Picea*, *Abies*, *Larix*	Trunks (under bark)	VL – L	
3a.148	*Pityophthorus morosovi* Spess.	*Scolytidae*	N. E. Russia, C. E. Russia, N.E.Siberia, N.W. Siberia, S. Siberia, Transbaik.	Not yet checked	Europe	*Picea*	Trunks (under bark)	VL – L	
3a.149	*Pityophthorus traegardhi* Spess.	*Scolytidae*	N. E. Russia, C. E. Russia, N.E.Siberia, N.W. Siberia, S. Siberia	Not yet checked	Europe	*Picea*, *Pinus*	Trunks (under bark)	VL – L	

Table 3a. INSECTS COLEOPTERA

3a.150	*Polygraphus polygraphus* L.	*Scolytidae*	Russia: widespread in spruce area; Baltic countries; Belarus; Moldova; Ukraine	Absent	Central and Northern Europe; Turkey	*Picea, Pinus, Larix, Abies*	Trunks (under bark)	L – M	
3a.151	*Polygraphus punctifrons* Thoms.	*Scolytidae*	Russia: widespread in coniferous area; Baltic countries; Belarus; Moldova; Ukraine; Kazakhstan	Not yet checked	Europe	*Picea, Pinus*	Trunks (under bark)	L	
3a.152	*Polygraphus subopacus* Thoms.	*Scolytidae*	Russia: widespread in coniferous area; Baltic countries; Belarus; Moldova; Ukraine	Not yet checked	Europe	*Picea, Abies*	Trunks (under bark)	L	
3a.153	*Scolytus ensifer* Eichh.	*Scolytidae*	N. E. Russia, C. E. Russia, S.E. Russia; Baltic countries; Belarus; Moldova; Ukraine; Transcaucasus	Not yet checked	Not yet checked	*Ulmus*, other deciduous	Trunks (under bark)	L	
3a.154	*Scolytus intricatus* Ratz.	*Scolytidae*	N. E. Russia, C. E. Russia, S.E. Russia; Baltic countries; Belarus; Moldova; Ukraine; Transcaucasus	Not yet checked	Europe	*Quercus, Carpinus, Fagus, Castanea, Ulmus, Betula*	Trunks (under bark)	L	Vector of *Ophiostoma roboris* and other mycoses
3a.155	*Scolytus kirschi* Skal.	*Scolytidae*	C. E. Russia, S. E. Russia; Baltic countries; Belarus; Moldova; Ukraine; Transcaucasus	Not known	Central and Southern Europe	*Ulmus*	Trunks (under bark)	L – M	The main damage – on elm plantations in the steppes
3a.156	*Scolytus multistriatus* Marsham.	*Scolytidae*	N. E. Russia, C. E. Russia, S.E. Russia; Baltic countries; Belarus; Moldova; Ukraine	Canada, USA	Europe (widespread); Iran; Algeria; Egypt; Australia	*Ulmus, Populus tremula, Quercus*, other deciduous	Trunks (under bark)	L – M	
3a.157	*Scolytus orientalis* Egg. (possibly – *S. multistriatus* Marsh.)	*Scolytidae*	Ukraine (Crimea); Transcaucasus; Central Asia	Not known	Bulgaria; Romania; Iran (North)	*Ulmus, Zelkowa*	Trunks (under bark)	L – M	
3a.158	*Scolytus pygmaeus* F.	*Scolytidae*	N. E. Russia, C. E. Russia, S.E. Russia; Baltic countries; Belarus; Moldova; Ukraine; Transcaucasus	Not yet checked	Europe	*Ulmus*, other deciduous	Trunks (under bark)	L	
3a.159	*Scolytus ratzeburgi* Jans.	*Scolytidae*	Russia: widespread in birch area; Baltic countries; Belarus; Moldova; Ukraine; Transcaucasus; Kazakhstan	Not known	Europe (widespread)	*Betula*	Trunks (under bark)	L – M	
3a.160	*Scolytus scolytus* F.	*Scolytidae*	C. E. Russia, S. E. Russia; Baltic countries; Belarus; Moldova; Ukraine; Transcaucasus; Kazakhstan; Central Asia	Not known	Europe (widespread); India, Iran	*Ulmus*, other deciduous	Trunks (under bark)	L – H	Vector of *Graphium ulmi*

Table 3a. INSECTS COLEOPTERA

3a.161	*Scolytus sulcifrons* Rey.	*Scolytidae*	S. E. Russia; Transcaucasus	Not known	Southern Europe	*Ulmus*, other deciduous	Trunks (under bark)	L – M	
3a.162	[*Scolytus zaitzevi* But.]	*Scolytidae*	S. E. Russia; Ukraine (South); Transcaucasus	Not known	Not known	*Ulmus*	Trunks (under bark)	L – M	
3a.163	*Tomicus minor ?* [*Blastophagus minor* Hart.]	*Scolytidae*	Russia: widespread in pine area; Baltic countries; Belarus; Moldova; Ukraine	Not known	Europe (widespread)	*Pinus*	Trunks (under bark)	L – M	
3a.164	*Tomicus piniperda* [*Blastophagus piniperda* L.]	*Scolytidae*	Russia: widespread in pine area; Baltic countries; Belarus; Moldova; Ukraine; Transcaucasus	Not known	Europe (widespread); Mongolia; Northern China	*Pinus*	Trunks (under bark)	L – H	
3a.165	*Trypodendron lineatum* Oliv.	*Scolytidae*	Russia: widespread in pine area; Baltic countries; Belarus; Moldova; Ukraine; Transcaucasus; Kazakhstan	Europe	Not yet checked	*Pinus*, *Picea*, *Abies*, *Larix*	Trunks (wood)	L	
3a.166	*Trypodendron proximum* Niis.	*Scolytidae*	S. Far East	Europe	Not yet checked	*Pinus sibirica*, *Picea*	Trunks (wood)	VL – L	
3a.167	*Xyleborus* [= *Anisandrus*] *dispar* *********	*Scolytidae*	N. E. Russia, C. E. Russia, S.E. Russia, N. W. Siberia, S. Siberia (West); Baltic countries; Belarus; Moldova; Ukraine; Transcaucasus	Canada (introduced); USA (introduced)	Europe (widespread)	*Quercus*, *Castanea*, *Carpinus*, *Juglans*	Trunks (under bark)	L – M	
3a.168	*Xyleborus* [= *Anisandrus*] *saxeseni*	*Scolytidae*	Russia: widespread; Baltic countries; Belarus; Moldova; Ukraine; Transcaucasus; Kazakhstan; Central Asia	Present	Europe (widespread); Iran; India; Mongolia; China; Korea; Japan	*Quercus*, *Carpinus*, *Fagus*, *Fraxinus*, *Ulmus*, other deciduous and coniferous	Trunks (under bark)	L – M	
3a.169	*Xylechinus pilosus*	*Scolytidae*	Russia: widespread in fir and spruce area; Baltic countries; Belarus; Moldova; Ukraine	Not known	Central and Northern Europe	*Abies*, *Picea*	Trunks (under bark)	L – M	
3a.170	*Blaps halophila*	*Tenebrionidae*	S. E. Russia, S. Siberia; Baltic countries; Belarus; Moldova; Ukraine; Central Asia	Not yet checked	Not yet checked	Deciduous, coniferous and other plants	Roots	L	Main damage - on young plants and in nurseries
3a.171	*Opatrum sabulosum*	*Tenebrionidae*	C. E. Russia, S. E. Russia, S. Siberia; Baltic countries; Belarus; Moldova; Ukraine; Transcaucasus; Central Asia	Not yet checked	Europe	Deciduous, coniferous and other plants	Roots, leaves	L	Main damage - on young plants and in nurseries

Table 3a. INSECTS DIPTERA, HETEROPTERA & HOMOPTERA

				Diptera					
3a.172	*Strobilomyia [Pegohylemyia] anthracina*	*Anthomyiidae*	Russia: widespread in the *Picea* area Baltic countries, Belarus, Ukraine	Not known	Widespread in Europe, China, Japan	*Picea*	Cones and seeds	L - M	Data of Dr. Alain Roques
3a.173	*Strobilomyia [Lasiomma] laricicola*	*Anthomyiidae*	Russia: widespread in the *Larix* area; Baltic countries; Belarus, Ukraine	Not known	Widespread in Europe, China, Japan	*Larix*	Cones and seeds	M - H	Data of Dr. Alain Roques
3a.174	*Strobilomyia [Lasiomma] infrequens*	*Anthomyiidae*	Russia: widespread in the *Larix* area;.	Not known	Widespread in Europe, China	*Larix*	Cones and seeds	M – H	Data of Dr. Alain Roques
3a.175	*Kaltenbachiola [= Perresia] strobi*	*Cecidomyiidae*	Russia: widespread in *Picea* area; Baltic countries; Belarus, Ukraine; Kazakhst.	Not known	Central and Northern Europe	*Picea*	Cones and seeds	L - M	Data of Dr. Alain Roques
3a.176	*Plemeliella abietina*	*Cecidomyiidae*	N. E. Russia, C. E. Russia, S.E. Russia; Belarus, Ukraine	Not known	Widespread in *Picea* area in Europe	*Picea*	Seeds	VL - L	Data of Dr. Alain Roques
3a.177	*Resseliella piceae*	*Cecidomyiidae*	Transcaucasus	Not known	Western, Central , Southern Europe	*Abies*	Cones and seeds	M - H	Data of Dr. Alain Roques
3a.178	*Earomyia bazini*	*Lonchaeidae*	S. Siberia, N. Far East	Not known	France, Poland	*Larixs*	Seeds	L-M	Data of Dr. Alain Roques
3a.179	*Earomyia impossibile [E. impossibilis]*	*Lonchaeidae*	Transcaucasus	Not known	Austria, Italy, Romania	*Abies*	Seeds	M - H	Data of Dr. Alain Roques
3a.180	*Earomyia schystopiga*	*Lonchaeidae*	C.E. Russia, S. Siberia, Transbaik.s	Not known	Westen, Central, Northern Europe	*Picea*	Seeds	M - H	Data of Dr. Alain Roques
				Heteroptera					
3a.181	*Aradus cinnamomeus*	*Aradidae*	N. E. Russia, C. E. Russia, S.E. Russia, N.E.Siberia, N.W. Siberia, S. Siberia; Baltic countries; Belarus; Moldova; Ukraine	Canada; USA	Finland; Sweden; Norway; Denmark; Netherlands; Spain; Greece; Chechia; Slovakia; Bulgaria; Poland; Hungary; Israel; Turkey;	*Pinus sylvestris*, other *Pinus*, *Larix*	Trunks (under bark)	L – H	Main damage – to young (5 – 25 year-old) pine plantations. Vector of resin flow canker
				Homoptera					
3a.182	*Adelges laricis*	*Adelgidae*	Russia: spread in common spruce and larch area	Not yet checked	Not yet checked	*Picea* and *Larix*	Young sprouts & needles	VL – L	Main damage – to young trees
3a.183	*Adelges tardus*	*Adelgidae*	N. E. Russia, C. E. Russia; Baltic countries; Belarus	Not known	Central and Northern Europe	*Picea*	Young sprouts and needles	L – M	Main damage - to young trees in plantations and nurseries
3a.184	*Aphrastasia pectinatae [A. pectinate]*	*Adelgidae*	Russia: spread in common spruce and fir area; Baltic countries	Not yet checked	Not yet checked	*Picea* and *Abies*	Young sprouts and needles	VL – L	Main damage – to young trees

Table 3a. INSECTS HOMOPTERA

3a.185	*Chermes [Adelges] tardoides*	*Adelgidae*	Russia: spread in common spruce and larch area	Not yet checked	Scandinavia	*Picea* and *Larix*	Young sprouts & needles	VL – L	Main damage – to young trees
3a.186	*Dreyfusia nordmannianae*	*Adelgidae*	Russia: spread in common spruce and fir area	Not yet checked	Not yet checked	*Picea* and *Abies*	Young sprouts & needles	VL – L	Main damage – to young trees
3a.187	*Pineus pini*	*Adelgidae*	N. E. Russia, C. E. Russia, S.E. Russia; Baltic countries; Belarus; Moldova; Ukraine	Not known	Europe: widespread in pine area	*Pinus*	Young sprouts and needles	L – M	Main damage - to young trees in plantations and nurseries
3a.188	*Cholodkovskya viridara*	*Aphididae*	N. E. Russia, C. E. Russia, S.E. Russia; Baltic countries; Belarus; Moldova; Ukraine	Absent	Western Europe	*Larix*	Young sprouts and needles	L – M	Main damage - to young trees in plantations and nurseries
3a.189	*Dysaphis (= Yezabura) reaumuri*	*Aphididae*	S. E. Russia; Ukraine; Transcaucasus; Central Asia	Not yet checked	Not yet checked	*Pyrus, Populus*	Leaves	VL – M	
3a.190	*Sacchiphantes abietis*	*Aphididae*	Russia: widespread in spruce area; Baltic countries; Belarus; Kazakhstan	Absent	Western Europe	*Picea*	Young sprouts and needles	L – M	Main damage - to young trees in plantations and nurseries
3a.191	*Sacchiphantes viridis*	*Aphididae*	Russia: widespread in common spruce and larch area; Baltic countries; Belarus; Ukraine; Transcaucasus	Not yet checked	Not yet checked	*Picea* and *Larix*	Young sprouts and needles	VL – L	Main damage – to young trees
3a.192	*Thecabius affinis (= T. agnotus)*	*Aphididae*	C. E. Russia, S. E. Russia, N. W. Siberia, S. Siberia, Transbaikalia, S. Far East; Ukraine; Transcaucasus; Central Asia	Not yet checked	Widespread in Eurasia	*Populus*	Leaves	VL – M	
3a.193	*Parthenolecanium corni*	*Coccidae*	N. E. Russia, C. E. Russia, S.E. Russia, N. Far East, S. Far East; Baltic countries; Belarus; Moldova; Ukraine; Transcaucasus; Central Asia	Present	Western Europe	*Corylus*, *Robinia*, *Acer*, *Caragana*, *Vitis*, other deciduous	Trunks and branches (on the bark)	L – M	Main damage - to young plants in plantations and nurseries
3a.194	*Chionaspis salicis*	*Diaspididae*	N. E. Russia, C. E. Russia, S.E. Russia; Baltic countries; Belarus; Moldova; Ukraine; Transcaucasus	Not known	Western Europe	*Salix*, *Populus*, *Fraxinus*, *Acer*, other deciduous	Trunks and branches (on the bark)	L – M	Main damage - to young plants in plantations and nurseries

Table 3a. INSECTS HOMOPTERA & HYMENOPTERA

3a.195	*Lepidosaphes ulmi*	*Diaspididae*	Russia: widespread; Baltic countries; Belarus; Moldova; Ukraine; Transcaucasus; Kazakhstan; Central Asia	Widespread	Widespread in the world	*Populus*, *Salix*, fruit and other deciduous	Trunks and branches (on the bark)	L – M	Main damage - to young plants in plantations and nurseries
				Hymenoptera					
3a.196	*Arge [= Hylotoma] pullata*	*Argidae*	Russia: widespread in birch area; Baltic countries; Belarus; Moldova; Ukraine; Transcaucasus	Not yet checked	Not yet checked	*Betula*	Leaves	L	
3a.197	*Diprion [= Lophyrus] pini*	*Diprionidae*	Russia: widespread in pine area; Baltic countries; Belarus; Ukraine; Transcaucasus	Absent	Europe (widespread); Algeria	*Pinus*	Needles	M – H	
3a.198	*Neodiprion sertifer [Tenthredo rufa]*	*Diprionidae*	Russia: widespread in pine area; Baltic countries; Belarus; Ukraine; Transcaucasus	East of USA (introduced and not yet widely distributed)	Western Europe; Japan; Korea	*Pinus*	Needles	M – H	
3a.199	*Eurytoma laricis* (=*E. bouceki*)	*Eurytomidae*	S.E. Russia, C.E. Russia, S. Siberia, Transbaik	Not known	Europe: widespread in *Larix* area, Finland, China	*Larix*	seeds	VL – L	Data of Dr. Alain Roques
3a.200	*Eurytoma plotnikovi*	*Eurytomidae*	Central Asia	Not yet checked	Not yet checked	*Pistacia*	Nuts	VL – L	
3a.201	*Acantholyda [= Lyda] erythrocephala*	*Pamphiliidae*	Russia: widespread in pine area; Baltic countries; Belarus; Ukraine; Kazakhstan	East of USA (introduced and not yet widely distributed)	Western Europe; Korea	*Pinus*	Needles	M – H	Main damage – to young mono-cultures of pine
3a.202	*Acantholyda [Lyda] hieroglyphica*	*Pamphiliidae*	N. E. Russia, C. E. Russia; Baltic countries; Belarus; Moldova; Ukraine; Transcaucasus	Not known	Western Europe	*Pinus*	Needles	L – M	Main damage – to 2 – 4 year-old plantations and nurseries
3a.203	*Acantholyda posticalis [Lyda nemoralis (= Acantholyda pinivora = Tenthredo stellata)]*	*Pamphiliidae*	Russia: widespread in pine area; Baltic countries; Belarus; Ukraine; Kazakhstan	Not known	Western Europe; Japan; Mongolia	*Pinus*	Needles	M – H	
3a.204	*Sirex [Paururus] juvencus*	*Siricidae*	Russia: widespread in pine area; Baltic countries; Belarus; Moldova; Ukraine; Transcaucasus	Not yet checked	Not yet checked	*Pinus*, other coniferous	Trunks (wood)	L	

Table 3a. INSECTS HYMENOPTERA

3a.205	*Tremex fuscicornis*	*Siricidae*	Russia: widespread; Baltic countries; Belarus; Moldova; Ukraine	Absent	Western Europe; Chili, China (North – East); Japan; Korea	*Betula, Populus tremula, Salix, Fagus, Quercus*	Trunks (wood)	L – M	
3a.206	*Tremex magus*	*Siricidae*	C. E. Russia, S.E. Russia, S. Siberia (West); Baltic countries; Belarus; Moldova; Ukraine	Absent	Western Europe	*Betula, Fagus, Acer*, other deciduous	Trunks (wood)	L – M	
3a.207	*Urocerus [Sirex] gigas*	*Siricidae*	Russia: widespread in spruce area; Baltic countries; Belarus; Moldova; Ukraine; Kazakhstan	Not known	Western Europe; Japan	*Picea*, other coniferous	Trunks (wood)	L – M	
3a.208	*Croesus [= Nematus] septentrionalis*	*Tenthredinidae*	Russia: widespread except Far East; Baltic countries; Belarus; Moldova; Ukraine	Not yet checked	Not yet checked	*Betula, Alnus, Populus, Salix, Corylus*	Leaves	L	
3a.209	*Macrophya punctumalbum*	*Tenthredinidae*	N. E. Russia, C. E. Russia, S.E. Russia; Baltic countries; Belarus; Moldova; Ukraine; Transcaucasus	East USA	Europe to the Caucasus	*Fraxinus, Ligustrum, Crataegus*	Leaves	L	
3a.210	*Mesoneura opaca*	*Tenthredinidae*	N. E. Russia, C. E. Russia, S.E. Russia; Baltic countries; Belarus; Moldova; Ukraine	Not yet checked	Not yet checked	*Quercus*	Leaves	L	
3a.211	*Pristiphora abietina [Lygaeonematus (Nematus) abietinus]*	*Tenthredinidae*	N. E. Russia, C. E. Russia, S.E. Russia; Baltic countries; Belarus; Ukraine	Not known	Western Europe	*Picea*	Needles	L – M	
3a.212	*Pristiphora [= Lygaeonematus = Nematus] erichsonii*	*Tenthredinidae*	Russia: widespread in larch area; Baltic countries; Belarus; Ukraine	Present	Western Europe	*Larix*	Needles	L – M	
3a.213	*Pristiphora [= Lygaeonematus] wesmaeli*	*Tenthredinidae*	Russia: widespread in larch area; Baltic countries; Belarus; Ukraine	Not known	Western Europe	*Larix*	Needles and young sprouts	L – M	
3a.214	*Tomostethus nigritus*	*Tenthredinidae*	N.E. Russia, C.E.Russia, S.E. Russia, S. Far East; Baltic countries; Belarus; Moldova; Ukraine; Transcaucasus	Not yet checked	Europe (HR, IT); from ES, N. Africa to the Caucasus	*Fraxinus*	Leaves	L	
3a.215	*Trichiocampus [= Cladius] ulmi (= Cladius uncinatus)*	*Tenthredinidae*	N. E. Russia, C. E. Russia, S.E. Russia; Baltic countries; Belarus; Moldova; Ukraine; Transcaucasus	Not yet checked	Not yet checked	*Ulmus*	Leaves	L	

Table 3a. INSECTS HYMENOPTERA, ISOPTERA & LEPIDOPTERA

3a.216	*Megastigmus pistaciae*	*Torymidae*	Ukraine; Transcaucasus; Central Asia	California	Southern Europe; North Africa, Iran, China	*Pistacia*	Nuts (seeds)	L – M	Data of Dr. Alain Roques
3a.217	*Megastigmus pictus*	*Torymidae*	Russia: widespread in larch area; Baltic countries; Belarus, Ukraine	Not known	Europe: widespread in *Larix* area, China	*Larix*	Seeds	L – M	Data of Dr. Alain Roques
3a.218	*Megastigmus specularis*	*Torymidae*	C.E. Russia, S. Siberia, Baltic countries	Not known	Finland, Denmark, Sweden, France	*Abies*	Seeds	L-M	Data of Dr. Alain Roques
3a.219	*Megastigmus strobilobius*	*Torymidae*	Russia: widespread in *Picea* area; Baltic countries; Belarus, Ukraine, Transcaucasus	Not known	Europe: widespread in *Picea* area	*Picea*	Seeds	M – H	Data of Dr. Alain Roques
3a.220	*Megastigmus suspectus*	*Torymidae*	C.E. Russia, S.E. Russia, Transcaucasus, Baltic countries; Belarus, Ukraine	Not known	Europe: widespread in *Abies* area	*Abies*	Seeds	M - H	Data of Dr. Alain Roques
3a.221	*Konowia [= Pseudoxiphydria] betulae*	*Xiphydriidae*	Russia: widespread except Far East; Baltic countries; Belarus; Moldova; Ukraine	Absent	Western Europe	*Betula*	Trunks (wood)	L – M	
3a.222	*Xiphydria camelus*	*Xiphydriidae*	Russia: widespread; Baltic countries; Belarus; Moldova; Ukraine	Not known	Western Europe	*Alnus, Betula*	Trunks (wood)	L – M	
3a.223	*Xiphydria prolongata*	*Xiphydriidae*	Russia: widespread except Far East; Baltic countries; Belarus; Moldova; Ukraine; Transcaucasus; Kazakhstan	Not known	Western Europe	*Salix, Populus, Betula, Quercus, Ulmus*	Trunks (wood)	L – M	
				Isoptera					
3a.224	*Reticulitermes lucifugus*	*Rhinotermitidae*	Ukraine (South)	Not known	Not known	Coniferous and deciduous	Wood	M – H	Main damage - to telegraph-poles, wood in buildings, etc.
				Lepidoptera					
3a.225	*Hyphantria cunea*	*Arctiidae*	S. E. Russia; Azerbaijan; Georgia; Moldova; Ukraine; Uzbekistan	Canada, Mexico, USA	Europe (widespread); China; Japan; Korea; Turkey	*Morus, Acer negunda*, fruit trees, *Ulmus, Juglans, Salix*	Leaves	L – M	
3a.226	*Coleophora [= Eupista] laricella*	*Coleophoridae*	N. E. Russia, C. E. Russia, S.E. Russia, N.E. Siberia, S. Siberia (West); Baltic countries; Belarus; Ukraine	Canada (introduced); USA (introduced)	Central & Northern Europe; Japan;	*Larix*	Needles	L – M	
3a.227	*Cossus cossus*	*Cossidae*	Russia: widespread; Baltic countries; Belarus; Moldova; Ukraine; Kazakhstan; Central Asia	Absent	Europe; Mediterranean region; Western and Northern China	*Fraxinus*, fruit trees and other deciduous	Trunks (wood)	L – M	

Table 3a. INSECTS LEPIDOPTERA

3a.228	*Lamellocossus [Cossus] terebra*	*Cossidae*	N. E. Russia, C. E. Russia, S.E. Russia, S. Siberia, S. Far East, Transbaik.; Baltic countries; Belarus; Moldova; Ukraine; Transcaucasus	Not yet checked	Not yet checked	*Populus tremula*, other *Populus*	Trunks (wood)	VL – L	
3a.229	*Zeuzera pyrina*	*Cossidae*	C. E. Russia, S. E. Russia, S. Far East; Baltic countries; Belarus; Moldova; Ukraine; Transcaucasus	Present	Central & Southern Europe; Mediter-ranean region; Southern Africa; South–East Asia	*Fraxinus, Quercus, Ulmus, Malus, Pyrus*, other deciduous	Trunks and branches (wood)	L – M	
3a.230	*Endromis versicolora*	*Endromidae*	Russia: widespread; Baltic countries; Belarus; Moldova; Ukraine; Kazakhstan	Absent	Central and Northern Europe	*Betula, Salix, Tilia, Carpinus*	Leaves	L – M	
3a.231	*Schneidereria [Recurvaria] pistaciicola*	*Gelechiidae*	Central Asia	Not known	Not known	*Pistacia*	Nuts	L - M	
3a.232	*Abraxas sylvata*	*Geometridae*	N. E. Russia, C. E. Russia, S.E. Russia, S. Siberia, S. Far East; Baltic countries; Belarus; Moldova; Ukraine; Transcaucasus; Kazakhstan; Central Asia	Absent	Central and Northern Europe	*Ulmus, Betula, Prunus padus, Fraxinus, Ribes, Grossularia*	Leaves	L – M	
3a.233	*Agriopis [Erannis (= Hybernia)] aurantiaria*	*Geometridae*	C. E. Russia, S. E. Russia, S. Far East; Baltic countries; Belarus; Moldova; Ukraine; Transcaucasus	Not known	Central Europe; Turkey	*Quercus, Fagus, Ulmus, Betula, Tilia, Fraxinus*, fruit trees	Leaves	L – M	
3a.234	*Agriopis [Erannis (= Hybernia)] leucophaearia*	*Geometridae*	C. E. Russia, S. E. Russia, S. Far East; Baltic countries; Belarus; Moldova; Ukraine; Transcaucasus	Not known	Central and Southern Europe; Syria; Japan	*Quercus, Populus tremula, Fagus*, other deciduous	Leaves	L – M	
3a.235	*Agriopis [Erannis (= Hybernia)] marginaria*	*Geometridae*	C. E. Russia, S. E. Russia, S. Far East; Baltic countries; Belarus; Moldova; Ukraine; Transcaucasus	Not known	Europe (widespread); Turkey	*Quercus, Fagus, Ulmus, Betula, Tilia, Fraxinus*, fruit trees	Leaves	L – M	
3a.236	*Alsophila [= Anisopterix] aescularia*	*Geometridae*	N.E. Russia, C.E.Russia, S.E. Russia, S. Far East; Baltic countries; Belarus; Moldova; Ukraine; Transcaucasus	Absent	Central and Southern Europe	*Ulmus, Quercus, Betula, Alnus*	Leaves	L – M	
3a.237	*Apocheima [= Biston] hispidaria*	*Geometridae*	C. E. Russia, S. E. Russia, S. Siberia; Ukraine	Not known	Central and Southern Europe	*Quercus, Ulmus*, fruit trees, *Betula*	Leaves	L – M	
3a.238	*Apocheima pilosaria [Phigalia pedaria]*	*Geometridae*	N. E. Russia, C. E. Russia, S.E. Russia, S. Far East; Baltic countries; Belarus; Moldova; Ukraine	Absent	Central Europe	*Ulmus, Quercus*, fruit trees, *Betula*	Leaves	L – M	

Table 3a. INSECTS LEPIDOPTERA

3a.239	*Biston [= Amphidasis] betularia*	*Geometridae*	N. E. Russia, C. E. Russia, S.E. Russia, S. Siberia, S. Far East; Baltic countries; Belarus; Moldova; Ukraine; Transcaucasus; Kazakhstan	Not known	Western Europe; Japan	*Betula, Populus, Tilia, Ulmus, Quercus, Fraxinus*	Leaves	L – M	
3a.240	*Biston strataria*	*Geometridae*	C. E. Russia, S. E. Russia ; Baltic countries; Belarus; Moldova; Ukraine; Transcaucasus; Kazakhstan	Not known	Europe; Turkey	*Quercus, Populus, Tilia, Betula*	Leaves	L – M	
3a.241	*Bupalus [= Fidonia] piniarius*	*Geometridae*	Russia: widespread in pine area; Baltic countries; Belarus; Ukraine; Transcaucasus	Absent	Central and Northern Europe	*Pinus*	Needles	M – H	
3a.242	*Colotis [= Himera] pennaria*	*Geometridae*	N.E. Russia, C.E.Russia, S.E. Russia, S. Far East; Baltic countries; Belarus; Moldova; Ukraine; Transcaucasus	Absent	Central Europe; Turkey	*Quercus, Carpinus, Fagus, Betula, Populus, Salix*	Leaves	L – M	
3a.243	*Ectropis [Boarmia] bistortata*	*Geometridae*	Russia: widespread; Baltic countries; Belarus; Ukraine; Transcaucasus	Absent	Europe (widespread)	*Abies, Larix, Ribes*	Needles	L – H	Extremely polyphagous
3a.244	*Ectropis extersaria [Parectropis luridata (= Boarmia extersaria = B. luridata)]*	*Geometridae*	Russia: widespread except North regions; Baltic countries; Belarus; Ukraine	Absent	Central Europe; Japan	*Betula, Alnus, Quercus, Corylus*	Leaves	L – M	
3a.245	*Ennomos quercinaria*	*Geometridae*	C. E. Russia, S. E. Russia, S. Far East; Baltic countries; Belarus; Moldova; Ukraine; Transcaucasus	Absent	Central Europe; Turkey	*Quercus, Betula, Tilia, Fagus, Carpinus*	Leaves	L – M	
3a.246	*Erannis [= Hybernia] defoliaria*	*Geometridae*	N.E. Russia, C.E.Russia, S.E. Russia, S. Far East; Baltic countries; Belarus; Moldova; Ukraine; Transcaucasus	Not known	Europe (widespread)	*Quercus, Fagus, Ulmus, Betula, Tilia, Fraxinus*, fruit trees	Leaves	L – M	
3a.247	*Eupithecia abietaria*	*Geometridae*	Russia: widespread in spruce area	Not known	Northern, western and central Europe	*Picea*, *Pinus*,	Cones and seeds	M - H	Data of Dr. Alain Roques
3a.248	*Eupithecia bilunulata [E. analoga] [E. strobilata]*	*Geometridae*	C. E. Russia, S. E. Russia, N.E.Siberia, N.W. Siberia, S. Siberia, Transbaik.; Baltic countries; Belarus, Ukraine	Not known	Northern western and central Europe	*Picea*,	Cones and seeds	M - H	Data of Dr. Alain Roques
3a.249	*Hylaea [Ellopia] fasciaria [= E. prosapiaria]*	*Geometridae*	Russia: widespread; Baltic countries; Belarus; Ukraine; Transcaucasus; Kazakhstan	Absent	Central and Northern Europe	*Pinus*, *Picea*, *Abies*	Needles	L – M	
3a.250	*Lycia [= Biston] hirtaria*	*Geometridae*	N. E. Russia, C. E. Russia, S.E. Russia, S. Siberia, S. Far East; Baltic countries; Belarus; Moldova; Ukraine; Kazakhstan	Not known	Western Europe; Turkey	*Ulmus*, fruit trees, *Salix*, *Populus*, *Betula, Tilia, Acer, Quercus*	Leaves	L – M	

Table 3a. INSECTS LEPIDOPTERA

3a.251	*Operophtera [= Cheimatobia] brumata*	*Geometridae*	N.E. Russia, C.E.Russia, S.E. Russia, S. Far East; Baltic countries; Belarus; Moldova; Ukraine; Transcaucasus; Kazakhstan; Turkmenistan	Western USA (introduced); Eastern Canada (introduced)	Europe (widespread); Iran; Japan; Algeria; Tunisia	*Quercus*, fruit trees, *Ulmus, Fagus, Tilia, Carpinus, Acer, Salix*	Leaves	M – H	
3a.252	*Poecilopsis [= Biston] pomonaria*	*Geometridae*	N. E. Russia, C. E. Russia, S.E. Russia; Baltic countries; Belarus; Moldova; Ukraine	Not known	Northern – Western Europe	Deciduous fruit and forest trees & shrubs	Leaves	L – M	
3a.253	*Semiothisa [= Macaria] liturata*	*Geometridae*	Russia: widespread; Baltic countries; Belarus; Ukraine; Transcaucasus	Not known	Western Europe	*Pinus, Picea, Abies*	Needles	L – M	
3a.254	*Semiothisa [= Macaria] signaria*	*Geometridae*	Russia: widespread in coniferous area; Baltic countries; Belarus; Ukraine; Transcaucasus	Not known	Central and Northern Europe	*Picea, Abies, Pinus*	Needles	L – M	
3a.255	*Dendrolimus pini*	*Lasiocampidae*	Russia: widespread in pine area; Baltic countries; Belarus; Ukraine; Kazakhstan	Absent	Europe (generally); Asia (generally); Morocco	*Pinus sylvestris*	Needles	H – VH	
3a.256	*Eriogaster [= Lasiocampa = Gastropacha] lanestris*	*Lasiocampidae*	Russia: widespread in forest area; Baltic countries; Belarus; Moldova; Ukraine	Absent	Western Europe	*Quercus, Betula, Tilia, Populus Salix*	Leaves	L – M	
3a.257	*Malacosoma [= Gastropacha] neustria*	*Lasiocampidae*	C. E. Russia, S. E. Russia, S. Siberia, S. Far East; Baltic countries; Belarus; Moldova; Ukraine; Transcaucasus	Absent	Western Europe; Northern China; Korea; Japan	*Rosaceae, Quercus, Populus, Salix*	Leaves	L – M	
3a.258	*Cosmotriche [= Selenephera = Selenophora] lunigera*	*Lasiocampidae*	Russia: widespread; Baltic countries; Belarus; Moldova; Ukraine	Absent	Central Europe	*Abies,Larix, Picea, Pinus*	Needles	L – H	
3a.259	*Calliteara [Dasychira] abietis*	*Lymantriidae*	Russia: widespread in coniferous area; Baltic countries; Belarus; Ukraine	Not known	Central and Northern Europe; Japan	*Picea, Abies Pinus, Larix,*	Needles	L – M	
3a.260	*Calliteara [Dasychira] pudibunda*	*Lymantriidae*	Russia: widespread; Baltic countries; Belarus; Moldova; Ukraine; Transcaucasus; Kazakhstan; Central Asia	Not known	Western Europe; Japan	*Quercus, Fagus, Carpinus, Betula, Salix*	Leaves	L – M	
3a.261	*Euproctis [= Nygmia] chrysorrhoea*	*Lymantriidae*	C. E. Russia, S. E. Russia ; Baltic countries; Belarus; Moldova; Ukraine; Transcaucasus	Canada, USA	Europe (widely); Iran; Syria; Turkey; Algeria; Morocco; Mauritania; Tunisia	*Quercus*, fruit trees, *Ulmus, Populus*, other deciduous	Leaves	M – H	
3a.262	*Leucoma [= Stilpnotia] salicis*	*Lymantriidae*	Russia: widespread; Baltic countries; Belarus; Moldova; Ukraine; Transcaucasus; Kazakhstan; Central Asia	Canada (West); USA (East)	Europe (widely); Mediterranean region; Northern Mongolia; China; Korea; Japan; Northern Africa	*Salix, Populus*	Leaves	M – H	The most dangerous for plantations of *Salix* and *Populus*

Table 3a. INSECTS LEPIDOPTERA

3a.263	*Lymantria [= Ocneria = Porthetria] dispar*	*Lymantriidae*	Russia: widespread; Baltic countries; Belarus; Moldova; Ukraine; Transcaucasus; Kazakhstan; Central Asia	Canada and USA (introduced)	Europe (widely); Mediterranean region; India; Afghanistan; Iran; Iraq; China; Japan; Korea; Taiwan	*Quercus*, fruit trees, *Populus, Betula, Larix*, etc.	Leaves	M – VH	Extremely polyphagous
3a.264	*Lymantria [= Ocneria] monacha*	*Lymantriidae*	Russia: widespread in coniferous area; Baltic countries; Belarus; Ukraine; Transcaucasus	Absent	Europe (widely); China; Japan; Korea; Turkey; Mediterranean region (generally)	*Pinus, Picea, Abies, Larix*	Needles, young sprouts and buds	H - VH	
3a.265	*Orgyia antiqua*	*Lymantriidae*	Russia: widespread; Baltic countries; Belarus; Ukraine; Transcaucasus	Present	Western Europe; Eastern Asia; Northern China; Japan	*Quercus, Populus, Betula*, other deciduous, *Picea, Larix*	Leaves and needles	M - H	
3a.266	*Sphrageidus [= Euproctis = Porthesia] similis*	*Lymantriidae*	Russia: widespread; Baltic countries; Belarus; Moldova; Ukraine; Transcaucasus; Kazakhstan; Central Asia	Absent	Europe (widespread); China; Japan	*Quercus, Betula*, fruit trees	Leaves	L – M	
3a.267	*Acronicta aceris*	*Noctuidae*	N. E. Russia, C. E. Russia, S.E. Russia; Baltic countries; Belarus; Moldova; Ukraine; Transcaucasus; Central Asia	Not known	Central and Western Europe; Mediterranean region	*Quercus, Acer, Ulmus, Fagus, Aesculus, Populus, Salix*	Leaves	L – M	
3a.268	*Agrotis segetum*	*Noctuidae*	Russia: widespread; Baltic countries; Belarus; Moldova; Ukraine; Transcaucasus; Kazakhstan; Central Asia	Not known	Europe (widespread); Asia (widespread); Africa (widespread)	Deciduous, coniferous and other plants	Roots	L – M	Main damage - to young plantations and in nurseries
3a.269	*Colocasia [= Demas] coryli*	*Noctuidae*	N.E. Russia, C E.Russia, S.E. Russia, N.E.Siberia, N.W. Siberia, S. Siberia; Baltic countries; Belarus; Moldova; Ukraine; Transcaucasus	Not known	Central and Northern Europe	*Quercus, Betula, Fagus, Carpinus, Corylus, Populus, Salix*	Leaves	L – M	
3a.270	*Moma [= Daseochaeta = Diphtera] alpium*	*Noctuidae*	Russia: widespread; Baltic countries; Belarus; Moldova; Ukraine	Absent	Central & Northern Europe; China; Korea; Japan	*Quercus, Fagus, Betula, Carpinus*	Leaves	L – M	
3a.271	*Orthosia cruda [Monima (= Taeniocampa) pulverulenta]*	*Noctuidae*	N. E. Russia, C. E. Russia, S.E. Russia; Baltic countries; Belarus; Moldova; Ukraine; Transcaucasus	Not known	Central and Northern Europe; Mediterranean region	*Quercus, Acer, Tilia, Betula, Ulmus, Populus tremula*	Leaves	L – M	
3a.272	*Orthosia [Monima (= Taeniocampa] incerta*	*Noctuidae*	N.E.Russia, C.E. Russia, S.E. Russia, S.Siberia, S.Far East; Baltic countries; Belarus; Moldova; Ukraine; Transcaucasus; Kazakhstan; Central Asia	Present	Central and Northern Europe; Mediterranean region	*Quercus, Betula, Populus, Ulmus, Tilia*	Leaves	L – M	

Table 3a. INSECTS LEPIDOPTERA

3a.273	*Orthosia [Monima = Taeniocampa] stabilis*	*Noctuidae*	N. E. Russia, C. E. Russia, S.E. Russia; Baltic countries; Belarus; Moldova; Ukraine	Not known	Central Europe; Mediterranean region; Japan	*Quercus, Fagus*	Leaves	L – M	
3a.274	*Panolis flammea*	*Noctuidae*	Russia: widespread in pine area; Baltic countries; Belarus; Ukraine	Absent	Central Europe; Northern Mongolia; Northern China; Korea; Japan	*Pinus*	Needles	M – H	
3a.275	*Cerura [= Dicranura = Harpia] vinula*	*Notodontidae*	Russia: widespread; Baltic countries; Belarus; Moldova; Ukraine; Transcaucasus	Not known	Europe (widely); Turkey; Northern China; Japan	*Populus, Salix*	Leaves	L – M	
3a.276	*Clostera [*possibly *Pygaera] anastomosis*	*Notodontidae*	Russia: widespread; Baltic countries; Belarus; Moldova; Ukraine; Transcaucasus; Central Asia	Not known	Western Europe	*Populus tremula, Salix,* other *Populus*	Leaves	L – M	
3a.277	*Exaereta [= Uropus] ulmi*	*Notodontidae*	S. E. Russia, S. Far East; Moldova; Ukraine; Transcaucasus	Absent	Central and Southern Europe; Turkey	*Ulmus*	Leaves	L – M	
3a.278	*Leucodonta bicoloria*	*Notodontidae*	Russia: widespread; Baltic countries; Belarus; Moldova; Ukraine	Absent	Central and Northern Europe; Japan	*Betula*	Leaves	L – M	
3a.279	*Peridea [Notodonta] anceps*	*Notodontidae*	C. E. Russia, S. E. Russia, S. Far East; Baltic countries; Belarus; Moldova; Ukraine; Transcaucasus	Not known	Western Europe	*Quercus*	Leaves	L – M	
3a.280	*Phalera bucephala*	*Notodontidae*	Russia: widespread; Baltic countries; Belarus; Moldova; Ukraine; Transcaucasus; Kazakhstan	Absent	Western Europe; Mediterranean region	*Quercus, Tilia, Betula, Populus, Salix*	Leaves	L – M	Main damage – to city plantations
3a.281	*Thaumetopoea [= Cnethocampa] pinivora*	*Notodontidae*	C. E. Russia (Kaliningrad region); Lithuania	Absent	Central Europe	*Pinus sylvestris*	Needles	M	Main damage – to pines on sand dunes
3a.282	*Thaumetopoea [= Cnethocampa] processionea [T. prozessionea]*	*Notodontidae*	Moldova; Ukraine	Absent	Central and Southern Europe	*Quercus*	Leaves	L – M	
3a.283	*Nymphalis [= Vanessa] polychloros*	*Nymphalidae*	C. E. Russia, S. E. Russia, S. Siberia, Baltic countries; Belarus; Moldova; Ukraine; Transcaucasus	Not yet checked	Not yet checked	*Ulmus,* wild fruit trees	Leaves	L	
3a.284	*Aporia crataegi*	*Pieridae*	Russia: widespread; Baltic countries; Belarus; Moldova; Ukraine; Transcaucasus; Kazakhstan; Central Asia	Absent	Europe (widely); Mediterranean region; Korea; China; Japan	fruit trees, *Quercus, Ulmus*	Leaves	L – M	
3a.285	*Dioryctria abietella*	*Pyralidae*	Russia: widespread in spruce area; Baltic countries; Belarus, Ukraine, Kazakhstan, Transcaucasus	Not known	Europe; Korea; Northern China;	*Picea, Abies, Larix,*	Cones and seeds	M - H	Data of Dr. Alain Roques

Table 3a. INSECTS LEPIDOPTERA

3a.286	*Etiella zinckenella*	*Pyralidae*	Russia: widespread; Baltic countries; Belarus, Moldova, Ukraine	Canada; USA	Western Europe; Mediterranean region; tropical and subtropical regions	*Pseudoacacia, Caragana*	Seeds	L - M	
3a.287	*Paranthrene [Sciapteron] tabaniformis*	*Sesiidae*	Russia: widespread; Baltic countries; Belarus; Moldova; Ukraine; Transcaucasus; Kazakhstan; Central Asia	Not known	Western Europe; Northern Mongolia	*Populus* (including *P. tremula*), *Salix*	Trunks and branches (wood)	L - H	Main damage - to young trees in plantations and nurseries
3a.288	*Sesia [Aegeria] apiformis*	*Sesiidae*	C. E. Russia, S. E. Russia, N.E.Siberia, N.W. Siberia, S. Siberia; Baltic countries; Belarus; Moldova; Ukraine; Transcaucasus; Central Asia	Present	Western Europe; Turkey; North America	*Populus* (including *P. tremula*), *Salix*, *Betula*, *Tilia*, *Fraxinus*	Trunks and roots (wood and under bark)	L – M	Main damage - to young trees in South regions
3a.289	*Sphinx pinastri*	*Sphingidae*	Russia: widespread except Far East; Baltic countries; Belarus; Ukraine; Transcaucasus	Not known	Central and Northern Europe; Japan	*Pinus*	Needles	L – M	
3a.290	*Aleimma [Tortrix] loeflingiana*	*Tortricidae*	C. E. Russia, S.E. Russia; Baltic countries; Belarus; Moldova; Ukraine; Transcaucasus	Not known	Central and Southern Europe; Turkey	*Quercus*	Leaves	L – M	
3a.291	*Archips crataeganus [Cacoecia (= Archips = Tortrix) crataegana]*	*Tortricidae*	C. E. Russia, S. E. Russia ; Baltic countries; Belarus; Moldova; Ukraine; Transcaucasus	Not known	Western Europe; Turkey; China; Japan	Fruit trees, *Quercus*, *Fraxinus*, *Populus*, *Tilia*, *Ulmus*	Leaves	L – M	
2.292	*Archips oporanus (= Cacoecia (= Tortrix) piceana)*	*Tortricidae*	C. E. Russia, N. E. Russia, S. Siberia, S. Far East	Not yet checked	All Europe, China, Japan, Koreas	*Pinus*, *Abies*, *Picea*, *Larix*, *Juniperus*	Needles	L – H	
3a.293	*Archips rosanus [Cacoecia (= Archips = Tortrix) rosana]*	*Tortricidae*	Russia: widespread except Far East; Baltic countries; Belarus; Moldova; Ukraine; Transcaucasus; Kazakhstan; Central Asia	Present (introduced)	Europe (widespread); Turkey; Northern Africa	*Quercus*, *Ulmus*, *Betula*, *Fraxinus*, *Acer*, *Populus*, fruit trees	Leaves	L – M	
3a.294	*Archips xylosteanus [Cacoecia (= Archips = Tortrix) xylosteana]*	*Tortricidae*	N.E. Russia, C.E.Russia, S.E. Russia, S. Far East; Baltic countries; Belarus; Moldova; Ukraine; Transcaucasus; Turkmenistan	Not known	Western Europe; Near East; China; Korea; Japan	*Quercus*, *Fraxinus*, *Betula*, *Ulmus*, *Acer*, *Populus*, fruit trees	Leaves	L – M	
3a.295	*Blastesthia turionella [Evetria turionana]*	*Tortricidae*	C. E. Russia, S. E. Russia, S. Siberia; Baltic countries; Belarus; Moldova; Ukraine	Not yet checked	Not yet checked	*Pinus*	Buds	L	Main damage - to 6 – 16 year-old plantations
3a.296	*Choristoneura [= Cacoecia = Archips = Tortrix] murinana*	*Tortricidae*	Russia: widespread in coniferous area; Baltic countries; Belarus; Ukraine; Transcaucasus	Not known	Central and Northern Europe	*Abies*, *Picea*	Needles	L – M	

Table 3a. INSECTS LEPIDOPTERA

3a.297	*Cydia [= Carpocapsa] amplana*	*Tortricidae*	Russia: widespread; Baltic countries; Belarus; Ukraine; Moldova; Transcaucasus	Not known	Central and Southern Europe; Turkey	*Quercus*, *Corylus*, *Fagus*, *Castanea*	Fruits	L - M	
3a.298	*Cydia [= Carpocapsa] grossana [= Laspeyresia fagiglandana]*	*Tortricidae*	S. E. Russia; Ukraine; Moldova; Transcaucasus; Central Asia	Not known	Western Europe; Turkey	*Fagus*	Fruits	L - M	
3a.299	*Cydia illutana [Laspeyresia (= Grapholitha) illutana illutana]*	*Tortricidae*	C. E. Russia	Not known	Central and Northern Europe	*Larix*, *Picea*	Cones and seeds	L – M	
3a.300	*Cydia [= Laspeyresia] pomonella*	*Tortricidae*	Russia; Baltic countries; Belarus; Ukraine; Moldova; Transcaucasus; Kazakhstan; Central Asia	Mexico; Canada; USA	Europe (widely); Asia (widely); S. America (widely); Africa; New Zealand; Australia	*Juglans*, fruit trees	Nuts, fruits	L – M	
3a.301	*Cydia [= Carpocapsa] splendana*	*Tortricidae*	Russia: widespread in oak area; Baltic countries; Belarus; Ukraine; Moldova; Transcaucasus	Not known	Italy	*Quercus*, *Castanea*	Acorns, fruits	L – M	
3a.302	*Cydia [= Laspeyresia = Grapholitha] strobilella*	*Tortricidae*	Russia: widespread in spruce area; Baltic countries; Belarus; Ukraine	Widespread in North America	Western, Central and Northern Europe	*Picea*	Cones and seeds	M	
3a.303	*Gravitarmata [= Evetria] margarotana*	*Tortricidae*	C. E. Russia, S. E. Russia, S. Far East	Not known	Western and Central Europe	*Pinus*	Cones and seeds	L-M	Data of Dr. Alain Roques
3a.304	*Petrova [= Evetria] resinella*	*Tortricidae*	Russia: widespread in pine area; Baltic countries; Belarus; Moldova; Ukraine; Transcaucasus; Kazakhstan	Not yet checked	Not yet checked	*Pinus*	Young sprouts, buds and needles	VL – L	Main damage - to young pine trees
3a.305	*Rhyacionia [= Evetria] buoliana*	*Tortricidae*	Russia: widespread in pine area; Baltic countries; Belarus; Moldova; Ukraine; Transcaucasus; Kazakhstan	Canada; USA	Europe (widely); Cyprus; Israel; Japan; Syria; Turkey; Argentina; Chile; Uruguay	*Pinus*	Needles, buds and young sprouts	L – M	Main damage - to 3 - 12 year-old pine plantations
3a.306	*Rhyacionia [= Evetria] duplana*	*Tortricidae*	Russia: widespread in pine area; Baltic countries; Belarus; Moldova; Ukraine	Present (introduced)	Europe (widespread); Japan	*Pinus*	Needles, buds and young sprouts	L – M	Main damage – to 3 – 6 year-old plantations
3a.307	*Tortrix viridana*	*Tortricidae*	C. E. Russia, S. E. Russia; Baltic countries; Belarus; Moldova; Ukraine; Transcaucasus	Not known	Western Europe; Turkey	*Quercus*	Leaves	M – H	

Table 3a. INSECTS & NEMATODES LEPIDOPTERA , ORTHOPTERA & APHELENCHOIDEA

3a.308	*Zeiraphera [= Semasia = Grapholitha] diniana [= Z. griseana]*	*Tortricidae*	Russia: widespread in coniferous area; Baltic countries; Belarus; Ukraine; Kazakhstan	Present	Southern, Central and Northern Europe	*Larix, Picea, Pinus, Abies*	Needles	M – H	
3a.309	*Zeiraphera [= Semasia] ratzeburgiana*	*Tortricidae*	N. E. Russia	Not known	Western, Central and Northern Europe	*Picea*	Cones and seeds	L	
3a.310	*Zeiraphera [= Semasia = Epinotia = Grapholitha = Tortrix] rufimitrana*	*Tortricidae*	N.E. Russia, C.E.Russia, S.E. Russia, N.E.Siberia, N.W. Siberia, S. Siberia; Baltic countries; Belarus; Ukraine	Not known	Western Europe	*Abies, Picea*	Female flowers, needles	M – H	
3a.311	*Zeiraphera [= Semasia] rufimitrana*	*Tortricidae*	N. E. Russia	Not known	Europe	*Abies*	Cones and seeds	L	Data of Dr. Alain Roques
3a.312	*Ocnerostoma friesei*	*Yponomeutidae*	Transbaik.	Not known	Western Europe	*Pinus sylvestris*	Needles	L – M	
3a.313	*Yponomeuta rorellus [Hyponomeuta rorella (= H. rorellus)]*	*Yponomeutidae*	C. E. Russia, S. E. Russia; Baltic countries; Belarus; Moldova; Ukraine	Not known	Western Europe	*Salix, Sorbus*	Leaves	L – M	
				Orthoptera					
3a.314	*Gryllotalpa gryllotalpa*	*Gryllotalpidae*	C. E. Russia, S. E. Russia; Baltic countries; Belarus; Moldova; Ukraine; Transcaucasus; Kazakhstan; Central Asia	Eastern USA (introduced)	Western Europe; Northern Africa; Near East	Deciduous, coniferous and other plants	Roots	L - H	Main damage – to young plantations and in nurseries
3a.315	*Gryllotalpa orientalis [G. fossor]*	*Gryllotalpidae*	S. Far East	Absent	Not known	Deciduous, coniferous and other plants	Roots	L - H	Main damage – to young plantations and in nurseries
3a.316	*Gryllotalpa unispina*	*Gryllotalpidae*	S.E.Russia, S.Siberia (West); Ukraine; Georgia; Azerbaijan; Kazakhstan; Central Asia	Absent	Iran; China	Deciduous, coniferous and other plants	Roots	L - H	Main damage – to young plantations and in nurseries
				Nematodes					
3a.317	*Bursaphelenchus mucronatus*	*Aphelenchoidae*	Russia: widespread; Baltic countries; Belarus; Moldova; Ukraine; Transcaucasus; Kazakhstan; Central Asia	Not yet checked	Not yet checked	*Pinus*, other coniferous	Trunks and branches (wood)	VL – L	

Table 3b. Forest pests causing significant damage on the territory of the former USSR, which may present risk only or mainly to plants, which are not considered as forest trees and shrubs in most of the non-Asian part of the EPPO region

N°	Pest	Group of organisms	Distribution			Main host plants in the former USSR	Damaged parts of plants	Economic significance in area of origin	Remarks
			In the former USSR	In North America	In other countries				
Acari (Arachnida)									
3b.1	*Eriophyes (= Phytoptus) padi*	*Eriophyidae*	C. E. Russia, S. E. Russia; Belarus; Transcaucasus; Ukraine; Kazakhstan	Not yet checked	Not yet checked	*Padus*	Leaves	VL - L	
3b.2	*Tenuipalpus zhizhilashvilliae*	*Tenuipalpidae (= Trichadenidae)*	Transcaucasus	Not yet checked	Not yet checked	*Diospyros kaki*	Leaves	VL - M	
3b.3	*[Schizotetranychus coryli]*	*Tetranychidae*	Transcaucasus	Not yet checked	Not yet checked	*Corylus*	Leaves	VL - M	
Insecta									
Coleoptera									
3b.4	*[Rhynchites faldermanni]*	*Attelabidae*	S. Far East	Not yet checked	China	*Prunus*	Fruits & seeds	VL – L	
3b.5	*[Rhynchites zaitzevi]*	*Attelabidae*	Armenia, Tadjikistan, Uzbekistan	Not yet checked	Iran	*Prunus amygdalus*	Seeds	L – H	
3b.6	*Rhynchites heros*	*Attelabidae*	S. Far East	Not yet checked	Koreas, Japan	*Malus, Pyrus, Prunus*	Fruits & seeds	VL – M	
3b.7	*[Phonapate deserti]*	*Bostrychidae*	Turkmenistan	Not yet checked	Not yet checked	*Haloxylon*	Trunks (wood)	L – M	
3b.8	*Xylogenes dilatatus*	*Bostrychidae*	Tadjikistan; Turkmenistan	Not yet checked	Syria, Iran	*Tamarix*	Trunks (wood)	L – M	
3b.9	*[Agrilus nivosus]*	*Buprestidae*	Uzbekistan	Not yet checked	Not yet checked	*Pistacea*	Trunks (under bark)	L – M	
3b.10	*[Anthaxia (= Euanthaxia) tractata]*	*Buprestidae*	Armenia; Georgia (East)	Not yet checked	Not yet checked	*Cydonia, Prunus*	Trunks (under bark)	L – M	
3b.11	*[Capnodis excisa]*	*Buprestidae*	Georgia; Central Asia	Not yet checked	India, Iran	*Calligonum, Haloxylon*	Trunks (under bark)	VL – L	
3b.12	*[Chrysobothris deserticola]*	*Buprestidae*	Kazakhstan; Central Asia	Not yet checked	Not yet checked	*Elaeagnus*	Trunks (under bark)	VL – L	
3b.13	*[Cratomerus mirabilis]*	*Buprestidae*	Armenia; Azerbaijan	Not yet checked	Not yet checked	*Prunus, Cydonia*	Trunks (under bark)	L – M	

Table 3b. INSECTS COLEOPTERA

3b.14	*[Cyphosoma tataricum]*	*Buprestidae*	S. E. Russia; Transcaucasus; Central Asia	Not yet checked	Iran	*Tamarix*	Trunks (under bark)	VL – L	
3b.15	*[Dicerca obtuse]*	*Buprestidae*	Uzbekistan; Kazakhstan; Kyrgyzstan	Not yet checked	Not yet checked	*Juglans*	Trunks (under bark)	VL – L	
3b.16	*[Sphenoptera (= Tropeopeltis) anthaxoides]*	*Buprestidae*	Armenia	Not yet checked	Not yet checked	*Prunus*	Trunks (under bark)	L – M	
3b.17	*[Sphenoptera parfentjevi]*	*Buprestidae*	Kazakhstan; Central Asia	Not yet checked	Not yet checked	*Haloxylon*	Trunks and roots (under bark)	L	
3b.18	*Cratomerus (= Cryptocratomerus) turanus*	*Buprestidae*	Tadjikistan; southern Turkmenistan	Not yet checked	Not yet checked	*Pistacea*	Trunks (under bark)	L – M	
3b.19	*Sphenoptera kaznakovi (= S. kaznakowi)*	*Buprestidae*	Tadjikistan	Not yet checked	Not yet checked	*Prunus amygdalis*, other *Prunus*	Trunks (under bark)	L – H	
3b.20	*[Cleroclytus collaris (= C. manifestus)]*	*Cerambycidae*	Central Asia	Not yet checked	China	*Malus, Juglans*	Trunks (wood)	VL – L	
3b.21	*[Oberea vittata]*	*Cerambycidae*	S. Far East	Not yet checked	Japan	*Corylus*	Trunks (wood)	VL – M	
3b.22	*[Phymatodes maacki]*	*Cerambycidae*	S. Far East	Not yet checked	China, Japan, Koreas	*Vitis*	Trunks (wood)	VL – L	
3b.23	*[Turanium johannis]*	*Cerambycidae*	Central Asia (mountains); Kazakhstan (mountains)	Not yet checked	Not yet checked	*Juglans*, *Sorbus*, *Prunus*, *Cotoneaster*	Trunks (wood)	VL – L	
3b.24	*[Turanium juglandis]*	*Cerambycidae*	Central Asia	Not yet checked	Not yet checked	*Juglans*	Trunks (wood)	VL – L	
3b.25	*Xylotrechus grumi*	*Cerambycidae*	Central Asia	Not yet checked	Not yet checked	*Elaeagnus*	Trunks (wood)	L – M	
3b.26	*[Cyaniris discolor]*	*Chrysomelidae*	Central Asia	Not yet checked	Not yet checked	*Prunus*	Leaves	VL – L	
3b.27	*[Labidostomis stenostoma]*	*Chrysomelidae*	Central Asia	Not yet checked	Not yet checked	*Pistacea*	Leaves	L – M	
3b.28	*Epilachna 28-maculata*	*Coccinellidae*	S. Far East	Not yet checked	China; Japan; Koreas	*Solanum*, *Juglans*, *Crataegus*, *Aralia*, other trees and herbs	Leaves	L – H	
3b.29	*[Catapionus semiglabratus]*	*Curculionidae*	Kyrgyzstan	Not yet checked	Not yet checked	*Juglans*	Leaves	VL – L	
3b.30	*[Phyllobius solskyi]*	*Curculionidae*	Tadjikistan, Uzbekistan	Not yet checked	Not yet checked	*Juglans*	Leaves	VL – L	
3b.31	*[Lytta coccinea]*	*Meloidae*	Central Asia	Not yet checked	Not yet checked	Sand-protecting plants	Leaves	L – M	

Table 3b. INSECTS COLEOPTERA

3b.32	*[Mylabris javeti]*	*Meloidae*	Uzbekistan; Turkmenistan	Not yet checked	Northern Iran	Sand-protecting plants	Leaves	L – M	
3b.33	*[Mylabris sedecimpunctata]*	*Meloidae*	Southern Kazakhstan; Central Asia	Not yet checked	Iran	Sand-protecting plants	Leaves	L – M	
3b.34	*[Teratolytta eylandti]*	*Meloidae*	Turkmenistan	Not yet checked	Not yet checked	Sand-protecting plants	Leaves & flowers	L – H	
3b.35	*Mylabris elegantissima (= M. elegantissimus)*	*Meloidae*	Central Asia	Not yet checked	Not yet checked	Sand-protecting plants	Leaves	L – M	
3b.36	*[Pseudoadoretus dilutellus]*	*Scarabaeidae*	Kazakhstan; Central Asia	Not yet checked	Not yet checked	Sand-protecting plants	Roots	VL – L	
3b.37	*[Pseudoadoretus validus]*	*Scarabaeidae*	Central Asia	Not yet checked	Not yet checked	Sand-protecting plants	Roots	VL – L	
3b.38	*Adoretus nigrifrons*	*Scarabaeidae*	S. E. Russia; Transcaucasus; Kazakhstan; Central Asia	Not yet checked	Iran, Afghanistan	Sand-protecting plants	Roots	VL – M	
3b.39	*Adoretus pruinosus*	*Scarabaeidae*	Central Asia	Not yet checked	Not yet checked	Sand-protecting plants	Roots	VL – M	
3b.40	*Chioneosoma komarovi*	*Scarabaeidae*	Central Asia (deserts)	Not yet checked	Not yet checked	Sand-protecting plants	Roots	VL – M	
3b.41	*[Dryocoetes padi]*	*Scolytidae*	S. Far East	Not yet checked	Not yet checked	*Padus maacki*	Trunks (under bark)	VL – M	
3b.42	*[Xyleborus orientalis]*	*Scolytidae*	S. Far East	Not yet checked	Not yet checked	*Padus maacki*	Trunks (under bark)	VL – L	
3b.43	*Cryphalus pruni*	*Scolytidae*	S. Far East	Not yet checked	Not yet checked	*Prunus, Malus*	Trunks (under bark)	VL – M	
3b.44	*Cryphalus scopiger*	*Scolytidae*	S. Far East	Not yet checked	Not yet checked	*Juglans*	Trunks (under bark)	VL – M	
3b.45	*[Argyrophana deserti]*	*Tenebrionidae*	Uzbekistan, Turkmenistan	Not yet checked	Not yet checked	Sand-protecting plants	Roots	VL – L	
3b.46	*[Blaps pruinosa]*	*Tenebrionidae*	Kazakhstan; Central Asia	Not yet checked	Not yet checked	Sand-protecting plants	Leaves	VL – M	

Table 3b. INSECTS COLEOPTERA & HOMOPTERA

3b.47	*[Blaps scutellata]*	*Tenebrionidae*	Central Asia	Not yet checked	Not yet checked	Sand-protecting plants	Stems & leaves	VL – M	
3b.48	*[Diesia sexdentata]*	*Tenebrionidae*	Central Asia	Not yet checked	Not yet checked	Sand-protecting plants	Leaves	VL – L	
3b.49	*[Sarothropus depressus]*	*Tenebrionidae*	Kazakhstan; Central Asia	Not yet checked	Not yet checked	Sand-protecting plants	Roots	VL – L	
3b.50	*[Sympiezocnemis gigantea]*	*Tenebrionidae*	Kazakhstan; Central Asia	Not yet checked	Not yet checked	Sand-protecting plants	Root crowns	L – M	
3b.51	*[Sympiezocnemis kessleri]*	*Tenebrionidae*	Central Asia	Not yet checked	Not yet checked	Sand-protecting plants	Root crowns	L – M	
3b.52	*[Tagona macrophthalma]*	*Tenebrionidae*	Kazakhstan; Central Asia	Not yet checked	Not yet checked	*Haloxylon (саксаул)*	Leaves	VL – L	
3b.53	*[Trigonoscelis sublaevicollis]*	*Tenebrionidae*	Central Asia	Not yet checked	Not yet checked	Sand-protecting plants	Leaves	VL – L	
3b.54	*[Trigonoscelis zoufali]*	*Tenebrionidae*	Central Asia	Not yet checked	Not yet checked	Sand-protecting plants	Leaves	VL – L	
3b.55	*[Zophosis scabriuscula]*	*Tenebrionidae*	Central Asia	Not yet checked	Not yet checked	Sand-protecting plants	Leaves	L – M	
3b.56	*Adesmia gebleri*	*Tenebrionidae*	Southern Kazakhstan; Central Asia	Not yet checked	Not yet checked	Sand-protecting plants	Leaves	L – M	
3b.57	*Blaps fausti*	*Tenebrionidae*	Central Asia	Not yet checked	Not yet checked	Sand-protecting plants	Stems	VL – L	
3b.58	*Sternodes caspicus*	*Tenebrionidae*	Uzbekistan, Turkmenistan	Not yet checked	Not yet checked	Sand-protecting plants	Root crowns, stems	VL – M	
3b.59	*Trigonoscelis grandis*	*Tenebrionidae*	Kazakhstan; Central Asia	Not yet checked	Not yet checked	Sand-protecting plants	Leaves	VL – L	
				Homoptera					
3b.60	*[Aphis catalpae]*	*Aphididae*	Ukraine; Central Asia	Not yet checked	Not yet checked	*Catalpa*	Leaves	VL – L	
3b.61	*[Brachycaudus pruni-domesticae]*	*Aphididae*	Transcaucasus; Central Asia	Not yet checked	Not yet checked	*Prunus*	Leaves	VL – L	
3b.62	*[Echinaphis ussuriensis]*	*Aphididae*	S. Far East	Not yet checked	Not yet checked	*Juglans*	Leaves	VL – L	

Table 3b. INSECTS HOMOPTERA

3b.63	*[Macrosiphum fallacies]*	*Aphididae*	Transcaucasus; Kazakhstan	Not yet checked	Not yet checked	*Juglans*	Leaves	VL – L	
3b.64	*[Mordvilkomemor pilosus]*	*Aphididae*	Central Asia	Not yet checked	Not yet checked	*Prunus*	Leaves	VL – L	
3b.65	*Anuraphis pyri-laseri*	*Aphididae*	S. E. Russia; Ukraine (Crimea); Transcaucasus	Not yet checked	Not yet checked	*Pyrus*	Leaves	VL – M	
3b.66	*Prociphilus kuwanae (= P. kuwanai = P. orientalis)*	*Aphididae*	S. Far East	Not yet checked	Japan	*Pyrus*	Leaves	VL – L	
3b.67	*Sappaphis piri (= S. pyri = Anuraphis piricola)*	*Aphididae*	S. Far East	Not yet checked	China, Japan, Koreas	*Pyrus*, *Artemisia*	Leaves	VL – L	
3b.68	*Schizaphis pyri*	*Aphididae*	S. Far East	Not yet checked	Not yet checked	*Pyrus*	Leaves	VL – L	
3b.69	*[Tibicina zevara]*	*Cicadidae*	Central Asia (mountains)	Not yet checked	Not yet checked	*Prunus*, *Crataegus*, other trees	Roots & trunks (bark)	VL – M	
3b.70	*Didesmococcus (= Eulecanium) unifasciatus*	*Coccidae*	Central Asia	Not yet checked	Not yet checked	*Prunus*	Trunks & branches	L – M	
3b.71	*Eulecanium (= Lecanium) rugulosum*	*Coccidae*	Transcaucasus; Central Asia; Kazakhstan	Not yet checked	Not yet checked	*Cotoneaster*, *Prunus*, *Pyrus*, other trees	Trunks & branches	L – M	
3b.72	*Rhodococcus (= Lecanium) turanicus*	*Coccidae*	Transcaucasus; Central Asia; Kazakhstan	Not yet checked	Iran	*Prunus*, *Pyrus*, *Malus*, other trees	Trunks & branches	L – M	
3b.73	*Tecaspis (= Noechionaspis) asiatica*	*Coccidae (= Diaspididae)*	Armenia, Central Asia	Not yet checked	Iran	*Prunus*, *Malus*, other trees	Lreaves & branches	VL – M	
3b.74	*[Aulacaspis mali]*	*Diaspididae*	S. Far East	Not yet checked	Not yet checked	*Malus*, *Crataegus*, *Humulus*, other trees	Trunks & branches	VL – M	
3b.75	*Diaspidiotus (= Aspidiotus) prunorum*	*Diaspididae*	Transcaucasus; Central Asia	Not yet checked	Not yet checked	*Prunus*, *Malus*, *Crataegus*, other trees	Trunks & branches	L – H	
3b.76	*Lepidosaphes malicola*	*Diaspididae*	Armenia	Not yet checked	Not yet checked	*Malus*, *Prunus*, *Juglans*, other trees	Trunks, leaves & branches	VL – M	
3b.77	*Lepidosaphes yanagicola*	*Diaspididae*	S. Far East	Not yet checked	Japan	*Maackia*, *Syringa*, other trees	Trunks & branches	VL – L	

Table 3b. INSECTS HOMOPTERA, HYMENOPTERA & LEPIDOPTERA

3b.78	*Lopholeucaspis japonica*	*Diaspididae*	S. E. Russia, S. Far East; Ukraine; Transcaucasus	USA	Brazil, China, India, Iran, Japan, Koreas, Pakistan, Turkey	*Citrus, Prunus, Diospiros, Acer, Pyrus,* many other trees	Trunks, leaves & branches	M – VH	
3b.79	*Phenacaspis (= Chlidaspis) prunorum*	*Diaspididae*	Armenia, Central Asia	Not yet checked	Irak	*Prunus*	Lreaves & branches	VL – M	
3b.80	*Salicicola (= Suturaspis = Leucaspis) archangelskajae (= S. archangelskyae)*	*Diaspididae*	Central Asia; Transcaucasus	Not yet checked	Iran	*Pyrus, Prunus, Malus,* other trees	Trunks, leaves & branches	L – M	
3b.81	*[Coccura (= Phenacoccus) ussuriensis]*	*Pseudococcidae*	S. Far East	Not yet checked	Koreas	*Syringa, Crataegus, Malus,* other trees	Trunks & branches	L – M	
				Hymenoptera					
3b.82	*Ceratina cyanea (= C. laevifrons)*	*Anthophoridae (= Ceratinidae)*	Kazakhstan; Central Asia	Not yet checked	Not yet checked	*Catalpa, Ailanthus*	Leaves	VL – L	
3b.83	*Arge (= Hylotoma) mali*	*Argidae*	S. Far East	Not yet checked	Japan	*Malus*	Leaves	L – H	
3b.84	*Megastigmus aculeatus*	*Torymidae*	Russia: widespread; Transcaucasus, Central Asia, Baltic countries; Belarus, Ukraine	USA, Canada	Europe: Widespread; Japan, North Africa, South Africa, Australia	*Rosa*	Seeds	L – M	Data of Dr. Alain Roques
3b.85	*Megastigmus cotoneastri*	*Torymidae*	Central Asia, S. Siberia	Not known	Japan	*Cotoneaster*	Seeds	L – M	Data of Dr. Alain Roques
3b.86	*Megastigmus brevicaudis*	*Torymidae*	S.E. Russia, C.E. Russia, N.E. Russia, S. Siberia, Central Asia, Baltic countries; Belarus, Ukraine	Not known	Europe: widespread	*Sorbus, Amelanchier*	Seeds	L – M	Data of Dr. Alain Roques
3b.87	*Megastigmus mali*	*Torymidae*	S. Siberia, Transbaik	Not known	Japan	*Pyrus*	Seeds	L – M	Data of Dr. Alain Roques
3b.88	*Megastigmus rosae*	*Torymidae*	S. Siberia	Not known	Western and Central Europe:	*Rosa*	Seeds	L – M	Data of Dr. Alain Roques
3b.89	*Megastigmus rosae kondaricus*	*Torymidae*	Central Asia	Not known	Not known	*Rosa*	Seeds	L – M	Data of Dr. Alain Roques
				Lepidoptera					
3b.90	*Coleophora (= Eupista) hemerobiola*	*Coleophoridae*	Central Asia	Not yet checked	Not yet checked	*Rosaceae*	Leaves and buds	VL – M	
3b.91	*[Holcocerus campiola]*	*Cossidae*	Kazakhstan; Central Asia	Absent	Absent	*Haloxylon, Arthrophytum ammodendron*	Trunks (wood)	L – H	

Table 3b. INSECTS LEPIDOPTERA

3b.92	*[Biston cognataria]*	*Geometridae*	Central Asia	North America	India, Japan	*Juglans*	Leaves	VL – L	
3b.93	*[Ephoria arenosa]*	*Geometridae*	S. Far East	Not yet checked	Japan, Koreas	*Juglans manshurica*	Leaves	VL – L	
3b.94	*[Gelasma grandificaria]*	*Geometridae*	S. Far East	Not yet checked	China, Japan, Koreas	*Juglans manshurica*	Leaves	VL – L	
3b.95	*[Hypomecis (= Boarmia = Jankowskia) athleta]*	*Geometridae*	S. Far East	Not yet checked	China, Japan, Koreas	*Malus*	Leaves	VL – L	
3b.96	*[Jotaphora admirabilis]*	*Geometridae*	S. Far East	Not yet checked	China, India (North)	*Juglans manshurica*	Leaves	VL – M	
3b.97	*Apocheima (= Biston) cinerarius (= A. cinerarium)*	*Geometridae*	Kazakhstan; Central Asia	Not yet checked	Not yet checked	*Morus*, fruit trees	Leaves	VL – H	Main damage – on *Morus*
3b.98	*Cystidia couaggaria*	*Geometridae*	S. Far East	Not yet checked	China, Japan, Koreas	*Rosaceae*	Leaves	VL – M	
3b.99	*Zamacra juglansiaria*	*Geometridae*	S. Far East	Not yet checked	Japan	*Juglans manshurica*	Leaves	VL – L	
3b.100	*[Lasiocampa eversmanni]*	*Lasiocampidae*	S. E. Russia, S. Siberia; Kazakhstan	Not yet checked	Not yet checked	*Caragana*, other trees	Leaves	VL – L	
3b.101	*[Metanastra (= Metanastria) subpurpurea]*	*Lasiocampidae*	Transbaikalia, S. Far East	Not yet checked	Japan	*Sorbus, Padus,* other trees	Leaves	VL – L	
3b.102	*[Phrixolepia serica]*	*Limacodidae (= Heterogeneidae)*	S. Far East	Not yet checked	Japan	*Juglans mandshurica*	Leaves	VL – M	
3b.103	*[Thecla (= Zephyrus) betulina]*	*Lycaenidae*	S. Far East	Not yet checked	China	*Malus manshurica*	Leaves	VL – L	
3b.104	*[Thecla (= Zephyrus) enthea]*	*Lycaenidae*	S. Far East	Not yet checked	China, Japan, Koreas	*Juglans manshurica*	Leaves	VL – L	
3b.105	*[Thecla herzi]*	*Lycaenidae*	S. Far East	Not yet checked	China, Koreas	*Malus manshurica*	Leaves	VL – L	
3b.106	*Orgyia prisca*	*Lymantriidae*	Central Asia	Not yet checked	Not yet checked	Fruit trees	Leaves	VL – L	
3b.107	*[Catocala (= Marmonia) bella]*	*Noctuidae*	S. Far East	Not yet checked	Japan	*Malus*	Leaves	VL – L	
3b.108	*[Cosmia (= Calymnia) unicolor]*	*Noctuidae*	S. Far East	Not yet checked	Japan	*Juglans, Corylus*	Leaves	VL – L	
3b.109	*[Sinna extrema (= S. ornatissima)]*	*Noctuidae*	S. Far East	Not yet checked	China, Japan	*Juglans manshurica*	Leaves	VL – L	
3b.110	*[Uropyia meticulodina]*	*Notodontidae*	S. Far East	Not yet checked	Japan, Koreas	*Juglans manshurica*	Leaves	VL – L	
3b.111	*Papilio bianor*	*Papilionidae*	S. Far East	Not yet checked	China, Japan, Koreas	*Phellodendron amurense*	Leaves	VL – L	

Table 3b. INSECTS LEPIDOPTERA & ORTHOPTERA

3b.112	*Papilio xuthus*	*Papilionidae*	S. Far East	Not yet checked	China, Japan, Koreas	*Phellodendron amurense*	Leaves	VL – L	
3b.113	*[Rhodinia jankowskii]*	*Saturniidae*	S. Far East	Not yet checked	Not known	*Phellodendron amurense*	Leaves	VL – L	
3b.114	*Synanthedon (= Aegeria) hector*	*Sesiidae (=Aegeriidae)*	S. Far East	Not yet checked	Japan	*Rosacea* ssp.	Trunks (wood)	VL – M	
3b.115	*[Smerinthus (= Phyllosphingia) dissimilis]*	*Sphingidae*	S. Far East	Not yet checked	China, Japan	*Juglans manshurica*	Leaves	VL – L	
3b.116	*Marumba (= Smerinthus) gaschkewitschii*	*Sphingidae*	S. Far East	Not yet checked	China, Japan	*Rosaceae*	Leaves	VL – M	
3b.117	*[Tischeria Rosella]*	*Tischeriidae*	Uzbekistan	Not yet checked	Not yet checked	*Rosa*	Leaves	VL – M	
3b.118	*[Tortrix praeclarana]*	*Tortricidae*	S. E. Russia, S. Siberia; Kazakhstan	Not yet checked	Not yet checked	*Caragana frutex*, *Caragana arborescens*	Leaves	VL – M	
3b.119	*Ancylis selenana*	*Tortricidae*	C. E. Russia, S. E. Russia, S. Far East; Ukraine	Not yet checked	Not yet checked	Fruit trees	Leaves	VL – M	
3b.120	*Cydia (= Carpocapsa) pyrivora*	*Tortricidae*	S. E. Russia; Ukraine; Transcaucasus	Not yet checked	Not yet checked	*Pyrus*	Fruits	L – H	
3b.121	*Eucosma (= Semasia) funesta*	*Tortricidae*	S. Far East	Not yet checked	Not yet checked	*Malus*, *Pyrus*, other trees	Buds & ovaries	L – H	
3b.122	*Spilonota (= Tmetocera) prognathana*	*Tortricidae*	S. Far East	Not yet checked	China, Koreas	*Malus*, *Pyrus*, other trees	Leaves & fruits	L – H	
3b.123	*Carposina sasakii*	*Tortricidae (=Carposinidae)*	S. Far East	Not yet checked	China, Japan, Koreas	*Malus*, *Pyrus*, other trees	Fruits	L – H	
3b.124	*[Ypsolopha (= Cerostoma) sasakii]*	*Yponomeutidae (=Plutellidae)*	S. Far East	Not yet checked	Koreas	*Rosaceae*	Leaves	VL – L	
3b.125	*Illiberis sinensis*	*Zygaenidae*	S. Far East	Not yet checked	China, Japan, Koreas	*Malus mandshurica*, *Salix*, other deciduous	Leaves	L – H	
				Orthoptera					
3b.126	*[Zubovskia parvula]*	*Acrididae*	S. Far East	Not yet checked	China, Koreas	*Juglans*, other trees	Leaves	VL - M	Main damage – to young plantations and in nurseries

Table 4. Forest pests causing significant damage on the territory of the former USSR added to the data base and not yet prioritized

N°	Pest	Group of organisms	Distribution			Main host plants in the former USSR	Damaged parts of plants	Economic significance in area of origin	Remarks
			In the former USSR	In North America	In other countries				
Acari (Arachnida)									
4.1	*[Bryobia ulmophila]*	*Bryobiidae*	Transcaucasus	Not yet checked	Not yet checked	*Ulmus*	Leaves	VL - M	
4.2	*[Paratetranychus (= Oligonychus) kobachidzei]*	*Tetranychidae*	Transcaucasus	Not yet checked	Not yet checked	*Platanus, Corylus, Juglans, Quercus*	Leaves	VL - M	
4.3	*[Paratetranychus (= Oligonychus) longiclavatus]*	*Tetranychidae*	Transcaucasus	Not yet checked	Not yet checked	*Quercus, Carpinus*	Leaves	VL - L	
4.4	*[Paratetranychus (= Oligonychus) piceae]*	*Tetranychidae*	Transcaucasus	Not yet checked	Not yet checked	*Picea, Pinus*	Leaves	VL - M	
4.5	*[Schizotetranychus aceri]*	*Tetranychidae*	Transcaucasus	Not yet checked	Not yet checked	*Acer, Aesculus*	Leaves	VL - M	
4.6	*[Schizotetranychus carpinula]*	*Tetranychidae*	Transcaucasus	Not yet checked	Not yet checked	*Carpinus*	Leaves	VL - L	
4.7	*[Schizotetranychus fraxini]*	*Tetranychidae*	Transcaucasus	Not yet checked	Not yet checked	*Fraxinus*	Leaves	VL - M	
4.8	*[Schizotetranychus ibericus]*	*Tetranychidae*	Transcaucasus	Not yet checked	Not yet checked	*Quercus*	Leaves	VL - L	
4.9	*[Schizotetranychus ulmicola]*	*Tetranychidae*	Transcaucasus	Not yet checked	Not yet checked	*Ulmus*	Leaves	VL - M	
Gastropoda									
4.10	*[Helicella candaharica (= Helix derbentina)]*	*Helicidae*	Central Asia	Not yet checked	Afghanistan	*Robinia, Salix*	Leaves	VL – L	Main damage – to nurseries
4.11	*[Helicella (= Xerophila) derbentina]*	*Helicidae*	S. E. Russia; Ukraine (Crimea); Transcaucasus	Not yet checked	Afghanistan	*Robinia, Prunus*, other trees	Leaves	VL – M	Main damage – to young plantations and in nurseries

Table 4. INSECTS COLEOPTERA

Insecta									
Coleoptera									
4.12	*[Tropiderinus interruptus]*	*Anthribidae*	S. Siberia, Transbaikalia, S. Far East	Not yet checked	Japan	*Prunus*, *Populus*, other trees	Trunks (wood)	VL – M	
4.13	*Apion pachyrrhynchum*	*Apionidae (= Curculionidae)*	S. Far East	Not yet checked	Japan	*Acer*	Leaves	VL – L	
4.14	*[Apoderus erythropterus]*	*Attelabidae*	N. E. Russia, N. W. Siberia, N. E. Siberia, S. Siberia, Transbaikalia,N. Far East, S. Far East	Not yet checked	China, Japan, Koreas	*Salix*, *Quercus*, *Corylus*, *Ulmus*, etc.	Leaves	L – M	
4.15	*[Apoderus jekeli]*	*Attelabidae*	S. Far East	Not yet checked	Japan, Koreas	*Alnus*, *Corylus*, *Juglans*, etc.	Leaves	VL – L	
4.16	*[Attelabus (= Henicolabus) giganteus]*	*Attelabidae*	S. Far East	Not yet checked	China, Koreas	*Tilia*	Leaves	VL – L	
4.17	*Tomapoderus ruficollis*	*Attelabidae*	Transbaikalia, S. Far East	Not yet checked	China, Koreas	*Ulmus*	Leaves	VL – L	
4.18	*[Acmaeodera glazunovi]*	*Buprestidae*	Central Asia	Not yet checked	Not yet checked	Different forest trees	Trunks (under bark)	VL – L	
4.19	*[Agrilus smaragdinus]*	*Buprestidae*	S. Far East	Not yet checked	Not yet checked	*Quercus*, *Betula*	Trunks (under bark)	VL – M	
4.20	*[Ancylocheira (= Ancylochira - ?) (= Buprestis) sibirica]*	*Buprestidae*	N. W. Siberia, N. E. Siberia, S. Siberia, Transbaikalia, S. Far East, N. Far East; Kazakhstan; Kyrgyzstan	Not yet checked	Mongolia, Northern China, Koreas	*Pinus*, *Picea*, other coniferous	Trunks (under bark)	L – M	
4.21	*[Ancylocheira (= Ancylochira - ?) rustica nickerli]*	*Buprestidae*	Georgia	Not yet checked	Not yet checked	*Pinus*, *Picea*	Trunks (under bark)	VL – L	
4.22	*[Ancylocheira (= Ancylochira - ?) salomonii]*	*Buprestidae*	Azerbaijan; Armenia; Central Asia	Not yet checked	Turkey, Iran, China	*Populus*	Trunks (under bark)	VL – L	
4.23	*[Ancylocheira (= Ancylochira - ?) strigosa]*	*Buprestidae*	N. W. Siberia, N. E. Siberia, S. Siberia, Transbaikalia, S. Far East, N. Far East; Kazakhstan	Not yet checked	Mongolia, Northern China	*Pinus*, *Picea*, other coniferous	Trunks (under bark)	L – M	
4.24	*[Anthaxia (= Chrysanthaxia) polychloros]*	*Buprestidae*	S. E. Russia; Ukraine; Transcaucasus	Not yet checked	Turkey, Syria	*Quercus*, *Prunus amygdalis*	Trunks (under bark)	L – M	
4.25	*[Anthaxia (= Melanthaxia) auriventris]*	*Buprestidae*	Kyrgyzstan	Not yet checked	Not yet checked	*Juniperus*	Trunks (under bark)	VL – L	

Table 4. INSECTS COLEOPTERA

4.26	*[Anthaxia (= Melanthaxia) baicalensis]*	*Buprestidae*	S. Siberia	Not yet checked	Not yet checked	Coniferous	Trunks (under bark)	VL – L	
4.27	*[Anthaxia (= Melanthaxia) turkestanica]*	*Buprestidae*	Kyrgyzstan (mountains)	Not yet checked	Not yet checked	*Juniperus*	Trunks (under bark)	VL – L	
4.28	*[Anthaxia (= Melanthaxia) zarudniana]*	*Buprestidae*	Southern Kazakhstan	Not yet checked	Not yet checked	*Juniperus*	Trunks (under bark)	VL – L	
4.29	*[Buprestis proscheki]*	*Buprestidae*	S. E. Russia; Ukraine (Crimea)	Not yet checked	Not yet checked	*Pinus*	Trunks (under bark)	VL – L	
4.30	*[Chrysobothris amurensis]*	*Buprestidae*	S. Far East	Not yet checked	Not yet checked	*Quercus mongolica*	Trunks (under bark)	VL – L	
4.31	*[Chrysobothris pulchripes]*	*Buprestidae*	S. Far East	Not yet checked	Northern China	*Quercus mongolica*	Trunks (under bark)	VL – L	
4.32	*[Eurythyrea eoa]*	*Buprestidae*	S. Far East	Not yet checked	China	*Populus*	Trunks (under bark)	VL – L	
4.33	*[Poecilonota dicercoides]*	*Buprestidae*	S. Far East	Not yet checked	Northern China	*Populus*	Trunks (under bark)	VL – L	
4.34	*[Scintillatrix (= Lampra) amurensis]*	*Buprestidae*	S. Far East	Not yet checked	Not yet checked	*Tilia*	Trunks (under bark)	VL – L	
4.35	*[Scintillatrix (= Lampra) suvorovi]*	*Buprestidae*	S. Far East	Not yet checked	Northern China	*Ulmus*, *Quercus*	Trunks (under bark)	VL – L	
4.36	*[Scintillatrix (= Lampra) virgata]*	*Buprestidae*	S. Far East	Not yet checked	Northern China	*Quercus*	Trunks (under bark)	VL – L	
4.37	*Acmaeodera chotanica*	*Buprestidae*	Uzbekistan	Not yet checked	China	*Populus*, *Morus*, *Pistacea*	Trunks (under bark)	VL – M	
4.38	*Anthaxia (= Melanthaxia) conradti*	*Buprestidae*	Central Asia (mountains)	Not yet checked	Not yet checked	*Juniperus*	Trunks (under bark)	VL – L	
4.39	*Anthaxia aurulenta (= Cratomerus (= Trichocratomerus) intermedius)*	*Buprestidae*	S. E. Russia; Transcaucasus; Central Asia	Not yet checked	Northern Iran	*Ulmus*, *Pyrus*	Trunks (under bark)	VL – L	
4.40	*Capnodis cariosa*	*Buprestidae*	S. E. Russia; Transcaucasus	Not yet checked	Syria, Iran	*Pistacea*, *Prunus*, *Salix*, *Populus*	Roots (under bark)	L – M	
4.41	*Capnodis miliaris*	*Buprestidae*	Transcaucasus, Central Asia	Not yet checked	DE, Syria, Turkey, Iran, Irak, Afghanistan	*Populus*, *Salix*	Trunks (under bark)	L – M	

Table 4. INSECTS COLEOPTERA

4.42	*Chrysobothris (= Abothris) nana*	*Buprestidae*	Central Asia	Not yet checked	Not yet checked	*Populus*	Trunks (under bark)	VL – L	
4.43	*Chrysobothris affinis tetragramma*	*Buprestidae*	Transcaucasus; Central Asia	Not yet checked	Iran	*Ulmus, Salix, Juglans*	Trunks (under bark)	L – M	
4.44	*Cratomerus (= Anthaxia) fariniger*	*Buprestidae*	Central Asia	Not yet checked	Not yet checked	*Populus*	Trunks (under bark)	L – M	
4.45	*Cratomerus (= Trichocratomerus) aurulentus seniculus*	*Buprestidae*	S. E. Russia; Ukraine; Uzbekistan	Not yet checked	Turkey, Syria	*Ulmus, Malus*	Trunks (under bark)	VL – L	
4.46	*[Acanthocinus elegans]*	*Cerambycidae*	Transcaucasus	Not yet checked	Iran	*Quercus*, other trees	Trunks (wood)	VL – L	
4.47	*[Acanthocinus stillatus]*	*Cerambycidae*	S. Far East	Not yet checked	Japan, Koreas	*Acer mono*	Trunks (wood)	VL – L	
4.48	*[Acmaeops brachyptera]*	*Cerambycidae*	Kazakhstan (mountains)	Not yet checked	China	*Picea schrenkiana*	Trunks (under bark)	VL – L	
4.49	*[Anaesthetis flavipilis]*	*Cerambycidae*	S. Far East	Not yet checked	China, Koreas	*Quercus*, other trees	Trunks (wood)	VL – L	
4.50	*[Anaglyptus arabicus]*	*Cerambycidae*	S.E.Russia; Transcaucasus	Not yet checked	Iran, Turkey	*Quercus*	Trunks (wood)	VL – L	
4.51	*[Anaglyptus simplicicornis]*	*Cerambycidae*	S.E.Russia; Transcaucasus	Not yet checked	Iran, Turkey	*Quercus, Castanea*	Trunks (wood)	VL – L	
4.52	*[Asemum amurense]*	*Cerambycidae*	S. Far East	Not yet checked	China, Japan, Koreas	*Pinus, Picea*	Trunks (wood)	VL – M	
4.53	*[Callidium chlorizans]*	*Cerambycidae*	N.W. Siberia, N.E. Siberia, S. Siberia, Transbaikalia, S. Far East	Not yet checked	China, Japan, Koreas, Mongolia	*Picea*	Trunks (wood)	VL – L	
4.54	*[Cerambyx multiplicatus]*	*Cerambycidae*	Transcaucasus	Not yet checked	Iran	*Quercus, Fagus, Ulmus*	Trunks (wood)	VL – L	
4.55	*[Chlorophorus faldermanni]*	*Cerambycidae*	S.E.Russia; Transcaucasus; Central Asia	Not yet checked	Afghanistan, China, Iran	*Populus, Elaeagnus*, deciduous wood	Dry wood, Trunks (wood)	L – H	Main damage – to dry wood
4.56	*[Distenia gracilis]*	*Cerambycidae*	S. Far East	Not yet checked	China, Japan, Koreas	*Picea, Pinus* and other trees	Trunks (wood)	VL – L	
4.57	*[Isotomus comptus]*	*Cerambycidae*	S.E.Russia; Transcaucasus; Ukraine	Not yet checked	India, Iran, Turkey	*Carpinus, Quercus, Fagus, Castanea*, deciduous wood	Dry wood, Trunks (wood)	L – M	Main damage – to dry wood
4.58	*[Megasemum quadricostulatum]*	*Cerambycidae*	Transbaikalia, S. Far East	Not yet checked	China, Japan, Koreas	*Pinus sibirica*	Trunks (wood)	VL – M	
4.59	*[Mesosa hirsute]*	*Cerambycidae*	S. Far East	Not yet checked	Japan, Koreas	*Tilia*	Trunks (wood)	VL – L	

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4.60	*[Mesosa obscuricornis]*	*Cerambycidae*	Transcaucasus	Not yet checked	Iran	*Quercus*, other trees	Trunks (wood)	VL – L	
4.61	*[Molorchus pallidipennis]*	*Cerambycidae*	Kyrgyzstan; Kazakhstan	Not yet checked	China	*Picea schrenkiana*	Trunks (wood)	VL – L	
4.62	*[Pachyta bicuneata]*	*Cerambycidae*	S. Far East	Not yet checked	China, Koreas	*Pinus sibiricus, Larix dahurica, Picea koraiensis*	Trunks (wood)	VL – L	
4.63	*[Paraclytus raddei]*	*Cerambycidae*	Azerbaijan	Not yet checked	Iran	*Quercus*	Trunks (wood)	VL – L	
4.64	*[Paraclytus reitteri]*	*Cerambycidae*	Azerbaijan	Not yet checked	Iran	*Quercus*	Trunks (wood)	VL – L	
4.65	*[Paraclytus sexguttatus]*	*Cerambycidae*	S.E.Russia; Transcaucasus	Not yet checked	Iran, Turkey	*Quercus*	Trunks (wood)	VL – L	
4.66	*[Patimna liturata]*	*Cerambycidae*	S. Far East	Not yet checked	Japan	*Acer*	Trunks (wood)	VL – L	
4.67	*[Plagionotus bartolomei]*	*Cerambycidae*	Transcaucasus	Not yet checked	Iran	*Quercus*	Trunks (wood)	VL – L	
4.68	*[Plagionotus christophi]*	*Cerambycidae*	S. Far East	Not yet checked	China	*Quercus*	Trunks (wood)	VL – L	
4.69	*[Plagionotus lugubris]*	*Cerambycidae*	Transcaucasus	Not yet checked	Iran	*Quercus*	Trunks (wood)	L – M	
4.70	*[Plagionotus pulcher]*	*Cerambycidae*	S. Far East	Not yet checked	China, Japan, Koreas	*Quercus, Betula*	Trunks (wood)	VL – L	
4.71	*[Pogonocherus caucasicus]*	*Cerambycidae*	Transcaucasus	Not yet checked	Not yet checked	*Picea*	Trunks (wood)	VL – L	
4.72	*[Pogonocherus kuksha]*	*Cerambycidae*	Transcaucasus	Not yet checked	Not yet checked	*Picea*	Trunks (wood)	VL – L	
4.73	*[Prionus angustatus]*	*Cerambycidae*	Central Asia	Not yet checked	Not yet checked	*Populus* and other trees	Trunks (wood)	VL – L	
4.74	*[Rhagium fasciculatum]*	*Cerambycidae*	S. E. Russia; Transcaucasus	Not yet checked	Iran, Turkey	*Quercus, Fagus, Tilia, Platanus, Castanea* and other trees	Trunks (under bark)	VL – L	
4.75	*[Rhagium inquisitor rugipenne]*	*Cerambycidae*	Transbaikalia, S. Far East	Not yet checked	China, Koreas	*Pinus, Picea* and other trees	Trunks (under bark)	VL – L	
4.76	*[Rhagium pygmaeum]*	*Cerambycidae*	Azerbaijan	Not yet checked	Iran	*Quercus, Fagus, Tilia, Castanea* and other trees	Trunks (under bark)	VL – L	
4.77	*[Sachalinobia koltzei]*	*Cerambycidae*	S. Far East	Not yet checked	China, Japan, Koreas	*Abies holophylla, Abies nephrolepis*	Trunks (wood)	VL – L	

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4.78	*[Saperda alberti (= S. decempunctata)]*	*Cerambycidae*	N.W. Siberia, N.E. Siberia, S. Siberia, Transbaikalia, S. Far East	Not yet checked	Not yet checked	*Populus tremula, Ulmus*	Trunks (wood)	VL – L	
4.79	*[Saperda interrupta]*	*Cerambycidae*	N.W. Siberia, N.E. Siberia, S. Siberia, Transbaikalia, S. Far East	Not yet checked	China, Koreas	*Picea ajanensis, Pinus sibirica*	Trunks (wood)	VL – L	
4.80	*[Stenocorus insitivus]*	*Cerambycidae*	S. E. Russia; Ukraine; Transcaucasus	Not yet checked	Turkey	*Quercus, Castanea* and other trees	Trunks (under bark)	VL – L	
4.81	*[Stenygrinum quadrinotatum]*	*Cerambycidae*	S. Far East	Not yet checked	Assam, Birma, China, Japan, Koreas, Manipur	*Castanea, Quercus, Salix*	Trunks (wood)	VL – L	
4.82	*[Turanium pilosum]*	*Cerambycidae*	Central Asia	Not yet checked	Not yet checked	*Betula, Salix, Populus, Ulmus*	Trunks (wood)	VL – L	
4.83	*[Turanium scabrum]*	*Cerambycidae*	Central Asia	Not yet checked	Not yet checked	*Populus, Ulmus, Salix, Malus, Prunus*	Trunks (wood)	VL – L	
4.84	*[Xylotrechus cuneipennis]*	*Cerambycidae*	Transbaikalia, S. Far East	Not yet checked	China, Japan, Koreas	*Quercus, Betula, Ulmus*	Trunks (wood)	VL – L	
4.85	*[Xylotrechus rufilius]*	*Cerambycidae*	S. Far East	Not yet checked	China, Japan, Koreas	*Acer*	Trunks (wood)	VL – L	
4.86	*Acalolepta cervina (= Dihammus cervinus)*	*Cerambycidae*	S. Far East	Not yet checked	Birma, China, India, Japan, Koreas, Nepal	*Alnus*, other trees	Trunks (wood)	VL – L	
4.87	*Chlorophorus motschulskyi*	*Cerambycidae*	Transbaikalia, S. Far East	Not yet checked	China, Japan, Koreas, Mongolia	*Betula*	Trunks (wood)	VL – L	
4.88	*Compsidia (= Saperda) balsamifera*	*Cerambycidae*	N.W. Siberia, N.E. Siberia, S. Siberia, Transbaikalia, S. Far East	Not yet checked	Mongolia	*Populus balsamifera*	Trunks (wood)	VL – L	
4.89	*Dokhturovia (= Dokhtouroffia) nebulosa*	*Cerambycidae*	Kyrgyzstan; Kazakhstan	Absent	China	*Picea schrenkiana*	Trunks (wood)	VL – M	
4.90	*Eutetrapha metallescens*	*Cerambycidae*	S. Far East	Not yet checked	China, Koreas	*Tilia*	Trunks (wood)	VL – L	
4.91	*Hesperophanus (= Trichoferus) campestris*	*Cerambycidae*	S. Far East; Central Asia (mountains)	Not yet checked	China, Koreas, Mongolia	Fruit and other deciduous trees	Trunks (wood)	VL – L	
4.92	*Leptura sequenci (= L. sequensi)*	*Cerambycidae*	N.W. Siberia, N.E. Siberia, S. Siberia, Transbaikalia, S. Far East	Not yet checked	China, Japan, Koreas, Mongolia	*Pinus, Picea*	Trunks (wood)	VL – L	
4.93	*Mallambyx raddei*	*Cerambycidae*	S. Far East	Not yet checked	China, Japan, Koreas	*Quercus, Castanea, Fraxinus*	Trunks (wood)	L – M	
4.94	*Mesosa japonica*	*Cerambycidae*	S. Far East	Not yet checked	China, Japan	*Castanea, Acer, Malus, Prunus*	Trunks (wood)	VL – L	
4.95	*Moechotipa diphysis*	*Cerambycidae*	S. Far East	Not yet checked	China, Koreas	*Quercus*, other trees	Trunks (wood)	VL – L	

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4.96	*Monochamus guttatus*	*Cerambycidae*	S. Far East	Not yet checked	China, Koreas	*Fraxinus*, other trees	Trunks (wood)	VL – L	
4.97	*Morimus verecundus*	*Cerambycidae*	S.E.Russia; Transcaucasus; Turkmenistan	Not yet checked	Caucasus, Iran, Turkey	*Quercus*, *Fagus*, *Castanea*, *Juglans*, other trees	Trunks (wood)	VL – L	
4.98	*Parandra caspia*	*Cerambycidae*	Azerbaijan	Not yet checked	Iran	*Populus*, *Salix*, *Alnus*, *Quercus* and other deciduous	Trunks (wood)	VL – M	
4.99	*Prionus insularis*	*Cerambycidae*	S. Far East	Not yet checked	China, Japan, Koreas	*Pinus*, *Abies*, *Cryptomeria*, *Picea*, *Cha-maecyparis*, and other trees	Trunks (wood)	VL – L	
4.100	*Rhesus serricollis*	*Cerambycidae*	Transcaucasus	Not yet checked	East Maditerranean, Iran, Syria, Turkey	*Quercus*, *Fagus*, *Platanus*, *Juglans*, *Salix*, *Tilia*, *Ulmus* and other deciduous	Trunks (wood)	VL – M	
4.101	*Rhopaloscelis bifasciatus*	*Cerambycidae*	S. Far East	Not yet checked	China, Japan, Koreas	*Quercus*, other trees	Trunks (wood)	VL – L	
4.102	*Rhopaloscelis unifasciatus*	*Cerambycidae*	S. Far East	Not yet checked	China, Japan, Koreas	*Quercus*, other trees	Trunks (wood)	VL – L	
4.103									
4.104	*[Altica (= Haltica) bisulcata]*	*Chrysomelidae*	S. Far East	Not yet checked	Not yet checked	*Salix*, *Populus tremula*	Leaves	VL – L	
4.105	*[Bedelia angustata]*	*Chrysomelidae*	Armenia, Turkmenistan	Not yet checked	Iran	*Populus*	Leaves	VL – L	
4.106	*[Bedelia kokandica]*	*Chrysomelidae*	Tadjikistan, Turkmenistan, Uzbekistan	Not yet checked	Not yet checked	*Populus*, *Salix*	Leaves	VL – L	
4.107	*[Bedelia viridicoerulea]*	*Chrysomelidae*	Tadjikistan, Turkmenistan, Uzbekistan	Not yet checked	Not yet checked	*Populus*, *Salix*	Leaves	VL – L	
4.108	*[Colasposoma dahuricum]*	*Chrysomelidae*	S. Siberia, Transbaikalia, S. Far East	Not yet checked	Japan	*Fraxinus*	Leaves	VL – L	
4.109	*[Cryptocephalus koltzei]*	*Chrysomelidae*	S. Far East	Not yet checked	China	*Corylus*	Leaves	VL – L	
4.110	*[Cryptocephalus kulibini]*	*Chrysomelidae*	Transbaikalia, S. Far East	Not yet checked	Not yet checked	*Corylus*	Leaves	VL – L	
4.112	*[Cryptocephalus mannerheimi]*	*Chrysomelidae*	N.E. Siberia, S. Siberia, Transbaikalia, S. Far East	Not yet checked	Japan	*Corylus*	Leaves	VL – L	
4.113	*[Cryptocephalus pallescens]*	*Chrysomelidae*	S. Far East	Not yet checked	Not yet checked	*Corylus*	Leaves	VL – L	
4.114	*[Cryptocephalus peliopterus]*	*Chrysomelidae*	N.E. Siberia, S. Siberia, Transbaikalia, S. Far East	Not yet checked	Not yet checked	*Populus*, *Ulmus*,*Corylus*	Leaves	VL – L	

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4.115	*[Cryptocephalus polymorphus]*	*Chrysomelidae*	Central Asia (mountains)	Not yet checked	Not yet checked	*Populus*	Leaves	VL – L	
4.116	*[Cryptocephalus regalis]*	*Chrysomelidae*	N.E. Siberia, S. Siberia, Transbaikalia, S. Far East	Not yet checked	China, Japan, Koreas	*Populus tremula*	Leaves	VL – L	
4.117	*[Cyaniris golda]*	*Chrysomelidae*	N.E. Siberia, Transbaikalia, S. Far East	Not yet checked	Not yet checked	*Corylus*	Leaves	VL – L	
4.118	*[Cyaniris hypocrita]*	*Chrysomelidae*	Ukraine (Crimea)	Not yet checked	Not yet checked	*Quercus*	Leaves	VL – L	
4.119	*[Euliroetis ornate]*	*Chrysomelidae*	S. Far East	Not yet checked	China, Japan, Koreas	*Populus tremula*	Leaves	VL – L	
4.120	*[Galerucida jacobsoni]*	*Chrysomelidae*	S. Far East	Not yet checked	China, Koreas	*Ulmus*	Leaves	VL – L	
4.121	*[Gastrolina peltoidea]*	*Chrysomelidae*	S. Siberia, Transbaikalia, S. Far East	Not yet checked	China	*Juglans, Alnus, Fraxinus*	Leaves	VL – L	
4.122	*[Gonioctena (= Phytodecta) gracilicornis]*	*Chrysomelidae*	S. Siberia, Transbaikalia, S. Far East	Not yet checked	Japan	*Salix*	Leaves	VL – L	
4.123	*[Labidostomis asiatica]*	*Chrysomelidae*	Transcaucasus	Not yet checked	Iran, Syria	*Salix*	Leaves	VL – L	
4.124	*[Labidostomis sibirica (= L. amurensis)]*	*Chrysomelidae*	N.W. Siberia, N.E. Siberia, S. Siberia, Transbaikalia, S. Far East	Not yet checked	Not yet checked	*Corylus*	Leaves	VL – L	
4.125	*[Luperus qussakovskii*	*Chrysomelidae*	Tadjikistan	Not yet checked	Not yet checked	*Populus, Fraxinus*	Leaves	VL – L	
4.126	*[Rhadinosa nigrocyanea]*	*Chrysomelidae*	S. Siberia, Transbaikalia, S. Far East	Not yet checked	Japan	*Populus tremula*	Leaves	VL – L	
4.127	*Agelastica coerulea*	*Chrysomelidae*	S. Far East	North America	China, Japan, Koreas	*Alnus, Malus*	Leaves	VL – M	
4.128	*Galerucella maculicollis*	*Chrysomelidae*	S. Far East	Not yet checked	China, Japan	*Ulmus*	Leaves	VL – M	
4.129	*Labidostomis beckeri*	*Chrysomelidae*	S.E.Russia; Kazakhstan; Ukraine	Not yet checked	Not yet checked	*Quercus*	Leaves	VL – L	
4.130	*Labidostomis bipunctata*	*Chrysomelidae*	N.W. Siberia, N.E. Siberia, S. Siberia, Transbaikalia, S. Far East	Not yet checked	Mongolia	*Betula*	Leaves	VL – L	
4.131	*Labidostomis chinensis*	*Chrysomelidae*	S. Far East	Not yet checked	China	Deciduous trees	Leaves	VL – L	
4.132	*[Acicnemis (= Oplocnemis) palliatus]*	*Curculionidae*	S. Far East	Not yet checked	Japan	*Pinus koraiensis*	Trunks (under bark) - ?	VL – L	
4.133	*[Chlorophanus micans]*	*Curculionidae*	S. E. Russia; Ukraine	Not yet checked	Not yet checked	*Salix, Populus*	Leaves	L – M	
4.134	*[Chlorophanus rufomarginatus]*	*Curculionidae*	Kazakhstan	Not yet checked	Not yet checked	*Populus*	Leaves	VL – L	
4.135	*[Chlorophanus sibiricus]*	*Curculionidae*	N. E. Siberia, S. Siberia, Transbaikalia, S. Far East	Not yet checked	China, Koreas	*Salix, Fraxinus*	Leaves	L – M	
4.136	*[Corygetes marmoratus]*	*Curculionidae*	Transbaikalia	Not yet checked	Not yet checked	*Ulmus*	Leaves	VL – L	

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4.137	*[Curculio dickmanni]*	*Curculionidae*	S. Far East	Not yet checked	Not yet checked	*Quercus, Corylus*	Acorns & nuts	VL – L	
4.138	*[Curculio distinguendus]*	*Curculionidae*	S. Far East	Not yet checked	Japan	*Corylus*	Nuts	VL – L	
4.139	*[Cyphycerus tessellates]*	*Curculionidae*	S. Far East	Not yet checked	Japan	*Juglans, Prunus, Quercus*	Leaves & buds	VL – L	
4.140	*[Hylobius haroldi]*	*Curculionidae*	S. Far East	Not yet checked	Japan	*Picea, Pinus, Larix*	Roots, bark	L – H	Main damage – to young trees
4.141	*[Larinus subvariolosus]*	*Curculionidae*	S. Far East	Not yet checked	Not yet checked	*Fraxinus*	Leaves	VL – L	
4.142	*[Magdalis koltzei]*	*Curculionidae*	S. Far East	Not yet checked	Not yet checked	*Pinus*	Trunks (under bark) - ?	VL – L	
4.143	*[Megamecus albilaterus]*	*Curculionidae*	Central Asia	Not yet checked	Not yet checked	*Populus, Malus, Pyrus, Tamarix*	Leaves	VL – L	
4.144	*[Mylloceropsfilicornis]*	*Curculionidae*	S. Far East	Not yet checked	Not yet checked	*Ulmus*	Leaves	VL – L	
4.145	*[Phyllobius dorsalis]*	*Curculionidae*	S. Siberia	Not yet checked	Not yet checked	*Populus*	Leaves	VL – L	
4.146	*[Phyllobius fulvago]*	*Curculionidae*	Ukraine (Crimea)	Not yet checked	Not yet checked	*Quercus*	Leaves	VL – L	
4.147	*[Phyllobius pallidipennis]*	*Curculionidae*	Azerbaijan	Not yet checked	Iran	*Quercus*	Leaves	VL – L	
4.148	*[Phyllobius pictus]*	*Curculionidae*	Ukraine (Crimea); Transcaucasus	Not yet checked	Not yet checked	*Quercus*	Leaves	VL – L	
4.149	*[Polydrosus (= Polydrusus) obesulus]*	*Curculionidae*	S. Far East	Not yet checked	Not yet checked	*Salix, Juglans*	Leaves	VL – L	
4.150	*[Polydrosus (= Polydrusus) obliquatus]*	*Curculionidae*	Central Asia	Not yet checked	Not yet checked	*Prunus, Pyrus, Malus, Robinia, Pistacea*	Leaves	VL – M	
4.151	*[Polydrosus (= Polydrusus) ponticus]*	*Curculionidae*	S. E. Russia; Ukraine (Crimea); Transcaucasus	Not yet checked	Turkey	*Quercus*	Leaves	VL – L	
4.152	*[Polydrosus (= Polydrusus) rufulus]*	*Curculionidae*	S. E. Russia; Transcaucasus; Turkmenistan	Not yet checked	Turkey	*Alnus, Parrotia*	Leaves	VL – L	
4.153	*[Pseudocneorrhinus obesus*	*Curculionidae*	S. Far East	Not yet checked	Japan, Koreas	*Corylus, Juglans, Quercus*	Buds	L – M	
4.154	*[Rhynchaenus mutabilis]*	*Curculionidae*	Transbaikalia, S. Far East	Not yet checked	Japan	*Ulmus pumila*	Leaves	VL – L	
4.155	*[Trachodes hystrix]*	*Curculionidae*	S. E. Russia; Transcaucasus	Not yet checked	Not yet checked	*Fagus, Juglans*	Trunks (wood)	VL – L	

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4.156	*Cleonus (= Stephanophorus) strabus*	*Curculionidae*	S. E. Russia; Ukraine; Transcaucasus	Not yet checked	Not yet checked	*Quercus*	Leaves	VL – L	
4.157	*Cossonus rotundicollis*	*Curculionidae*	S. Far East	Not yet checked	Not yet checked	*Populus*	Trunks (under bark)	VL – L	
4.158	*Pissodes obscurus*	*Curculionidae*	S. Far East	Not yet checked	Japan	*Pinus, Picea, Abies*	Trunks (under bark) - ?	VL – L	
4.159	*[Byctiscus congener] (= B. congenor - ?) [(= B. puberulus)]*	*Curculionidae (= Attelabidae)*	S. Siberia, Transbaikalia, S. Far East	Not yet checked	China, Japan	*Acer, Tilia, Betula, Ulmus, Populus, Fraxinus*, etc.	Leaves	VL – M	
4.160	*[Byctiscus princeps]*	*Curculionidae (= Attelabidae)*	S. Far East	Not yet checked	Japan	*Ulmus, Tilia, Malus, Betula, Populus*, etc.	Leaves	VL – L	
4.161	*[Byctiscus rugosus]*	*Curculionidae (= Attelabidae)*	S. Siberia, Transbaikalia, S. Far East	Not yet checked	Koreas	*Populus, Malus, Pyrus*, etc.	Leaves	VL – L	
4.162	*[Deporaus unicolor]*	*Curculionidae (= Attelabidae)*	S. Far East	Not yet checked	Japan	*Quercus, Corylus, Syringa*, etc.	Leaves	VL – L	
4.163	*[Paracycnotrachelus longiceps (= Apoderus longiceps)]*	*Curculionidae (= Attelabidae)*	S. Far East	Not yet checked	China, Japan, Koreas	*Quercus, Corylus*	Leaves	L – M	
4.164	*[Lyctus suturalis]*	*Lyctidae*	S. E. Russia; Transcaucasus	Not yet checked	Not yet checked	*Quercus*	Trunks (wood)	L – M	
4.165	*[Lytta caraganae]*	*Meloidae*	Transbaikalia, S. Far East	Not yet checked	Not yet checked	*Fraxinus, Lonicera, Syringa*	Leaves	VL – M	
4.166	*[Lytta menetriesi]*	*Meloidae*	South-eastern Kazakhstan; Central Asia	Not yet checked	Not yet checked	*Fraxinus, Ulmus*	Leaves	L – H	
4.167	*Crossotarsus koryoensis (= C. koreyoensis)*	*Platypodidae*	S. Far East	Not yet checked	Japan, Koreas	*Quercus, Acer*	Trunks (wood)	VL – L	
4.168	*[Amphimallon volgensis]*	*Scarabaeidae*	S. E. Russia; Kazakhstan	Not yet checked	Not yet checked	Different plants	Roots	VL – M	Main damage – to seedlings in nurseries
4.169	*[Anisoplia alazanica]*	*Scarabaeidae*	Georgia	Not yet checked	Not yet checked	*Quercus*, other plants	Roots	VL – L	Main damage – to seedlings in nurseries
4.170	*[Chioneosoma porosum]*	*Scarabaeidae*	Azerbaijan; Central Asia	Not yet checked	Not yet checked	Different plants	Roots	VL – M	
4.171	*[Hoplia golovjankoi]*	*Scarabaeidae*	Ukraine	Not yet checked	Not yet checked	Different plants	Roots and leaves	VL – L	
4.172	*[Hoplia pollinosa]*	*Scarabaeidae*	S. E. Russia; Transcaucasus	Not yet checked	Turkey	Different plants	Roots and leaves	VL – L	

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4.173	*[Melolontha gussakovskii]*	*Scarabaeidae*	Tadjikistan	Not yet checked	Not yet checked	Different deciduous	Roots and leaves	VL – M	
4.174	*[Melolontha kraatzi]*	*Scarabaeidae*	Azerbaijan	Not yet checked	Iran	Different deciduous	Roots and leaves	VL – M	
4.175	*[Melolontha permira]*	*Scarabaeidae*	S. E. Russia; Georgia	Not yet checked	Not yet checked	Different deciduous	Roots and leaves	VL – M	
4.176	*[Monotropus fausti]*	*Scarabaeidae*	S. E. Russia; Azerbaijan	Not yet checked	Not yet checked	Different plants	Roots	VL – L	Main damage – to seedlings in nurseries
4.177	*[Oxythyrea albopicta]*	*Scarabaeidae*	S. E. Russia; Transcaucasus; Kazakhstan; Central Asia	Not yet checked	Not yet checked	*Malus* and other trees	Flowers	VL – M	
4.178	*[Proagopertha lucidula (= P. acutisterna)]*	*Scarabaeidae*	S. Far East	Not yet checked	China	*Malus, Ulmus, Crataegus, Rosa*	Flowers & leaves	L – M	
4.179	*Adoretus discolor*	*Scarabaeidae*	S. E. Russia; Transcaucasus	Not yet checked	Not yet checked	*Quercus*, other plants	Roots	VL – L	Main damage – to seedlings in nurseries
4.180	*Anisoplia farraria*	*Scarabaeidae*	Transcaucasus	Not yet checked	Not yet checked	*Quercus*, other plants	Roots	VL – L	Main damage – to seedlings in nurseries
4.181	*Anomala (= A. aenea) abchasica*	*Scarabaeidae*	S. E. Russia; Transcaucasus	Not yet checked	Turkey	*Salix, Vitis, Castanea*	Leaves of *Salix* and *Vitis*, roots of *Vitis* and *Castanea*	VL – L	
4.182	*Brahmina intermedia*	*Scarabaeidae*	Transbaikalia, S. Far East	Not yet checked	Mongolia, China	Different deciduous	Leaves	VL – L	
4.183	*Ectinohoplia rufipes*	*Scarabaeidae*	S. Far East	Not yet checked	China, Koreas	*Malus, Prunus, Betula, Corylus*	Roots and leaves	L – H	
4.184	*Epicometis (= Tropinota) suturalis*	*Scarabaeidae*	Transcaucasus	Not yet checked	Turkey, Iran	*Malus* and other trees	Flowers	VL – M	
4.185	*Epicometis senicula*	*Scarabaeidae*	Transcaucasus	Not yet checked	Turkey, Iran	*Malus* and other trees	Flowers	VL – M	
4.186	*Epicometis turanica*	*Scarabaeidae*	Kazakhstan; Central Asia	Not yet checked	Not yet checked	*Malus* and other trees	Flowers	L – H	
4.187	*Holotrichia (= Lachnosterna) diomphalia*	*Scarabaeidae*	Transbaikalia, S. Far East	Not yet checked	China, Japan, Koreas	Different deciduous	Roots and leaves	VL – L	
4.188	*Hoplia aureola*	*Scarabaeidae*	N. E. Siberia, S. Siberia, Transbaikalia, S. Far East	Not yet checked	Mongolia, Koreas	*Betula* and other plants	Roots and leaves	VL – M	
4.189	*Lachnosterna (= Brahmina) sedakovi*	*Scarabaeidae*	N. E. Siberia, S. Siberia, Transbaikalia, S. Far East	Not yet checked	Mongolia	Different deciduous	Leaves	VL – L	
4.190	*Lachnosterna (= Holotrichia) sichotana*	*Scarabaeidae*	S. Far East	Not yet checked	Not yet checked	Different deciduous	Roots and leaves	VL – L	

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4.191	*Maladera (= Aserica) orientalis (= Serica salebrosa)*	*Scarabaeidae*	S. Far East	Not yet checked	China, Japan, Koreas	Different plants	Roots and leaves	L – H	
4.192	*Maladera japonica (= Aserica castanea = Autoserica castanea)*	*Scarabaeidae*	Georgia; S. Far East	USA	China, Japan, Koreas	Different plants	Roots and leaves	L – H	
4.193	*Melolontha aceris*	*Scarabaeidae*	Transcaucasus	Not yet checked	Not yet checked	Different plants	Roots and leaves	VL – M	
4.194	*Melolontha afflicta*	*Scarabaeidae*	Uzbekistan	Not yet checked	Not yet checked	Different deciduous	Roots and leaves	VL – M	
4.195	*Monotropus nordmanni*	*Scarabaeidae*	S. E. Russia; Ukraine	Not yet checked	Not yet checked	Different plants	Roots	VL – L	Main damage – to seedlings in nurseries
4.196	*Polyphylla adspersa*	*Scarabaeidae*	S. E. Russia; Transcaucasus; Kazakhstan; Central Asia	Not yet checked	Iran, Turkey	Different plants	Roots	L – H	
4.197	*Polyphylla irrorata*	*Scarabaeidae*	Kazakhstan; Kyrgyzstan	Not yet checked	China	Different plants	Roots	L – H	
4.198	*Polyphylla tridentata*	*Scarabaeidae*	Central Asia	Not yet checked	Not yet checked	Different plants	Roots	L – H	
4.199	*[Carphoborus abachidsei]*	*Scolytidae*	Georgia	Not yet checked	Not yet checked	*Pinus eldarica*	Trunks (under bark)	VL – L	
4.200	*[Cryphalus (= Trypophloeus) berezinae]*	*Scolytidae*	N. E. Russia	Not yet checked	Not yet checked	*Populus tremula*	Trunks (under bark)	VL – L	
4.201	*[Cryphalus (= Trypophloeus) dejevi]*	*Scolytidae*	S. Siberia, Transbaikalia	Not yet checked	Not yet checked	*Alnus, Salix*	Trunks (under bark)	VL – L	
4.202	*[Cryphalus (= Trypophloeus) klimeschi]*	*Scolytidae*	Central Asia	Not yet checked	Not yet checked	*Populus*	Trunks (under bark)	VL – L	
4.203	*[Cryphalus (= Trypophloeus) niger]*	*Scolytidae*	S. Far East	Not yet checked	Not yet checked	*Salix, Chosenia*	Trunks (under bark)	VL – L	
4.204	*[Cryphalus (= Trypophloeus) tremulae]*	*Scolytidae*	Ukraine (Crimea)	Not yet checked	BG	*Populus tremula*	Trunks (under bark)	VL – L	
4.205	*[Cryphalus coryli]*	*Scolytidae*	S. Far East	Not yet checked	Not yet checked	*Corylus*	Trunks (under bark)	VL – L	
4.206	*[Dryocoetes carpini]*	*Scolytidae*	S. Far East	Not yet checked	Not yet checked	*Carpinus*	Trunks (under bark)	VL – L	
4.207	*[Dryocoetes pusillus]*	*Scolytidae*	S. E. Russia; Georgia	Not yet checked	Not yet checked	*Fagus, Quercus*	Trunks (under bark)	VL – L	

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4.208	*[Dryocoetes ussuriensis]*	*Scolytidae*	S. Far East	Not yet checked	Not yet checked	*Alnus, Acer*	Trunks (under bark)	VL – L	
4.209	*[Ernoporus eggersi]*	*Scolytidae*	S. Far East	Not yet checked	N. Korea	*Tilia*	Trunks (under bark)	VL – L	
4.210	*[Ernoporus longus]*	*Scolytidae*	S. Far East	Not yet checked	Japan	*Alnus*	Trunks (under bark)	VL – L	
4.211	*[Hylastes aterrimus]*	*Scolytidae*	C.E. Russia, S. E. Russia, N. W. Siberia, N. E. Siberia, S. Siberia, Transbaikalia, S. Far East; Transcaucasus	Not yet checked	Not yet checked	*Pinus, Picea*	Trunks (under bark)	VL – M	
4.212	*[Hylastes substriatus]*	*Scolytidae*	Kazakhstan; Kyrgyzstan	Not yet checked	Not yet checked	*Picea*	Trunks (under bark)	VL – L	
4.213	*[Hylesinus costatus]*	*Scolytidae*	S. Far East	Not yet checked	Japan	*Fraxinus*	Trunks (under bark)	VL – L	
4.214	*[Hylesinus laticollis]*	*Scolytidae*	S. Far East	Not yet checked	Japan	*Fraxinus*	Trunks (under bark)	VL – L	
4.215	*[Hylesinus nobilis]*	*Scolytidae*	S. Far East	Not yet checked	Japan	*Fraxinus*	Trunks (under bark)	VL – L	
4.216	*[Hylesinus shabliovskii]*	*Scolytidae*	S. Far East	Not yet checked	Not yet checked	*Fraxinus*	Trunks (under bark)	VL – L	
4.217	*[Hylesinus striatus]*	*Scolytidae*	S. Far East	Not yet checked	Not yet checked	*Fraxinus*	Trunks (under bark)	VL – M	
4.218	*[Hylurgus longulus]*	*Scolytidae*	Transcaucasus	Not yet checked	Not yet checked	*Pinus*	Trunks (under bark)	VL – L	
4.219	*[Orthotomicus bachmaroensis]*	*Scolytidae*	Georgia	Not yet checked	Not yet checked	*Picea*	Trunks (under bark)	VL – L	
4.220	*[Phloeosinus krimaeus]*	*Scolytidae*	Ukraine (Crimea)	Not yet checked	Not yet checked	*Cupressus, Thuja, Juniperus*	Trunks (under bark)	VL – L	
4.221	*[Phloeosinus transcaspicus]*	*Scolytidae*	Transcaucasus; Turkmenistan	Not yet checked	Not yet checked	*Juniperus*	Trunks (under bark)	VL – L	
4.222	*[Pityophthorus jucundus]*	*Scolytidae*	S. Far East (Sakhalin)	Not yet checked	Japan, Koreas	*Picea*	Trunks (under bark)	VL – L	
4.223	*[Scolytus belocani]*	*Scolytidae*	Transcaucasus	Not yet checked	Not yet checked	*Acer*	Trunks (under bark)	VL – L	

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4.224	*[Scolytus brevipennis]*	*Scolytidae*	S. Far East	Not yet checked	Not yet checked	*Ulmus*	Trunks (under bark)	VL – L	
4.225	*[Scolytus butovitschi]*	*Scolytidae*	S. Far East	Not yet checked	Not yet checked	*Ulmus*	Trunks (under bark)	VL – L	
4.226	*[Scolytus chikisanii]*	*Scolytidae*	S. Far East	Not yet checked	Japan	*Ulmus*	Trunks (under bark)	VL – L	
4.227	*[Scolytus curviventralis]*	*Scolytidae*	S. Far East	Not yet checked	China, Japan	*Ulmus*	Trunks (under bark)	VL – L	
4.228	*[Scolytus dahuricus]*	*Scolytidae*	Transbaikalia, S. Far East	Not yet checked	Not yet checked	*Betula*	Trunks (under bark)	VL – L	
4.229	*[Scolytus ecksteini]*	*Scolytidae*	Transcaucasus	Not yet checked	Not yet checked	*Ulmus*	Trunks (under bark)	VL – L	
4.230	*[Scolytus eichhoffi]*	*Scolytidae*	Transcaucasus	Not yet checked	Not yet checked	*Ulmus*	Trunks (under bark)	VL – L	
4.231	*[Scolytus esuriens]*	*Scolytidae*	S. Far East	Not yet checked	Japan	*Ulmus*	Trunks (under bark)	VL – L	
4.232	*[Scolytus grandis]*	*Scolytidae*	S. Far East	Not yet checked	Not yet checked	*Ulmus*	Trunks (under bark)	VL – L	
4.233	*[Scolytus granulifer]*	*Scolytidae*	Transcaucasus	Not yet checked	Not yet checked	*Ulmus*	Trunks (under bark)	VL – L	
4.234	*[Scolytus koltzei]*	*Scolytidae*	S. Far East	Not yet checked	Not yet checked	*Tilia*	Trunks (under bark)	VL – L	
4.235	*[Scolytus lencoranus]*	*Scolytidae*	Transcaucasus	Not yet checked	Not yet checked	*Quercus*	Trunks (under bark)	VL – L	
4.236	*[Scolytus lineatus]*	*Scolytidae*	S. Far East	Not yet checked	Not yet checked	*Ulmus*	Trunks (under bark)	VL – L	
4.237	*[Scolytus possyeti]*	*Scolytidae*	S. Far East	Not yet checked	Not yet checked	*Betula*	Trunks (under bark)	VL – L	
4.238	*[Scolytus pubescens]*	*Scolytidae*	S. Far East	Not yet checked	Not yet checked	*Ulmus*	Trunks (under bark)	VL – L	
4.239	*[Scolytus starki]*	*Scolytidae*	S. Far East	Not yet checked	Not yet checked	*Ulmus*	Trunks (under bark)	VL – L	

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4.240	*[Scolytus tadzhikistanicus]*	*Scolytidae*	Tadjikistan	Not yet checked	Not yet checked	*Acer*	Trunks (under bark)	VL – L	
4.241	*[Scolytus tauricus]*	*Scolytidae*	Ukraine (Crimea)	Not yet checked	Not yet checked	*Ulmus*	Trunks (under bark)	VL – L	
4.242	*[Scolytus taxicola]*	*Scolytidae*	S. E. Russia; Transcaucasus	Not yet checked	Not yet checked	*Taxus*	Trunks (under bark)	VL – L	
4.243	*[Scolytus trispinosus]*	*Scolytidae*	S. Far East	Not yet checked	Japan	*Ulmus*	Trunks (under bark)	L – M	
4.244	*[Scolytus ussuriensis]*	*Scolytidae*	S. Far East	Not yet checked	Not yet checked	*Ulmus*	Trunks (under bark)	VL – L	
4.245	*[Scolytus ventrosus]*	*Scolytidae*	S. Far East	Not yet checked	Not yet checked	*Ulmus*	Trunks (under bark)	VL – L	
4.246	*[Taphrorychus lenkoranus]*	*Scolytidae*	Transcaucasus	Not yet checked	Not yet checked	*Fagus, Quercus*	Trunks (under bark)	VL – L	
4.247	*[Trypodendron aceris]*	*Scolytidae*	S. Far East	Not yet checked	Japan	*Acer*	Trunks (wood)	VL – L	
4.248	*[Trypodendron suturale]*	*Scolytidae*	S. Far East	Not yet checked	Not yet checked	*Betula, Alnus*	Trunks (wood)	VL – L	
4.249	*[Xyleborus maiche]*	*Scolytidae*	S. Far East	Not yet checked	Not yet checked	*Juglans, Alnus, Acer, Betula,* other trees	Trunks (under bark)	VL – L	
4.250	*[Xyleborus punctulatus]*	*Scolytidae*	S. Far East	Not yet checked	Not yet checked	*Quercus mongolica*	Trunks (under bark)	VL – L	
4.251	*[Xyleborus quercus]*	*Scolytidae*	S. Far East	Not yet checked	Not yet checked	*Quercus mongolica*	Trunks (under bark)	VL – L	
4.252	*Cryphalus (= Trypophloeus) populi*	*Scolytidae*	S. Far East	Not yet checked	Not yet checked	*Populus tremula*	Trunks (under bark)	VL – L	
4.253	*Cryphalus carpini*	*Scolytidae*	S. Far East	Not yet checked	Not yet checked	*Carpinus*	Trunks (under bark)	VL – L	
4.254	*Cryphalus mandschuricus (= C. mandshuricus)*	*Scolytidae*	S. Far East	Not yet checked	China	*Corylus*	Trunks (under bark)	VL – L	
4.255	*Ernoporicus spessivtzevi*	*Scolytidae*	S. Far East	Not yet checked	Not yet checked	*Fraxinus*	Trunks (under bark)	VL – L	
4.256	*Ernoporus fraxini*	*Scolytidae*	S. Far East	Not yet checked	Not yet checked	*Fraxinus*	Trunks (under bark)	VL – M	

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4.257	*Hylastinus tiliae*	*Scolytidae*	S. E. Russia; Transcaucasus	Not yet checked	Not yet checked	*Tilia*	Trunks (under bark)	VL – L	
4.258	*Hylesinus botscharnikovi*	*Scolytidae*	Transcaucasus	Not yet checked	Not yet checked	*Fraxinus*	Trunks (under bark)	VL – L	
4.259	*Hylesinus cholodkovskii (= H. cholodkovskyi)*	*Scolytidae*	Transcaucasus	Not yet checked	Not yet checked	*Fraxinus*	Trunks (under bark)	VL – L	
4.260	*Hylesinus cingulatus*	*Scolytidae*	S. Far East	Not yet checked	Japan	*Fraxinus*	Trunks (under bark)	VL – L	
4.261	*Hylesinus eos*	*Scolytidae*	S. Far East	Not yet checked	China	*Fraxinus*	Trunks (under bark)	VL – L	
4.262	*Hylesinus lubarskii (= H. lubarski)*	*Scolytidae*	S. Far East	Not yet checked	Japan	*Fraxinus*	Trunks (under bark)	VL – L	
4.263	*Hylesinus pravdini*	*Scolytidae*	S. Far East	Not yet checked	Not yet checked	*Fraxinus*	Trunks (under bark)	VL – L	
4.264	*Hylesinus tupolevi*	*Scolytidae*	Transcaucasus; Kyrgyzstan	Not yet checked	Not yet checked	*Fraxinus*	Trunks (under bark)	VL – L	
4.265	*Hypothenemus eruditus (= H. lezhavai, = H. lezjavai, = H. citri, = H. juglandis, = H. pusillus)*	*Scolytidae*	S. E. Russia; Transcaucasus	Not yet checked	IT, ES, FR (Corsica)	*Morus, Citrus, Tilia, Pinus, Carpinus, Alnus*, many other trees	Trunks (under bark)	VL – M	Vector of *Deuterophoma tracheiphila*
4.266	*Phloeophthorus brevicollis*	*Scolytidae*	Ukraine (Crimea); Transcaucasus	Not yet checked	Not yet checked	*Fagus*	Trunks (under bark)	VL – L	
4.267	*Pityophthorus kirgisicus*	*Scolytidae*	Kyrgyzstan	Not yet checked	Not yet checked	*Picea*	Trunks (under bark)	VL – L	
4.268	*Pityophthorus parfentjevi*	*Scolytidae*	Kyrgyzstan	Not yet checked	Not yet checked	*Picea*	Trunks (under bark)	VL – L	
4.269	*Pityophthorus schrenkianus (= P. schrenkianae)*	*Scolytidae*	Kyrgyzstan	Not yet checked	Not yet checked	*Picea*	Trunks (under bark)	VL – L	
4.270	*Polygraphus seriatus*	*Scolytidae*	S. Siberia, Transbaikalia, S. Far East	Not yet checked	Not yet checked	Coniferous trees	Trunks (under bark)	VL – L	
4.271	*Scolytoplatypus daimio*	*Scolytidae*	S. Far East (Sakhalin)	Not yet checked	Japan	*Quercus, Cornus, Abies*	Trunks (under bark)	VL – L	

Table 4. INSECTS COLEOPTERA

4.272	*Scolytoplatypus tycon*	*Scolytidae*	S. Far East	Not yet checked	China, Japan, Koreas	*Alnus*, *Acer*, *Juglans*, *Pinus*, *Picea*, *Abies*, other trees	Trunks (under bark)	VL – L	
4.273	*Scolytus aratus*	*Scolytidae*	S. Far East	Not yet checked	Japan, Koreas	*Ulmus*, *Prunus*	Trunks (under bark)	VL – L	
4.274	*Scolytus claviger*	*Scolytidae*	S. Far East	Not yet checked	Japan, Koreas	*Carpinus*	Trunks (under bark)	L – M	
4.275	*Scolytus fasciatus*	*Scolytidae*	S. E. Russia; Transcaucasus; Central Asia	Not yet checked	Irak, Turkey	*Prunus*, *Ulmus*	Trunks (under bark)	VL – L	
4.276	*Scolytus jacobsoni*	*Scolytidae*	S. Far East	Not yet checked	Japan	*Ulmus*	Trunks (under bark)	L – M	
4.277	*Scolytus japonicus (= S. confusus)*	*Scolytidae*	S. Far East	Not yet checked	Not yet checked	*Ulmus*	Trunks (under bark)	VL – L	
4.278	*Scolytus jaroschevskyi (= S. jaroshevskii)*	*Scolytidae*	S. E. Russia; Transcaucasus	Not yet checked	Not yet checked	*Ulmus*	Trunks (under bark)	VL – L	
4.279	*Scolytus mandli*	*Scolytidae*	Transbaikalia, S. Far East	Not yet checked	Not yet checked	*Fraxinus*	Trunks (under bark)	VL – L	
4.280	*Scolytus schevyrevi*	*Scolytidae*	Central Asia	Not yet checked	Not yet checked	*Ulmus*	Trunks (under bark)	VL – L	

Table 4. INSECTS COLEOPTERA, DIPTERA & HEMIPTERA

4.281	*Scolytus semenovi*	*Scolytidae*	Transbaikalia, S. Far East	Not yet checked	Not yet checked	*Ulmus*	Trunks (under bark)	L – M	
4.282	*Scolytus sibiricus*	*Scolytidae*	Transbaikalia, S. Far East	Not yet checked	Not yet checked	*Betula*	Trunks (under bark)	VL – L	
4.283	*Trypophloeus asperatus (= Cryphalus alni)*	*Scolytidae*	S. Far East (Sakhalin)	Not yet checked	Not yet checked	*Alnus*	Trunks (under bark)	VL – L	
4.284	*Xyleborus alni*	*Scolytidae*	S. Far East	Not yet checked	Japan	*Alnus, Betula, Tilia*	Trunks (under bark)	VL – L	
4.285	*Xylechinus bergeri*	*Scolytidae*	S. Far East	Not yet checked	Not yet checked	*Eleutherococcus, Akanthopanax, Phellodendron*	Trunks (under bark)	VL – L	
4.286	*[Zophosis deflexa]*	*Tenebrionidae*	Kyrgyzstan	Not yet checked	Not yet checked	Young plants	Leaves	L – M	
4.287	*Tentyria nomas*	*Tenebrionidae*	Central Asia	Not yet checked	Not yet checked	Seedlings	Roots, root crowns, leaves	L – M	
				Diptera					
4.288	*Agromyza salicifolii*	*Agromyzidae (= Cecidomyidae)*	S. E. Russia; Kazakhstan	Not yet checked	Egypt, Syria, Israel	*Populus, Salix*	Leaves	VL – L	
4.289	*Dasyneura] (= Dasineura) inchbaldiana*	*Cecidomyidae*	C. E. Russia, S. E. Russia; Belarus; Ukraine; Central Asia	Not yet checked	Not yet checked	*Salix*	Leaves	VL – L	
4.290	*Rhagoletis turanica*	*Tephritidae (= Trypetidae)*	Uzbekistan	Not yet checked	Not yet checked	*Juniperus*	Fruits	VL – M	
				Hemiptera					
4.291	*[Acanthosoma forcipatum]*	*Acanthosomatidae (= Pentatomidae)*	Central Asia (mountains)	Not yet checked	Not yet checked	*Salix, Malus, Pyrus, Betula,*, other trees	Leaves	VL – L	
4.292	*Elasmostethus interstinctus*	*Acanthosomatidae (= Pentatomidae)*	C. E. Russia, S. E. Russia, S. Far East; Ukraine (Crimea); Transcaucasus	Not yet checked	China, Japan	*Betula, Alnus, Tilia, Picea,* other trees	Leaves	VL – L	
4.293	*[Arocatus fasciatus]*	*Lygaeidae*	Transbaikalia, S. Far East	Not yet checked	Japan	*Quercus*, other deciduous trees	Trunks (under bark)	VL – L	
4.294	*[Cyllocoris equestris]*	*Miridae*	Transbaikalia	Not yet checked	Not yet checked	*Ulmus*	Leaves	VL – L	
4.295	*[Deraeocoris (= Camptobrochis) pilipes]*	*Miridae*	Central Asia	Not yet checked	China	*Ulmus, Malus, Pyrus*	Leaves	VL – L	
4.296	*[Dichrooscytus consobrinus]*	*Miridae*	Kazakhstan	Not yet checked	Not yet checked	Coniferous trees	Needles	VL – L	
4.297	*[Dichrooscytus pseudosabinae]*	*Miridae*	Azerbaijan; Central Asia	Not yet checked	Not yet checked	*Juniperus*	Needles	VL – L	

Table 4. INSECTS HEMIPTERA

4.298	*[Phylus limbatellus]*	*Miridae*	Transcaucasus	Not yet checked	Not yet checked	Deciduous trees	Leaves	VL – L	
4.299	*[Psallus cognatus]*	*Miridae*	S. E. Russia; Ukraine (Crimea)	Not yet checked	Not yet checked	*Quercus*	Leaves	VL – L	
4.300	*Ephippiocoris lunatus*	*Miridae*	Azerbaijan; Central Asia	Not yet checked	Not yet checked	*Betula*	Leaves	VL – L	
4.301	*[Acrocorisellus serraticollis]*	*Pentatomidae*	S. Far East	Not yet checked	Japan	Deciduous trees	Leaves & trunks	VL – L	
4.302	*[Alloeoglypta pretiosa]*	*Pentatomidae*	Central Asia	Not yet checked	Not yet checked	*Acer*	Leaves	VL – L	
4.303	*[Dalpada pavlovskii]*	*Pentatomidae*	Tadjikistan	Not yet checked	Afghanistan	*Platanus*, *Populus*, other trees	Leaves	VL – L	
4.304	*[Holcostethus manifestus]*	*Pentatomidae*	Central Asia	Not yet checked	Not yet checked	Deciduous trees	Leaves	VL – L	
4.305	*[Lelia decempunctata]*	*Pentatomidae*	S. Far East	Not yet checked	Japan	Deciduous trees	Leaves & trunks	VL – L	
4.306	*[Mesopriassus vetustus]*	*Pentatomidae*	Central Asia	Not yet checked	Not yet checked	*Acer*, *Sorbus*	Seeds	VL – L	
4.307	*[Palomena amurensis]*	*Pentatomidae*	S. Far East	Not yet checked	Not yet checked	*Quercus*, *Corylus*, *Acer*, other trees	Leaves	VL – L	
4.308	*[Pentatoma metallifer]*	*Pentatomidae*	Transbaikalia, S. Far East	Not yet checked	Mongolia	*Juglans*, other trees	Leaves & trunks	VL – L	
4.309	*[Pentatoma semiannulatum]*	*Pentatomidae*	S. Far East	Not yet checked	Koreas	Deciduous trees	Leaves & trunks	VL – L	
4.310	*[Rhaphigaster brevispinus]*	*Pentatomidae*	Azerbaijan; Central Asia	Not yet checked	Not yet checked	*Populus*, *Ulmus*, *Platanus*, other trees	Leaves	VL – L	
4.311	*[Urochela quadrinotata]*	*Pentatomidae (= Urostylidae)*	S. Far East	Not yet checked	China, Japan, Koreas	*Ulmus*	Leaves & branches	VL – L	
4.312	*Apodiphus integriceps*	*Pentatomidae*	Central Asia	Not yet checked	India	*Populus*, other trees	Leaves	VL – L	
4.313	*Cellobius abdominalis*	*Pentatomidae*	Central Asia	Not yet checked	Not yet checked	*Populus*	Leaves	VL – L	
4.314	*[Coptosoma biguttulum]*	*Plataspidae (= Urostylidae)*	S. Far East	Not yet checked	China, Japan, Koreas	*Ulmus*	Leaves & branches	VL – L	
4.315	*Monosteira discoidalis*	*Tingidae] (= Tingitidae)*	Central Asia	Not yet checked	Not yet checked	*Populus*	Leaves	VL – L	

Table 4. INSECTS HOMOPTERA

				Homoptera					
4.316	*Adelges (= Chermes) japonicus*	*Adelgidae*	S. Far East (Sakhalin)	Not known	Japan	*Picea*	Needles & shoots	VL – L	
4.317	*Adelges (= Chermes) karafutonis*	*Adelgidae*	S. Far East (Sakhalin)	Not known	Japan	*Picea*	Needles & shoots	VL – L	
4.318	*[Aphis sogdiana]*	*Aphididae*	Transcaucasus; Central Asia	Not yet checked	Not yet checked	*Ulmus*	Leaves	VL – L	
4.319	*[Callipterinella betularia]*	*Aphididae*	S. E. Russia; Ukraine; Transcaucasus; Kazakhstan	Not yet checked	Not yet checked	*Betula*	Leaves & shoots	VL – L	
4.320	*[Eriosoma antennatum]*	*Aphididae*	S. Far East	Not yet checked	Not yet checked	*Ulmus*	Leaves	VL – L	
4.321	*[Eriosoma ussuriense]*	*Aphididae*	S. Far East	Not yet checked	Not yet checked	*Ulmus*	Leaves	VL – L	
4.322	*[Euceraphis pilosa]*	*Aphididae*	Central Asia (mountains)	Not yet checked	Not yet checked	*Betula*	Leaves	VL – L	
4.323	*[Pachypappella orientalis]*	*Aphididae*	S. Far East	Not yet checked	China	*Populus*	Leaves	VL – L	
4.324	*[Pemphigus saccosus]*	*Aphididae*	S. Far East	Not yet checked	Not yet checked	*Populus*	Shoots	VL – L	
4.325	*[Pemphigus semenovi]*	*Aphididae*	S. Far East	Not yet checked	Not yet checked	*Populus*	Leaves	VL – L	
4.326	*[Prociphilus (= Paraprociphilus) ucrainensis]*	*Aphididae*	Ukraine	Not yet checked	Not yet checked	*Acer*	Leaves & shoots	VL – M	
4.327	*[Prociphilus bumeliaeformis]*	*Aphididae*	S. Far East	Not yet checked	Not yet checked	*Abies*	Roots	VL – L	
4.328	*[Stegophylla mordvilkoi]*	*Aphididae*	S. E. Russia; Ukraine (Crimea); Transcaucasus	Not yet checked	Not yet checked	*Quercus*	Leaves	VL – L	
4.329	*[Thecabius latisensoria]*	*Aphididae*	S. Far East	Not yet checked	Japan	*Populus*	Leaves	VL – L	
4.330	*[Tuberculatus flavus]*	*Aphididae*	S. Far East	Not yet checked	Not yet checked	*Quercus*	Leaves	VL – L	
4.331	*[Tuberculatus macrotuberculatus]*	*Aphididae*	S. Far East	Not yet checked	Japan	*Quercus*	Leaves	VL – L	
4.332	*[Tuberculatus multituberculatus]*	*Aphididae*	S. Far East	Not yet checked	Not yet checked	*Quercus*	Leaves	VL – L	
4.333	*Cinara confines (= C. abieticola)*	*Aphididae*	N. W. Siberia, N. E. Siberia, S. Siberia, Transbaikalia, N. Far East, S. Far East	Not yet checked	Not yet checked	*Abies*	Needles & shoots	VL – L	
4.334	*Cinara pseudosabinae*	*Aphididae*	Central Asia	Not yet checked	Not yet checked	*Juniperus*	Needles & shoots	VL – M	
4.335	*Eriosoma japonicum (= Schizoneura japonica)*	*Aphididae*	S. Far East	Not yet checked	Japan	*Ulmus*	Leaves	VL – L	

Table 4. INSECTS HOMOPTERA

4.336	*Eriosoma phoenax (= E. phaenax)*	*Aphididae*	Transcaucasus; Central Asia	Not yet checked	Not yet checked	*Ulmus*	Leaves & shoots	VL – L	
4.337	*Gootiella alba*	*Aphididae*	Kazakhstan	Not yet checked	Not yet checked	*Populus*	Leaves	VL – L	
4.338	*Greenidea kuwanai*	*Aphididae*	S. Far East	Not yet checked	China, Japan, Koreas	*Quercus*	Leaves & shoots	VL – L	
4.339	*Kaltenbachiella (= Gobaishia) japonica*	*Aphididae*	S. Far East	Not yet checked	Japan	*Ulmus*	Leaves	VL – L	
4.340	*Lachnus (= Pterochlorus) tropicalis*	*Aphididae*	S. Far East	Not yet checked	China, India, Japan, Koreas	*Quercus, Castanea*	Leaves & shoots	VL – L	
4.341	*Paraprociphilus baicalensis*	*Aphididae*	N. W. Siberia, N. E. Siberia, S. Siberia, Transbaikalia, N. Far East, S. Far East	Not yet checked	Not yet checked	*Alnus*	Leaves	VL – L	
4.342	*Pemphigus niishimae (= P. niisimae)*	*Aphididae*	S. Far East	Not yet checked	Japan	*Populus*	Leaves	VL – L	
4.343	*Periphyllus (= Neothomasia) populicola*	*Aphididae*	Transcaucasus; Central Asia	North America	Not yet checked	*Populus, Salix*	Leaves & shoots	VL – L	
4.344	*Prociphilus oriens*	*Aphididae*	S. Far East	Not yet checked	China, Japan	*Fraxinus, Syringa, Abies* (roots)	Leaves, Roots	VL – M	
4.345	*Tetraneura nigriabdominalis (= Byrsocrypta hirsute)*	*Aphididae*	S. Far East	Not yet checked	China, Japan, Koreas	*Ulmus*	Leaves	VL – L	
4.346	*Tinocallis saltans*	*Aphididae*	S. E. Russia; Ukraine; Transcaucasus; Central Asia	Not yet checked	West Asia, not known in Europe	*Ulmus*	Leaves	VL – L	
4.347	*[Asterodiaspis (= Asterolecanium) japonicus]*	*Asterolecaniidae*	S. Far East	Not yet checked	Japan, Taiwan	*Quercus*	Trunks & branches	L – M	Main damage – to young trees
4.348	*[Chaitophorus jaxarti]*	*Chaitophoridae (= Aphididae)*	Transcaucasus; Central Asia	Not yet checked	Not yet checked	*Populus*	Leaves	VL – L	
4.349	*[Batrachomorphus (=Batracomorphus) ulmi]*	*Cicadellidae*	Transbaikalia, S. Far East	Not yet checked	Not yet checked	*Ulmus*	Leaves & branches	VL – L	
4.350	*[Edwardsiana menzbieri]*	*Cicadellidae (= Eupterygidae)*	C. E. Russia	Not yet checked	Not yet checked	*Salix*	Leaves & branches	VL – L	
4.351	*[Edwardsiana ruthenica]*	*Cicadellidae (= Eupterygidae)*	C. E. Russia	Not yet checked	Not yet checked	*Acer*	Leaves & branches	VL – L	
4.352	*[Edwardsiana solearis rossica]*	*Cicadellidae (= Eupterygidae)*	C. E. Russia, S. E. Russia	Not yet checked	Not yet checked	*Tilia, Corylus, Quercus*, other trees, *Prunus*	Leaves & branches	VL – L	
4.353	*[Edwardsiana tshinari]*	*Cicadellidae (= Eupterygidae)*	Central Asia	Not yet checked	Not yet checked	*Platanus*	Leaves & branches	VL – L	
4.354	*[Eurhadina oshanini]*	*Cicadellidae (= Eupterygidae)*	C. E. Russia	Not yet checked	Not yet checked	*Ulmus*	Leaves & branches	VL – L	

Table 4. INSECTS HOMOPTERA

4.355	*[Kybos bipunctata ulmicola]*	*Cicadellidae (= Eupterygidae)*	C. E. Russia, S. E. Russia; Ukraine; Transcaucasus; Central Asia	Not yet checked	Not yet checked	*Ulmus*	Leaves & branches	VL – L	
4.356	*[Kybos mesasiatica]*	*Cicadellidae (= Eupterygidae)*	Central Asia	Not yet checked	Not yet checked	*Salix*	Leaves & branches	VL – L	
4.357	*[Kybos niveicolor]*	*Cicadellidae (= Eupterygidae)*	Central Asia	Not yet checked	Not yet checked	*Populus*	Leaves & branches	VL – L	
4.358	*[Typhlocyba ognevi (= Ribautiana ognevi)]*	*Cicadellidae (= Eupterygidae)*	S. E. Russia	Not yet checked	Not yet checked	*Ulmus*	Leaves & branches	VL – L	
4.359	*[Typhlocyba roseipennis]*	*Cicadellidae (= Eupterygidae)*	Central Asia	Not yet checked	Not yet checked	*Salix*	Leaves & branches	VL – L	
4.360	*Hyalesthes mlokosiewiczi*	*Cixiidae*	Transcaucasus	Not yet checked	Iran, Turkey	*Populus, Salix, Syringa*, other plants	Leaves & branches	VL – L	Vector of potato stolbur phytoplasma
4.361	*[Pulvinaria costata]*	*Coccidae*	S. Far East	Not yet checked	Not yet checked	*Alnus, Salix*	Branches	VL – L	
4.362	*[Pulvinaria kirgisica]*	*Coccidae*	Kyrgyzstan	Not yet checked	Not yet checked	*Betula*	Branches	VL – L	
4.363	*[Pulvinaria populeti]*	*Coccidae*	Kazakhstan	Not yet checked	Not yet checked	*Populus*	Branches	VL – L	
4.364	*[Pulvinaria salicicola]*	*Coccidae*	Central Asia; Kazakhstan	Not yet checked	Not yet checked	*Populus, Salix*	Leaves & branches	L – M	
4.365	*[Pulvinaria terrestris]*	*Coccidae*	Armenia; Georgia	Not yet checked	Not yet checked	*Crataegus, Carpinus*	Roots	L – M	
4.366	*Physokermes jezoensis*	*Coccidae*	S. Far East (Sakhalin)	Not yet checked	Not yet checked	*Picea*	Branches	VL – L	
4.367	*[Kuwania corpulenta]*	*Coccidae (= Margarodidae)*	S. Far East	Not yet checked	Japan	*Quercus, Castanea*, other trees	Trunks, leaves & branches	VL – L	
4.368	*[Kuwania minuta]*	*Coccidae (= Margarodidae)*	Ukraine (Crimea); Transcaucasus	Not yet checked	Not yet checked	*Quercus*	Trunks (bark)	VL – L	
4.369	*Kuwania betulae*	*Coccidae (= Margarodidae)*	S. Far East	Not yet checked	Not yet checked	*Betula*	Trunks (bark)	VL – L	
4.370	*[Chionaspis micropori]*	*Diaspididae*	S. Far East	Not yet checked	China	*Alnus*	Trunks & branches	VL – L	
4.371	*[Chionaspis Montana]*	*Diaspididae*	Kazakhstan, Kyrgyzstan	Not yet checked	Not yet checked	*Salix*	Trunks & branches	VL – L	
4.372	*[Chionaspis polypora]*	*Diaspididae*	Armenia, Central Asia	Not yet checked	Not yet checked	*Salix, Populus, Sorbus*, other trees	Trunks & branches	VL – M	
4.373	*[Diaspidiotus alma-atensis]*	*Diaspididae*	Kazakhstan, Kyrgyzstan	Not yet checked	Not yet checked	*Crataegus, Malus, Betula*	Trunks & branches	VL – L	
4.374	*[Diaspidiotus armenicus]*	*Diaspididae*	Armenia	Not yet checked	Iran	*Populus*	Trunks & branches	VL – L	
4.375	*[Diaspidiotus turanicus]*	*Diaspididae*	Armenia; Central Asia	Not yet checked	Not yet checked	*Salix*	Branches	VL – L	

Table 4. INSECTS HOMOPTERA

4.376	*[Epidiaspis salicis]*	*Diaspididae*	Armenia	Not yet checked	Iran	*Salix*	Trunks & branches	VL – L	
4.377	*[Lepidosaphes atunicola]*	*Diaspididae*	S. Far East (Sakhalin)	Not yet checked	Not yet checked	*Ulmus*	Trunks & branches	VL – L	
4.378	*[Lineaspis junipericola]*	*Diaspididae*	Armenia	Not yet checked	Not yet checked	*Juniperus*	Needles	VL – L	
4.379	*[Salicicola (= Leucaspis) kermanensis]*	*Diaspididae*	Central Asia; Transcaucasus	Not yet checked	Iran	*Populus, Salix*	Trunks, leaves & branches	L – M	
4.380	*Aspidiotus cryptomeriae*	*Diaspididae*	S. Far East (Sakhalin)	Not yet checked	Japan	*Taxus, Pinus,, Cryptomeria, Chamaecyparis, Abies*, other trees	Needles	VL – M	
4.381	*Chionaspis lepineyi*	*Diaspididae*	Armenia, Georgia	Not yet checked	MA, CH, HU, CZ, Algeria	*Quercus*	Trunks & branches	VL – L	
4.382	*Chionaspis salicis-nigrae*	*Diaspididae*	S. Far East (Sakhalin)	North America	Not yet checked	*Salix, Populus, Alnus*, other trees	Trunks & branches	VL – L	
4.383	*Diaspidiotus (= Aspidiotus) caucasicus*	*Diaspididae*	S.E. Russia; Ukraine (Crimea); Transcaucasus	Not yet checked	Not yet checked	*Populus, Juglans*	Trunks & branches	VL – M	
4.384	*Diaspidiotus (= Aspidiotus) transcaspiensis*	*Diaspididae*	Turkmenistan	Not yet checked	Not yet checked	*Populus*	Branches	VL – L	
4.385	*Lepidosaphes pallida (= L. maskelli*	*Diaspididae*	Georgia	Not yet checked	Japan, India, Hawaii	*Juniperus, Criptomeria, Taxus*, other trees	Needles	VL – M	
4.386	*Lepidosaphes tubulorum*	*Diaspididae*	S. Far East	Not yet checked	Japan, Taiwan	*Populus, Syringa*, other trees, *Malus*	Trunks & branches	VL – M	
4.387	*Noechionaspis kirgisica*	*Diaspididae*	Kazakhstan, Kyrgyzstan	Not yet checked	Not yet checked	*Acer, Ribes*, other trees	Trunks & branches	VL – L	
4.388	*Quadraspidiotus (= Diaspidiotus) slavonicus*	*Diaspididae*	S.E. Russia; Armenia; Central Asia	Not yet checked	Not yet checked	*Populus, Salix*, other trees	Trunks & branches	L – H	
4.389	*[Acanthococcus (= Eriococcus) salicis]*	*Eriococcidae (= Pseudococcidae)*	S. Far East	Not yet checked	Not yet checked	*Salix*	Trunks & branches	VL – L	
4.390	*Cryptococcus aceris*	*Eriococcidae (= Pseudococcidae)*	Transcaucasus	Not yet checked	DE	*Acer, Tilia*	Trunks & branches	VL – L	
4.391	*Gossyparia salicicola*	*Eriococcidae (= Pseudococcidae)*	Central Asia; Kazakhstan	Not yet checked	Not yet checked	*Salix*	Trunks & branches	L – M	
4.392	*[Mycterodus intricatus]*	*Issidae*	S. E. Russia; Ukraine (Crimea); Transcaucasus	Not yet checked	Not yet checked	*Quercus*	Leaves & branches	VL – L	

Table 4. INSECTS HOMOPTERA

4.393	*[Kermes (= Kermococcus = Chermes) corticalis] (probably = Eopineus strobus)*	*Kermesidae (= Kermococcidae)*	S. E. Russia; Ukraine	Not yet checked	Not yet checked	*Quercus*	Trunks & branches	L – M	
4.394	*[Kermes (= Kermococcus) nahalali]*	*Kermesidae (= Kermococcidae)*	Azerbaijan	Not yet checked	Syria, Liban, Israel	*Quercus*	Branches	VL – L	
4.395	*[Kermes (= Kermococcus) nakagawae]*	*Kermesidae (= Kermococcidae)*	S. Far East	Not yet checked	Japan, N. Korea	*Quercus*	Trunks & branches	VL – L	
4.396	*[Drosicha media]*	*Margarodidae*	Kazakhstan	Not yet checked	Not yet checked	*Salix*	Trunks & branches (bark)	VL – L	
4.397	*[Steingelia orientalis]*	*Margarodidae*	S. Far East	Not yet checked	China, Koreas	*Betula*	Trunks (bark)	VL – L	
4.398	*[Xylococcus betulicola]*	*Margarodidae*	S. Far East	Not yet checked	Not yet checked	*Betula*	Trunks & branches (bark)	VL – L	
4.399	*Drosicha turkestanica*	*Margarodidae*	Central Asia; Kazakhstan	Not yet checked	Not yet checked	*Salix, Populus, Cydonia,* other trees	Trunks, leaves & branches	VL – L	
4.400	*Xylococcus japonicus (= X. alni)*	*Margarodidae*	S. Far East	Not yet checked	Japan	*Alnus*	Trunks & branches (bark)	VL – L	
4.401	*[Phenacoccus (= Paroudablis) querculus]*	*Pseudococcidae*	Azerbaijan	Not yet checked	Not yet checked	*Quercus*	Trunks, leaves & branches	VL – L	
4.402	*[Pseudococcus junipericola]*	*Pseudococcidae*	Tajikistan	Not yet checked	Not yet checked	*Juniperus*	Trunks & branches	VL – L	
4.403	*[Spinococcus (= Phenacoccus) morrisoni]*	*Pseudococcidae*	S. E. Russia; Ukraine (Crimea); Transcaucasus	Not yet checked	Not yet checked	*Carpinus, Platanus,* other trees	Trunks & branches	VL – L	
4.404	*[Spinococcus tuberculus]*	*Pseudococcidae*	S. Far East	Not yet checked	Not yet checked	*Populus, Ribes*	Trunks & branches	VL – L	
4.405	*Phenacoccus polyphagus*	*Pseudococcidae*	S. Far East	Not yet checked	Not yet checked	*Malus, Betula, Fraxinus*	Trunks & branches	VL – L	
4.406	*Polystomophora (= Phenacoccus) ostiaplurima*	*Pseudococcidae*	Ukraine	Not yet checked	HU	*Acer, Aesculus*	Trunks & branches	VL – L	
4.407	*[Psylla moscovita]*	*Psyllidae*	C. E. Russia	Not yet checked	Not yet checked	*Salix*	Leaves & branches	VL – L	
4.408	*[Psylla subnigrita]*	*Psyllidae*	C. E. Russia	Not yet checked	Not yet checked	*Salix*	Leaves & branches	VL – L	

Table 4. INSECTS HYMENOPTERA

				Hymenoptera					
4.409	*[Cimbex japonica]*	*Cimbicidae*	S. Far East	Not yet checked	Japan	*Salix*, *Populus*	Leaves	VL – L	
4.410	*Gilpinia (= Diprion) verticalis*	*Diprionidae*	N. E. Russia, C. E. Russia, S. E. Russia; Belarus; Ukraine; Baltic countries	Not yet checked	FI, SE	*Pinus*	Needles	VL – L	
4.411	*[Camponotus caryae ruzskyi]*	*Formicidae*	S. E. Russia; Kazakhstan; Transcaucasus	Not yet checked	Not yet checked	Many trees	Trunks, cut wood	VL – M	
4.412	*[Camponotus pennsylvanicus saxatilis]*	*Formicidae*	S. E. Russia	Not yet checked	Not yet checked	Many trees	Trunks, cut wood	VL – L	
4.413	*[Leptothorax korbi]*	*Formicidae*	Azerbaijan	Not yet checked	Not yet checked	Many trees	Trunks (wood)	VL – L	
4.414	*[Leptothorax melnikovi]*	*Formicidae*	S. E. Russia, S. Siberia (West)	Not yet checked	Not yet checked	Many trees	Trunks (wood)	VL – L	
4.415	*[Megachile albidula]*	*Megachilidae*	Central Asia	Not yet checked	Not yet checked	*Robinia*	Leaves	VL – L	
4.416	*[Megachile kongracensis]*	*Megachilidae*	Uzbekistan, Tajikistan	Not yet checked	Not yet checked	*Robinia*	Leaves	VL – L	
4.417	*[Sirex (= Paururus) dux]*	*Siricidae*	Transcaucasus	Not yet checked	Not yet checked	*Abies*	Trunks (wood)	VL – L	
4.418	*Sirex (= Paururus) ermak* Semenov	*Siricidae*	Transbaikalia, S. Far East	Not yet checked	Not yet checked	*Larix*, *Picea*, *Pinus*	Trunks (wood)	VL – M	
4.419	*[Sirex (= Paururus) tianshanicus]*	*Siricidae*	Kazakhstan; Kyrgyzstan	Not yet checked	Not yet checked	*Picea schrenkiana*	Trunks (wood)	VL – L	
4.420	*[Sirex antennatus]*	*Siricidae*	S. Far East	Not yet checked	Japan	*Picea*, *Abies*	Trunks (wood)	VL – M	
4.421	*[Sirex sah]*	*Siricidae*	S. E. Russia; Transcaucasus; Ukraine; Central Asia (mountains)	Not yet checked	Iran	*Populus*	Trunks (wood)	VL – L	
4.422	*[Xoanon mysta]*	*Siricidae*	S. Far East	Not yet checked	Not yet checked	*Pinus koraiensis*	Trunks (wood)	VL – L	
4.423	*Sirex (= Xanthosirex) tardigradus (= S. cedrorum = X. phantasma)*	*Siricidae*	N. E. Russia; Transcaucasus, N. E. Siberia, S. Siberia (East), Transbaikalia, S. Far East; Transcaucasus	Not yet checked	Not yet checked	*Pinus*	Trunks (wood)	VL – M	
4.424	*[Cladius populi]*	*Tenthredinidae*	S. Far East	Not yet checked	Japan	*Populus*	Leaves	VL – L	
4.425	*[Heterarthrus (= Phyllotoma) flavicollis]*	*Tenthredinidae*	Transcaucasus	Not yet checked	Not yet checked	*Acer*	Leaves	VL – L	
4.426	*Eriocampa mitsukurii*	*Tenthredinidae*	S. Far East	Not yet checked	China, Japan	*Alnus*	Leaves	VL – L	
4.427	*[Xiphydria eborata]*	*Xiphydriidae*	S. Far East	Not yet checked	Japan	*Pinus*, *Picea*	Trunks (wood)	VL – M	

4.428	*[Xiphydria picta]*	*Xiphydriidae*	C. E. Russia, S. E. Russia; Belarus; Ukraine; Transcaucasus	Not yet checked	Europe, Japan	*Alnus*	Trunks (wood)	VL – L	
4.429	*[Xiphydria popovi]*	*Xiphydriidae*	N. E. Siberia, S. Siberia (East), Transbaikalia, S. Far East	Not yet checked	Japan	*Betula*	Trunks (wood)	VL – L	
				Lepidoptera					
4.430	*[Captoloma iteriorata]*	*Arctiidae*	S. Far East	Not yet checked	Japan, Koreas	*Quercus*	Leaves	VL – L	
4.431	*[Rhyparioides amurensis]*	*Arctiidae*	S. Far East	Not yet checked	China, Japan	*Ulmus, Malus,* other trees	Leaves	VL – M	
4.432	*[Argyresthia (= Argyrestia) fundella* f. *albicornis]*	*Hyponomeutidae*	S. Far East, N. Far East	Not yet checked	Not yet checked	*Abies, Picea*	Needles	VL – M	
4.433	*Argyresthia (= Argyrestia) fundella*	*Hyponomeutidae*	C. E. Russia, N. E. Russia; Belarus	Not yet checked	North, middle and south Europe	*Abies, Picea*	Needles	VL – M	
4.434	*[Brahmaea certhia]*	*Brahmaeidae*	S. Far East	Not yet checked	China, Koreas	*Fraxinus, Syringa*	Leaves	VL – L	
4.435	*[Brahmaea christophi]*	*Brahmaeidae*	Azerbaijan	Not yet checked	Iran	*Fraxinus, Syringa*	Leaves	VL – L	
4.436	*[Holcocerus vicarious]*	*Cossidae*	S. Far East	Not yet checked	China, Japan	*Populus*	Trunks (wood)	VL – L	
4.437	*[Drepana scabiosa]*	*Drepanidae*	S. Far East	Not yet checked	China, Japan, Koreas	*Quercus mongolica*	Leaves	VL – L	
4.438	*Epicopeia mencia (= E. albofasciata)*	*Epicopeiidae*	S. Far East	Not yet checked	China, Koreas	*Ulmus*	Leaves	VL – L	
4.439	*Dichomeris (= Ypsolopha = Hypsolophus) ustulella*	*Gelechiidae*	S. E. Russia, S. Far East, N. Far East; Ukraine; Transcaucasus	Not yet checked	Not yet checked	*Betula, Corylus, Carpinus*	Leaves	VL – L	
4.440	*[Abraxas orientalis]*	*Geometridae*	S. Far East	Not yet checked	China, Japan, Koreas	*Ulmus, Salix*	Leaves	VL – M	
4.441	*[Bupalus cembraria]*	*Geometridae*	S. Far East	Not yet checked	Not yet checked	*Pinus pumila*	Needles	VL – L	
4.442	*[Bupalus vestalis]*	*Geometridae*	S. Far East	Not yet checked	Not yet checked	*Pinus koraiensis*	Needles	VL – L	
4.443	*[Cidaria comis]*	*Geometridae*	S. Far East	Not yet checked	China, Japan	*Abies nephrolepis*	Needles	VL – L	
4.444	*[Cidaria djaconovi]*	*Geometridae*	S. Far East	Not yet checked	Not yet checked	*Picea ajanensis*	Needles	VL – L	
4.445	*[Comibaena tenuisaria]*	*Geometridae*	S. Far East	Not yet checked	Not yet checked	*Quercus mongolica*	Leaves	VL – L	

Table 4. INSECTS LEPIDOPTERA

4.446	*[Eilicrinia subcordaria]*	*Geometridae*	S. E. Russia; Kazakhstan; Central Asia	Not yet checked	Not yet checked	*Betula*, other deciduous	Leaves	VL – L	
4.447	*[Erannis (= Hybernia) golda]*	*Geometridae*	S. Far East	Not yet checked	Japan	*Ulmus, Tilia*, fruit trees	Leaves	VL – M	
4.448	*[Garaeus mirandus mirificus]*	*Geometridae*	S. Far East	Not yet checked	Japan	*Picea ajanensis*	Needles	VL – L	
4.449	*[Hipparchus dieckmanni]*	*Geometridae*	S. Far East	Not yet checked	Japan, Koreas	*Quercus*	Leaves	VL – L	
4.450	*[Hipparchus glaucaria]*	*Geometridae*	S. Far East	Not yet checked	Japan	*Quercus mongolica*	Leaves	VL – L	
4.451	*[Hypomecis (= Boarmia) angulifera]*	*Geometridae*	S. Far East	Not yet checked	China, Japan, Koreas	*Abies, Picea*	Needles	VL – M	
4.452	*[Naxa seriaria]*	*Geometridae*	S. Far East	Not yet checked	China, Japan, Koreas	*Syringa, Fraxinus manshurica*	Leaves	VL – M	
4.453	*Arlognophos (= Boarmia) amoenaria*	*Geometridae*	S. Far East	Not yet checked	Not yet checked	*Picea, Abies*	Needles	VL – L	
4.454	*Odontoptera (= Gonodontis) bidentata*	*Geometridae*	N. E. Russia, C. E. Russia, S. E. Russia, S. Siberia, Transbaikalia, S. Far East; Belarus; Ukraine; Kazakhstan; Central Asia	Not yet checked	Not yet checked	*Populus (*incl. *P. tremula), Quercus, Alnus, Betula, Prunus*	Leaves	VL – L	
4.455	*Zethenia rufescentaria (= Z. consociaria)*	*Geometridae*	S. Far East	Not yet checked	Japan	*Picea ajanensis*	Needles	VL – L	
4.456	*[Gracillaria (= Coloptilia) mandschurica]*	*Gracillariidae*	S. Far East	Not yet checked	Not yet checked	*Quercus*	Leaves	VL – M	
4.457	*[Phyllonorycter (= Lithocolletis) pruinosella]*	*Gracillariidae*	Central Asia	Not yet checked	Not yet checked	*Salix, Populus*, mainly *P. pruinosa*	Leaves	VL – L	
4.458	*Cameraria (= Lithocolletis) obliquifascia*	*Gracillariidae*	Central Asia	Not yet checked	Not yet checked	*Populus, Salix*	Leaves	VL – M	
4.459	*Lithocolletis populi*	*Gracillariidae*	Central Asia	Not yet checked	Not yet checked	*Populus*, mainly *P. alba*	Leaves	VL – M	
4.460	*[Phyllocnistis extrematrix]*	*Gracillariidae (= Phyllocnistidae)*	C. E. Russia, S. E. Russia	Not yet checked	Not yet checked	*Populus*	Leaves	VL – M	
4.461	*[Phyllocnistis xenia]*	*Gracillariidae (= Phyllocnistidae)*	Central Asia	Not yet checked	Not yet checked	*Populus*	Leaves	VL – M	
4.462	*Endoclita (= Phassus) excrescens*	*Hepialidae*	S. Far East	Not yet checked	Japan	*Fraxinus mandshurica*	Trunks (wood)	VL – M	Main damage – to young trees

Table 4. INSECTS LEPIDOPTERA

4.463	*[Bhima eximia]*	*Lasiocampidae*	S. Far East	Not yet checked	Not yet checked	*Ostrya*, *Quercus*, *Carpinus*	Leaves	VL – L	
4.464	*[Bhima idiota]*	*Lasiocampidae*	S. Far East	Not yet checked	Not yet checked	*Populus*, *Padus*, other trees	Leaves	VL – L	
4.465	*Dendrolimus pini [= D. segregatus]*	*Lasiocampidae*	S. Far East	Not yet checked	China, Japan, Koreas	*Pinus funebris*	Needles	VL – L	
4.466	*[Dendrolimus undans]*	*Lasiocampidae*	S. Far East	Not yet checked	China, Japan, Koreas	*Rosaceae*, *Juglans*, *Quercus*, *Salix*, other trees	Leaves	VL – L	
4.467	*[Epicnaptera arborea]*	*Lasiocampidae*	N. E. Russia, C. E. Russia	Not yet checked	Not yet checked	*Betula*, *Populus*, other trees, *Quercus*	Leaves	VL – L	
4.468	*[Eriogaster neogena]*	*Lasiocampidae*	S. E. Russia, S. Siberia; Transcaucasus	Not yet checked	Not yet checked	*Caragana*, *Cytisus*, *Robinia*	Leaves	VL – M	
4.469	*Eriogaster henkei*	*Lasiocampidae*	Central Asia	Not yet checked	Not yet checked	Deciduous	Leaves	VL – L	
4.470	*Paralebeda plagifera*	*Lasiocampidae*	S. Far East	Not yet checked	India	*Phellodendron*, *Quercus*, *Corylus*, *Tilia*, *Rosaceae*, other trees	Leaves	VL – L	
4.471	*Monema (=Miresa) flavescens*	*Limacodidae (= Heterogeneidae)*	S. Far East	Not yet checked	China, Japan, Koreas	*Rosacea*, *Ulmus*, *Corylus*, other deciduous	Leaves	VL – M	
4.472	*Parasa consocia*	*Limacodidae (= Heterogeneidae)*	S. Far East	Not yet checked	Japan, Koreas	Many deciduous	Leaves	VL – M	
4.473	*Parasa hilarata*	*Limacodidae (= Heterogeneidae)*	S. Far East	Not yet checked	China, Japan, Koreas	*Quercus*, *Betula*, other deciduous	Leaves	VL – M	
4.474	*Parasa sinica*	*Limacodidae (= Heterogeneidae)*	S. Far East	Not yet checked	China, Japan, Koreas	Many deciduous	Leaves	VL – M	
4.475	*[Niphanola fusca]*	*Lycaenidae*	S. Far East	Not yet checked	Japan	*Quercus mongolica*	Leaves	VL – L	
4.476	*[Thecla (= Zephyrus) attilia]*	*Lycaenidae*	S. Far East	Not yet checked	China, Japan, Koreas	*Quercus mongolica*	Leaves	VL – L	
4.477	*[Thecla (= Zephyrus) brilliantine]*	*Lycaenidae*	S. Far East	Not yet checked	China, Koreas	*Quercus mongolica*	Leaves	VL – L	
4.478	*[Thecla (= Zephyrus) lutea]*	*Lycaenidae*	S. Far East	Not yet checked	Japan	*Quercus mongolica*	Leaves	VL – L	
4.479	*[Thecla (= Zephyrus) oberthuri]*	*Lycaenidae*	S. Far East	Not yet checked	China, Japan, Koreas	*Quercus*	Leaves	VL – L	

Table 4. INSECTS LEPIDOPTERA

4.480	*[Thecla (= Zephyrus) orientalis]*	*Lycaenidae*	S. Far East	Not yet checked	China, Japan, Koreas	*Quercus*	Leaves	VL – L	
4.481	*[Thecla (= Zephyrus) raphaelis]*	*Lycaenidae*	S. Far East	Not yet checked	China, Koreas	*Fraxinus manshurica*	Leaves	VL – L	
4.482	*[Thecla (= Zephyrus) saphirina]*	*Lycaenidae*	S. Far East	Not yet checked	China, Japan, Koreas	*Quercus mongolica*	Leaves	VL – L	
4.483	*[Thecla (= Zephyrus) signata]*	*Lycaenidae*	S. Far East	Not yet checked	China	*Quercus mongolica*	Leaves	VL – L	
4.484	*[Thecla (= Zephyrus) smaragdina]*	*Lycaenidae*	S. Far East	Not yet checked	China, Koreas	*Quercus mongolica*	Leaves	VL – L	
4.485	*[Canna malachitis]*	*Lymantriidae*	S. Far East	Not yet checked	China	*Tilia*	Leaves	VL – L	
4.486	*[Colocasia (= Calocasia) mus]*	*Lymantriidae*	S. Far East	Not yet checked	China, Japan	*Betula, Alnus*	Leaves	VL – L	
4.487	*[Euproctis (=Artaxa) niphonis]*	*Lymantriidae*	S. Far East	Not yet checked	China, Japan, Koreas	*Carpinus, Ostryia*	Leaves	VL – L	
4.488	*[Gynaephora lugens]*	*Lymantriidae*	N. Siberia, N. Far East	Not yet checked	Not yet checked	*Betula, Salix,* other trees	Leaves	VL – L	
4.489	*[Leucoma (=Arctonis) alba]*	*Lymantriidae*	S. Far East	Not yet checked	China, Koreas	*Quercus mongolica*	Leaves	VL – L	
4.490	*[Leucoma flavo-sulfurea Ersch.] !*	*Lymantriidae*	Kazakhstan, Central Asia	Not yet checked	Not yet checked	*Populus*	Leaves	L – H	
4.491	*[Olene olga]*	*Lymantriidae*	S. Far East	Not yet checked	Not yet checked	*Padus, Corylus, Acer*	Leaves	VL – L	
4.492	*Calliteara (= Dasychira) lunulata*	*Lymantriidae*	S. Far East	Not yet checked	China, Japan	*Quercus, Castanea,* other trees	Leaves	VL – L	
4.493	*Calliteara (= Dasychira) pseudabietis*	*Lymantriidae*	S. Far East	Not yet checked	China, Japan, Koreas	*Cryptomeria,* other trees	Leaves	VL – L	
4.494	*Euproctis (= Nygmia) piperita*	*Lymantriidae*	S. Far East	Not yet checked	China, Japan, Koreas	*Quercus mongolica*	Leaves	VL – L	
4.495	*Euproctis (=Artaxa) subflava*	*Lymantriidae*	S. Far East	Not yet checked	China, Japan, Koreas	*Quercus, Castanea,* other trees	Leaves	VL – L	
4.496	*Leucoma candida*	*Lymantriidae*	N. E. Siberia, S. Siberia, Transbaikalia, N. Far East, S. Far East	Not yet checked	China, Japan, Koreas, Mongolia	*Populus (*incl. *P. tremula)*	Leaves	VL – M	
4.497	*Numens (= Numenes) disparilis*	*Lymantriidae*	S. Far East	Not yet checked	China, Japan, Koreas	*Carpinus, Ostryia*	Leaves	VL – L	
4.498	*[Amphipyra schrenki]*	*Noctuidae*	S. Far East	Not yet checked	China, Japan, Koreas	*Betula davurica*	Leaves	VL – L	
4.499	*[Aucha flavomaculata]*	*Noctuidae*	S. Far East	Not yet checked	China, Japan	*Quercus, Tilia*	Leaves	VL – L	

Table 4. INSECTS LEPIDOPTERA

4.500	*[Catocala (= Ephesia) dissimilis]*	*Noctuidae*	S. Far East	Not yet checked	Japan	*Quercus mongolica*	Leaves	VL – L	
4.501	*[Catocala (= Ephesia) praegnax]*	*Noctuidae*	S. Far East	Not yet checked	China, Japan, Koreas	*Quercus mongolica*	Leaves	VL – L	
4.502	*[Catocala (= Ephesia) streckeri]*	*Noctuidae*	S. Far East	Not yet checked	Not known	*Quercus mongolica*	Leaves	VL – L	
4.503	*[Catocala (=Marmonia) dula]*	*Noctuidae*	S. Far East	Not yet checked	Japan	*Quercus mongolica*	Leaves	VL – L	
4.504	*[Catocala lara]*	*Noctuidae*	S. Far East	Not yet checked	Japan	*Tilia*	Leaves	VL – L	
4.505	*[Chasminodes (= Leocyma) albonitens]*	*Noctuidae*	S. Far East	Not yet checked	Japan, Koreas	*Tilia*	Leaves	VL – L	
4.506	*[Cosmia (= Calymnia) camptostigma]*	*Noctuidae*	S. Far East	Not yet checked	China, Japan, Koreas	*Quercus mongolica*	Leaves	VL – L	
4.507	*[Cosmia (= Calymnia) moderata]*	*Noctuidae*	S. Far East	Not yet checked	Not known	*Quercus, Tilia*	Leaves	VL – L	
4.508	*[Cosmia (= Calymnia) ulmivora]*	*Noctuidae*	Central Asia (mountains)	Not yet checked	Not known	*Ulmus*	Leaves	VL – L	
4.509	*[Cosmia imbuta]*	*Noctuidae*	S. E. Russia	Not yet checked	Not yet checked	*Populus*	Leaves	VL – L	
4.510	*[Pangrapta vasava]*	*Noctuidae*	S. Far East	Not yet checked	Japan	*Ulmus*	Leaves	VL – L	
4.511	*[Xanthia gilvago]*	*Noctuidae*	S. E. Russia, S. Siberia; Central Asia; Transcaucasus	Not yet checked	Not yet checked	*Populus, Ulmus*	Inflorescences	VL – L	
4.512	*Cosmia (= Calymnia) subtilis*	*Noctuidae*	Central Asia (mountains)	Not yet checked	Not known	*Rosaceae, Populus*	Leaves	VL – M	
4.513	*Thyas (= Lagoptera = Dermaleipa) juno*	*Noctuidae*	S. Far East	Not yet checked	China, Japan, Koreas, Malaya	*Betula, Prunus* & other trees	Leaves	VL – L	
4.514	*[Acronicta catocaloida]*	*Noctuidae (= Lymantriidae)*	S. Far East	Not yet checked	Japan	*Quercus mongolica*	Leaves	VL – L	
4.515	*[Acronicta hercules]*	*Noctuidae (= Lymantriidae)*	S. Far East	Not yet checked	China, Japan	*Ulmus*	Leaves	VL – L	
4.516	*Acronicta intermedia (= A. incretata)*	*Noctuidae (= Lymantriidae)*	S. Far East	Not yet checked	China, Japan, Koreas	*Fagus, Alnus, Rosaceae*	Leaves	VL – L	
4.517	*Acronicta lutea*	*Noctuidae (= Lymantriidae)*	S. Siberia, Transbaikalia, S. Far East	Not yet checked	China, Japan, Koreas, Mongolia	*Populus, Carpinus*	Leaves	VL – L	
4.518	*[Nola fumosa]*	*Noctuidae (=Arctiidae)*	S. Far East	Not yet checked	Japan, Koreas	*Quercus*	Leaves	VL – L	
4.519	*[Earias pudicana pupillana]*	*Noctuidae (=Cymbidae)*	S. Far East	Not yet checked	China, Japan	*Populus*	Leaves	VL – L	
4.520	*Earias turana*	*Noctuidae (=Cymbidae)*	Central Asia	Not yet checked	Not known	*Salix*	Leaves	VL – L	
4.521	*Nycteola (= Sarrothripus) asiatica*	*Noctuidae (=Cymbidae)*	Central Asia	Not yet checked	Not known	*Populus, Salix*	Leaves	VL – L	

Table 4. INSECTS LEPIDOPTERA

4.522	*[Raphia approximata]*	*Noctuidae (=Lymantriidae)*	Kazakhstan, Central Asia	Not yet checked	Not yet checked	*Populus*	Leaves	VL – L	
4.523	*Acronicta megacephala (=Subacronicta centralis)*	*Noctuidae (=Lymantriidae)*	Kazakhstan, Central Asia	Not yet checked	Iran, China	*Populus, Salix*	Leaves	VL – L	
4.524	*[Cerura (= Harpyia) lanigera]*	*Notodontidae*	S. Siberia, Transbaikalia, S. Far East; Georgia	Not yet checked	Japan, Koreas	*Populus (*esp. *P. tremula), Salix*	Leaves	VL – M	
4.525	*[Cerura aeruginosa]*	*Notodontidae*	S. E. Russia, S. Siberia; Kazakhstan; Central Asia	Not yet checked	Not yet checked	*Salix*	Leaves	VL – L	
4.526	*[Clostera (= Pygaera) curtuloides]*	*Notodontidae*	S. Far East	Not yet checked	Not known	*Populus tremula*	Leaves	VL – L	
4.527	*[Cnethodonta grisescens]*	*Notodontidae*	S. Far East	Not yet checked	Japan	*Ulmus, Tilia*	Leaves	VL – L	
4.528	*[Dicranura (= Cerura = Harpyia) przewalskii]*	*Notodontidae*	Central Asia	Not yet checked	Not yet checked	*Salix, Populus*	Leaves	VL – M	
4.529	*[Lophocosma atriplaga]*	*Notodontidae*	S. Far East	Not yet checked	Japan, Koreas	*Corylus, Ostrya, Carpinus*	Leaves	VL – L	
4.530	*[Nadata splendida]*	*Notodontidae*	S. Far East	Not yet checked	China, Japan, Koreas	*Quercus mongolica*	Leaves	VL – L	
4.531	*[Notodonta dembovskii]*	*Notodontidae*	S. Far East	Not yet checked	Japan	*Betula*	Leaves	VL – L	
4.532	*[Phalerodonta bombycina]*	*Notodontidae*	S. Far East	Not yet checked	Japan, Koreas	*Quercus mongolica*	Leaves	VL – L	
4.533	*[Pterostoma grisea]*	*Notodontidae*	S. Far East	Not yet checked	Not known	*Populus tremula, Maackia amurensis*	Leaves	VL – L	
4.534	*[Ptilodon (= Lophopteryx) suturata]*	*Notodontidae*	S. Far East	Not yet checked	China, Japan	*Acer barbinerve*	Leaves	VL – L	
4.535	*[Spatalia (= Spatelia) dives]*	*Notodontidae*	S. Far East	Not yet checked	China, Japan	*Quercus mongolica*	Leaves	VL – L	
4.536	*[Spatalia (= Spatelia) doerriesi]*	*Notodontidae*	S. Far East	Not yet checked	China, Japan	*Quercus mongolica*	Leaves	VL – L	
4.537	*[Spatalia (= Spatelia) plusiotis]*	*Notodontidae*	S. Far East	Not yet checked	China, Japan, Koreas	*Quercus mongolica*	Leaves	VL – L	
4.538	*[Stauropus basalis]*	*Notodontidae*	S. Far East	Not yet checked	China, Japan	*Carpinus*	Leaves	VL – L	
4.539	*[Urodonta viridimixta]*	*Notodontidae*	S. Far East	Not yet checked	Not yet checked	*Quercus mongolica*	Leaves	VL – L	
4.540	*Lampronadata (= Nadata) cristata*	*Notodontidae*	S. Far East	Not yet checked	China, Japan, Koreas	*Quercus mongolica*	Leaves	VL – L	
4.541	*Phalera assimilis*	*Notodontidae*	S. Far East	Not yet checked	China, Japan, Koreas	*Quercus*	Leaves	VL – L	
4.542	*[Apatura nycteis]*	*Nymphalidae*	S. Far East	Not yet checked	China, Koreas	*Ulmus*	Leaves	VL – L	

Table 4. INSECTS LEPIDOPTERA

4.543	*[Apatura schrenki]*	*Nymphalidae*	S. Far East	Not yet checked	North Korea	*Carpinus, Ostrya, Ulmus*	Leaves	VL – L	
4.544	*[Neptis thisbe]*	*Nymphalidae*	S. Far East	Not yet checked	China, Koreas	*Quercus mongolica*	Leaves	VL – L	
4.545	*[Sephisa dichroa]*	*Nymphalidae*	S. Far East	Not yet checked	China, Japan, Koreas, Vietnam	*Quercus incana*	Leaves	VL – L	
4.546	*[Salebria lornata]*	*Pyralidae*	S. Far East	Not yet checked	Japan	*Pinus thunbergiana*, other *Pinus*	Needles	VL – L	
4.547	*Elegia fallax (= E. atrifasciella)*	*Pyralidae*	S. E. Russia; Armenia	Not yet checked	Not yet checked	*Quercus*	Leaves	VL – L	
4.548	*[Caligula (= Calligula) boisduvalii]*	*Saturniidae*	Transbaikalia, S. Far East	Not yet checked	Japan, Mongolia	*Quercus, Tilia, Corylus, Juglans*	Leaves	VL – M	
4.549	*Actias selene*	*Saturniidae*	S. Far East	Not yet checked	China, India, Japan, Malaya, Sri Lanka	*Salix, Juglans manshurica*, other trees	Leaves	VL – L	
4.550	*Antheraea pernyi*	*Saturniidae*	S. Far East	Not yet checked	China, Koreas	*Quercus, Castanea*	Leaves	VL – L	
4.551	*Antheraea yamamai*	*Saturniidae*	S. Far East	Not yet checked	Japan	*Quercus, Castanea*	Leaves	VL – L	
4.552	*Caligula (= Dictyoploca) japonica*	*Saturniidae*	S. Far East	Not yet checked	China, Japan, Taiwan	*Juglans, Quercus*, other trees, *Castanea*	Leaves	VL – M	
4.553	*Neoris (= Saturnia) huttoni (= N. stoliczkana = N. schenki)*	*Saturniidae*	Kazakhstan, Central Asia (mountains)	Not yet checked	Indis, Iran, Pakistan	*Crataegus, Fraxinus*, fruit trees, *Acer, Pistacea*	Leaves	L – H	
4.554	*Rhodinia fugax*	*Saturniidae*	S. Far East	Not yet checked	Japan	*Quercus mongolica*	Leaves	VL – L	
4.555	*Synanthedon spheciformis*	*Sesiidae (=Aegeriidae)*	C. E. Russia, N. E. Russia; Belarus; all Siberia, Transbaikalia, all Far East	Not yet checked	Europe and Asia generally	*Alnus*, *Betula*	Sprouts and branches	VL – M	
4.556	*[Dalbina exacta]*	*Sphingidae*	S. Far East	Not yet checked	China, Koreas	*Fraxinus, Syringa*	Leaves	VL – L	
4.557	*[Kentrochrysalis streckeri]*	*Sphingidae*	S. Far East	Not yet checked	Not known	*Fraxinus manshurica*	Leaves	VL – L	
4.558	*[Marumba jankowskii]*	*Sphingidae*	S. Far East	Not yet checked	China, Japan	*Tilia mandshurica*	Leaves	VL – L	
4.559	*[Marumba maacki]*	*Sphingidae*	S. Far East	Not yet checked	Not yet checked	*Tilia amurensis*	Leaves	VL – L	
4.560	*[Marumba sperchius]*	*Sphingidae*	S. Far East	Not yet checked	China, Japan, India	*Castanea, Quercus*	Leaves	VL – L	

Table 4. INSECTS LEPIDOPTERA & ORTHOPTERA

4.561	*[Smerinthus (= Callambulyx) tatarinovi]*	*Sphingidae*	Transbaikalia, S. Far East	Not yet checked	China, Japan, Koreas	*Ulmus*	Leaves	VL – M	
4.562	*[Smerinthus coecus]*	*Sphingidae*	C. E. Russia, S. Siberia, Transbaikalia, S. Far East	Not yet checked	China, Japan	*Salix, Populus*	Leaves	VL – L	
4.563	*Smerinthus planus*	*Sphingidae*	S. Siberia, Transbaikalia, S. Far East	Not yet checked	China, Japan	*Populus, Salix,* fruit trees	Leaves	VL – M	
4.564	*[Ancylis repandana]*	*Tortricidae*	S. Far East	Not yet checked	Not yet checked	*Quercus mongolica*	Leaves	L – H	
4.565	*[Archips (= Cacoecia = Tortrix) sarthana]*	*Tortricidae*	Kazakhstan, Kyrgyzstan, Uzbekistan	Not yet checked	Not yet checked	*Acer*	Trunks (wood)	VL – L	
4.566	*[Archips (= Cacoecia) disparana]*	*Tortricidae*	S. Far East	Not yet checked	Not yet checked	*Prunus*, other deciduous	Leaves	VL – L	
4.567	*[Pammene glaucana]*	*Tortricidae*	S. Far East	Not yet checked	Not yet checked	*Quercus mongolica*	Sprouts	L – M	
4.568	*[Tortrix aurichalcana]*	*Tortricidae*	S. Far East	Not yet checked	China, Japan, Koreas	*Tilia*	Leaves	L – H	
4.569	*[Eclysma westwoodi]*	*Zygaenidae*	S. Far East	Not yet checked	China, Japan, Koreas	Many deciduous	Leaves	VL – M	
				Orthoptera					
4.570	*[Primnoa ussuriensis]*	*Acrididae*	S. Far East	Not yet checked	Not yet checked	Deciduous plants	Leaves	VL - M	
4.571	*Anacridium (= Acridium) aegyptium*	*Acrididae*	S. E. Russia; Transcaucasus; Ukraine (Crimea); Kazakhstan; Central Asia	Not yet checked	Mediterranean, Iran, Afghanistan; Northern Africa	*Robinia, Populus, Quercus*, other trees	Leaves	VL - M	
4.572	*Eirenephilus longipennis (= E. debilis)*	*Acrididae*	S. Siberia, Transbaikalia, S. Far East; Kazakhstan	Not yet checked	China, Japan, Koreas, Mongolia	*Populus, Ulmus, Malus*, other trees	Leaves	VL - M	
4.573	*Oedaleus infernalis*	*Acrididae*	S. Far East	Not yet checked	China, Japan, Koreas	Deciduous plants	Leaves	VL - L	Main damage – to young plantations and in nurseries
4.574	*Prumna (=Primnoa) primnoa*	*Acrididae*	S. Siberia, N. E. Siberia, N. Far East, Transbaikalia, S. Far East	Not yet checked	China, Mongolia	*Populus, Syringa, Juglans*, other trees	Leaves	VL - M	
4.575	*Schistocerca gregaria*	*Acrididae*	Transcaucasus; Central Asia	Not yet checked	Iran, Afghanistan, Pakistan; Africa	*Populus, Salix, Acer*, other trees	Leaves	VL - M	
4.576	*Gryllotalpa africana*	*Gryllotalpidae*	S. Far East; Central Asia	Not yet checked	China, Japan, Afghanistran, Australia, New Zealand, Africa, South Eastern Asia	Deciduous plants	Roots	L - M	Main damage – to young plantations and in nurseries

Table 4. INSECTS ORTHOPTERA

4.577	*[Isophya caspica stshelkanovtzevi]*	*Tettigoniidae*	Azerbaijan	Not yet checked	Iran	*Quercus, Parrotia*, other trees	Leaves	VL – L	
4.578	*[Isophya gracilis (= I. vulgaris)]*	*Tettigoniidae*	S. E. Russia	Not yet checked	Not yet checked	*Quercus, Acer*, other trees	Leaves	VL – M	
4.579	*[Pholidoptera (=Uvarovitsia) satunini]*	*Tettigoniidae*	Armenia; Azerbaijan	Not yet checked	Not yet checked	Deciduous & fruit trees	Leaves	VL – L	
4.580	*Isophya redtenbacheri*	*Tettigoniidae*	Georgia	Not yet checked	Turkey	*Fraxinus, Robinia, Pyrus, Quercus*, other trees	Leaves	VL – M	
4.581	*Isophya taurica*	*Tettigoniidae*	Ukraine (Crimea)	Not yet checked	Not yet checked	*Quercus, Carpinus, Pyrus*, other trees	Leaves	VL – M	
4.582	*Pholidoptera pustulipes (= Olynthoscelis pontica)*	*Tettigoniidae*	S. E. Russia; Ukraine (Crimea)	Not yet checked	Not yet checked	Deciduous & fruit trees	Leaves	VL – L	
4.583	*Poecilimon scythicus*	*Tettigoniidae*	S. E. Russia; Ukraine	Not yet checked	Not yet checked	Different trees and other plants	Leaves	VL – L	

Table 5. Priority forest diseases causing significant damage on the territory of the former USSR

N°	Pest	Group of organisms	Distribution			Main host plants in the former USSR	Damaged parts of plants	Economic significance in area of origin	Remarks
			In the former USSR	In North America	In other countries				
Fungi									
5.1	*Stegophora ulmea* (Schweinitz: Fries) Sydow & Sydow (= *Gnomonia ulmea* (Schweinitz: Fries) Thümen = '*Gloeosporium ulmicolum*' = *Cylindrosporella ulmea* = *Asteroma ulmea* (L.E. Miles) Sutton = *Gloeosporium ulmeum* = *Sphaeria ulmea* Schweinitz: Fries = *Dothidella ulmea* (Schweinitz: Fries) Ellis & Everhart = *Lambro ulmea* (Schweinitz: Fries) E. Müller in E. Müller & Arx) **	*Ascomycetes: Diaporthales*	Absent	Canada (at least in Quebec, Nova Scotia, but likely to occur in other provinces), USA (widespread from the Great Plains to the Atlantic Ocean)	Netherlands (successfully eradicated in 2000); China (likely, since repeatedly detected on exported bonsais)	*U. americana* (preferred host), *U. alata, U. carpinifolia, U. crassifolia, U. glabra, U. hollandica, U. japonica, U. laciniata, U. laevis, U. parvifolia, U. procera, U. pumila, U. serotina, U. thomasii, U. rubra, Zelkova serrata*	Leaves, twigs & buds	L – M	
5.2	*Cronartium fusiforme* [= *Peridermium cerebrum*]	*Basidiomycetes, Uredinales*	S. Far East	USA (Central & Eastern)	Asia, India	*Pinus*	Trunks (wood)	L – M	Already EPPO quarantine pest

Table 6. Forest diseases causing significant damage on the territory of the former USSR, for which more information is needed

N°	Pest	Group of organisms	Distribution			Main host plants in the former USSR	Damaged parts of plants	Economic significance in area of origin	Remarks
			In the former USSR	In North America	In other countries				
Fungi									
6.1	[*Anisomyces odoratus (= Anisimyces odorata)*]	*Ascomycetes, Diaporthales*	Russia: widespread	Not known	?	Coniferous	Wood	L – M	Main damage – to treated wood
6.2	[*Biatorella difformis (= Biatoridina pinastri)*]	*Ascomycetes, Lecanorales*	Russia: widespread in pine area; Baltic countries; Belarus	Not known	?	*Pinus*	Trunks and branches	L – M	Main damage – to young trees
6.3	[*Cenangium ulmi*]	*Ascomycetes, Helotiales*	?	Not known	?	*Ulmus*	Central buds and sprouts	L - M	Main damage - to young trees
6.4	[*Ceratocystis buxi*]	*Ascomycetes, Ophiostomatales*	?	Not yet checked	Not yet checked	Deciduous	Wood	L	
6.5	[*Ceratocystis exiguum*][possibly *Ceratostomella exigua = Ophiostoma minus*	*Ascomycetes, Ophiostomatales*	?	Not yet checked	Not yet checked	Deciduous	Wood	L	
6.6	[*Coriolus vaporarius*] possibly = *Anthrodia sinuosa*	*Basidiomycetes*	?	Not known	?	Coniferous & deciduous	Wood	L – H	Main damage – to buildings
6.7	[*Cylindrosporium ulmi (= Phyllosticta bellunensis)*] possibly *C. ulmicola*	*Ascomycetes, Dothideales*	?	Not yet checked	Not yet checked	*Ulmus*	Leaves	L	Main damage – to seedlings
6.8	[*Cytophoma pulchella*]	*Deuteromycetes, Sphaeropsidales*	S. E. Russia	Not known	?	*Fraxinus excelsior*	Trunks & branches (wood)	L – H	
6.9	[*Eidamia catenulata*]	*?*	?	Not yet checked	Not yet checked	*Quercus, Juglans*	Wood	L	
6.10	[*Endoxylina stellulata*]	*Ascomycetes, ?*	S. E. Russia ; Ukraine	Not known	?	*Fraxinus excelsior*	Trunks (wood)	L – M	
6.11	[*Epicoccum purpureum*] possibly *E. purpurascens*	*Ascomycetes, Dothideales*	?	Not yet checked	Not yet checked	Coniferous	Wood	L	

Table 6. PATHOGENS FUNGI & BACTERIA

6.12	[*Gymnosporangium amelanchieris*]	*Basidiomycetes, Uredinales*	S. E. Russia ; Ukraine; Transcaucasus	Not known	?	*Juniperus communis*, fruit trees	Trunks (wood)	L – M	Main damage – to young trees
6.13	[*Hericium diversidens*]	*Basidiomycetes*	?	Not yet checked	Not yet checked	Deciduous	Wood	L	
6.14	*Ophiostoma kubanicum*	*Ascomycetes, Ophiostomatales*	?	Not known	?	*Quercus*	Trunks & branches (wood)	L – H	Main damage - to young trees and seedlings
6.15	[*Phyllosticta lacerans*]	*Ascomycetes, Dothideales*	?	Not yet checked	Not yet checked	*Ulmus*	Leaves	L	Main damage – to seedlings
6.16	[*Sclerophoma pithya* v. Hohnk] possibly *S. pithyophila* or *pythiophila*	*Ascomycetes, Dothideales*	S. E. Russia; Kazakhstan	Not known	?	*Pinus*	Needles & central sprouts	L – M	Main damage - to seedlings and to 4 – 12 year-old plantations
6.17	[*Typhula graminearum*]	*Basidiomycetes, Aphyllophorales*	N. E. Russia, C. E. Russia, S.E. Russia, S. Siberia, S. Far East; Baltic countries; Belarus; Moldova; Ukraine	Not known	?	*Pinus* and other trees	Buds of 1-year seedlings	L – M	Main damage – to young seedlings
6.18	[*Verticillium cubanicum (= V. kubanicum)*]	*Ascomycetes, Hypocreales*	?	Not known	?	*Quercus, Acer, Ulmus, Tilia, Betula, Populus*, other trees	Trunks (wood)	M – H	Main damage – to seedlings and young trees
6.19	[*Verticillium glaucum*]	*Ascomycetes, Hypocreales*	?	Not yet checked	Not yet checked	Coniferous & deciduous	Wood	L	
Bacteria									
6.20	[*Pseudomonas quercus*]	*Gracilicutes, Pseudomonadaceae*	Widespread in oak area	Not known	?	*Quercus*	Trunks & branches (wood)	L – M	Vector – aphid *Lachnus roboris*
6.21	[*Pseudomonas remifaciens*]	*Gracilicutes, Pseudomonadaceae*	Widespread	Not known	?	*Populus (*including *P. tremula)*	Trunks & branches (wood)	L – M	

Table 7a. Forest diseases causing significant damage on the territory of the former USSR, but which are already present in other parts of the EPPO region

N°	Pest	Group of organisms	Distribution			Main host plants in the former USSR	Damaged parts of plants	Economic significance in area of origin	Remarks
			In the former USSR	In North America	In other countries				
Fungi									
7a.1	*Apiognomonia errabunda* [*Gloeosporium tiliae (= Gnomonia tiliae)*]	*Deuteromycetes, Melanconiales*	?	USA	Europe	*Tilia*	Leaves, stems of seedlings	L – M	Main damage – to seedlings
7a.2	*Apiognomonia quercina* [*Gloeosporium quercinum* (probably – *Gnomonia quercinum)*]	*Deuteromycetes, Melanconiales*	?	USA	Europe	*Quercus*	Leaves, acorns	L	The main damage – to seedlings
7a.3	*Armillaria mellea*	*Basidiomycetes, Agaricales*	Widespread	USA	Europe	Deciduous & coniferous	Roots & trunks (wood)	L – H	
7a.4	*Botryotinia fuckeliana* [*Botrytis cinerea*]	*Ascomycetes, Helotiales*	?	USA	Europe	*Picea, Larix, Abies, Pinus,* other plants	Needles	L – M	Main damage – to seedlings in glasshouse nurseries
7a.5	*Cenangium ferruginosum* [*C. abietis (= Dothichiza ferruginosa)*]	*Ascomycetes, Helotiales*	?	USA	Europe	*Pinus*	Central buds and sprouts	L - M	Main damage – to 15 – 20 year-old pines
7a.6	*Cenangium populneum (= Encoelia fascicularis)* [= *Dothichiza populina*]	*Ascomycetes, Helotiales*	?	Present (in temperate zone)	Europe	*Populus, Fraxinus, Salix, Sorbus*	Central buds and sprouts	L - M	Main damage – to young trees
7a.7	[*Ceratocystis fagi*] = *C. piceae*	*Ascomycetes, Ophiostomatales*	?	Not yet checked	Europe	Deciduous	Wood	L	
7a.8	[*Ceratocystis quercus*]	*Ascomycetes, Ophiostomatales*	?	Not yet checked	E. Europe	Deciduous	Wood	L	
7a.9	*Chrysomyxa abietis*	*Basidiomycetes, Uredinales*	Russia; Latvia; Lithuania; Kazakhstan; Kyrgyzstan	Not known	Europe (widespread); Japan	*Picea, Abies*	Needles	VL – L	Main damage – to young plants
7a.10	*Chrysomyxa ledi*	*Basidiomycetes, Uredinales*	?	USA	Europe	*Picea*	Needles	VL – L	Main damage – to young plants

Table 7a. PATHOGENS FUNGI

7a.11	*Chrysomyxa pirolata* [= *Ch. pyrolae*]	*Basidiomycetes, Uredinales*	?	USA	Europe	*Picea*	Cones and seeds	L – M	
7a.12	*Ciboria* [*Sclerotinia*] *betulae*	*Ascomycetes, Helotiales*	?	Not yet checked	Europe	*Betula*	Seeds	VL – L	Main damage – in storage
7a.13	*Colpoma (= Hysterium) quercinum* [*Cytospora quercella (= Clithris quercina)*]	*Ascomycetes, Diaporthales*	?	USA (in temperate zone)	Europe	*Quercus*	Trunks & branches (bark and wood)	L – M	Main damage – to young trees
7a.14	*Coniophora cerebella (= C. puteana)*	*Basidiomycetes, ?*	?	USA	Europe	Coniferous and deciduous	Wood	L – M	Main damage – to buildings
7a.15	[*Coriolus hirsutus*]= *Trametes hirsuta*	*Basidiomycetes*	?	N. America (temperate)	Europe	Deciduous	Wood	L	
7a.16	*Cronartium flaccidum [Endocronartium pini](= Peridermium pini)*	*Basidiomycetes, Uredinales*	Russia: widespread in susceptible pines area; Baltic countries; Belarus; Moldova; Ukraine; Transcaucasus	Not known	Europe (widespread); China; Japan; Korea	*Pinus sylvestris, P. nigra, P. montana*, other *Pinus*	Trunks and branches (wood)	L – H	Main damage – to 30 – 50 year-old monocultures of pines
7a.17	*Cronartium ribicola*	*Basidiomycetes, Uredinales*	Russia: widespread in susceptible pines area; Baltic countries; Belarus; Moldova; Ukraine	Canada and USA (in temperate zone)	Europe (widely); Asia (widely); Taiwan	*Pinus strobus, P. sibirica, P. mandchurica*, other *Pinus, Ribes*	Trunks and branches (wood)	L – H	Main damage – to *Pinus strobus*
7a.18	*Cryphonectria* [*Endothia*] *parasitica*	*Ascomycetes, Diaporthales*	S. E. Russia, S. Far East; Ukraine; Georgia	Canada and USA (in temperate zone)	Europe (widely); China; India; Japan; Korea; Taiwan; Turkey; Tunisia	*Castanea, Fagus, Quercus, Carpinus*	Trunks and branches (wood)	L – H	Main damage – to *Castanea* forests at the Caucasus
7a.19	*Cryptodiaporthe* [= *Dothichiza*] *populea*	*Ascomycetes, Diaporthales*	?	USA	Europe	*Populus*	Trunks and branches	L – M	Main damage - to young trees
7a.20	*Cytospora decipiens*	*Deuteromycetes, Sphaeropsidales*	?	USA	Europe	*Carpinus*	Trunks & branches (bark and wood)	L – M	Main damage – to young trees
7a.21	[*Cytospora foetida*]	*Deuteromycetes, Sphaeropsidales*	S. E. Russia	Not known	Bulgaria	*Populus*, other deciduous	Trunks & branches (bark and wood)	L – H	Main damage – to young trees
7a.22	[*Cytospora intermedia*]	*Deuteromycetes, Sphaeropsidales*	Russia: widespread in oak area; Ukraine	Canada	Germany, Hungary	*Quercus*	Acorns, trunks & branches	L – M	Main damage – to young trees
7a.23	[*Discula brunneo-tingens*]	*Ascomycetes, Phacidiales*	?	Not yet checked	Europe	Coniferous	Wood	L	

Table 7a. PATHOGENS FUNGI

7a.24	*Epicoccum nigrum* [*E. purpurascens*]	*Ascomycetes, Dothideales*	?	Not yet checked	Europe	Coniferous	Wood	L	
7a.25	[*Fibuloporia vaillantii*] = *Poria (Antrodia) vaillantii*	*Basidiomycetes*	Russia: widespread	N.America	Europe, Nepal	Coniferous & deciduous	Wood	L – H	Main damage – to buildings
7a.26	*Fomes fomentarius*	*Basidiomycetes, Aphyllophorales*	?	USA	Europe	*Betula, Fagus, Populus, Alnus, Salix,* other trees	Trunks (wood)	L – M	Main damage – to wood
7a.27	*Fomitopsis* [= *Fomes*] *(= Laricifomes) officinalis*	*Basidiomycetes, Aphyllophorales*	Russia: widespread in coniferous area; Baltic countries; Belarus	Central and Western North America	Europe	*Larix, Pinus, Abies,* some other coniferous	Trunks (wood)	L – M	Main damage – to wood
7a.28	*Fomitopsis (= Fomes) pinicola*	*Basidiomycetes, Aphyllophorales*	?	Present	Europe (widely); Asia (widely)	Coniferous & some deciduous	Trunks (wood)	L – M	Main damage – to wood
7a.29	*Fomitopsis rosea (= Fomes roseus)*	*Basidiomycetes, Aphyllophorales*	?	Canada; USA	Europe (widely); India; Japan; Kenya; Pakistan;	*Pinus*, other coniferous	Wood	L – M	Main damage – to treated wood
7a.30	*Gibberella pulicaris* [*Fusarium sambucinum*]	*Ascomycetes, Hypocreales*	?	Not yet checked	Europe	*Pinus*, *Picea*	Wood	L	
7a.31	*Gloeophyllum sepiarium (= G. hirsutum = Lenzites sepiaria)*	*Basidiomycetes, ?*	Russia: widespread	Widespread	Europe.Widespread in Northern hemisphere	*Pinus, Picea,* other coniferous	Wood	L – M	
7a.32	*Gremmeniella* [= *Ascocalyx*] *abietina* [= *Scleroderris lagerbergii = Brunchorstia pinea = B. destruens*]	*Ascomycetes, Helotiales*	Russia; Estonia; Lithuania; Belarus; Georgia	Canada; USA	Europe (widespread); Japan	*Picea abies, Pinus sylvestris, Pinus, Picea, Larix, Abies*	Needles	L – H	Main damage – in nurseries and to young plantations
7a.33	*Gymnosporangium clavariiforme*	*Basidiomycetes, Uredinales*	S. E. Russia ; Ukraine; Transcaucasus	USA	Europe	*Juniperus communis,* fruit trees	Trunks (wood)	L – M	Main damage – to young trees
7a.34	*Gymnosporangium fuscum* [*G. sabinae*]	*Basidiomycetes, Uredinales*	S. E. Russia ; Ukraine; Transcaucasus	Canada (BC) and USA (CA) (not widely)	Europe (widely); China; Cyprus; Lebanon; Syria; Turkey; Arab Emirates; Algeria; Morocco	*Juniperus sabina, J. rubescens, J. virginiana, Pyrus,* other fruit trees	Trunks (wood)	L – M	Main damage – to young trees
7a.35	*Gymnosporangium juniperinum* [*G. juniperi*] *(= G. cornutum)*	*Basidiomycetes, Uredinales*	S. E. Russia ; Ukraine; Transcaucasus	Widespread	Europe, Widespread in temperate Northern hemisphere	*Juniperus communis,* fruit trees	Trunks (wood)	L – M	Main damage – to young trees

Table 7a. PATHOGENS FUNGI

7a.36	*Gymnosporangium tremelloides* [*G. mali-tremelloides*]	*Basidiomycetes, Uredinales*	S. E. Russia ; Ukraine; Transcaucasus	Present	Europe; Western Africa; East Asia	*Juniperus communis*, fruit trees	Trunks (wood)	L – M	Main damage – to young trees
7a.37	*Herpotrichia juniperi (= H. nigra)*	*Ascomycetes, Dothideales*	?	Widespread	Europe (widely); Asia (widely)	*Picea*, *Pinus*, *Juniperus*	Needles	L – M	Main damage – to seedlings
7a.38	*Heterobasidion annosum* [*Fomitopsis annosa*] *(= Fomes annosus)*	*Basidiomycetes, Aphyllophorales*	Russia: widespread in coniferous area; Baltic countries; Belarus; Ukraine	Mexico; Cuba; Canada; USA	Europe (widely); Asia (widely); Morocco; Papua New Guinea; Fiji; Dominican Repub.; Jamaica; Australia; New Zealand	*Pinus*, *Picea*, *Abies*, *Larix*, *Juniperus*	Roots and trunks (wood)	M – VH	
7a.39	*Hirschioporus abietinus = Trichaptum abietinum*	*Basidiomycetes*	?	N. America	Europe	Coniferous	Wood	L	
7a.40	*Hypoxylon mammatum* [*H. pruinatum*]	*Ascomycetes, Sphaeriales*	Russia: widespread; Ukraine	Canada; USA	Europe except North	*Populus tremula*, *Populus*	Trunks & branches (wood)	L – M	
7a.41	*Inonotus (= Polyporus) dryophilus*	*Basidiomycetes, Aphyllophorales*	Widespread in oak area	Widespread	Europe, Widespread in temperate Northern hemisphere	*Quercus*	Trunks (wood)	L – M	Main damage – to wood
7a.42	*Ischnoderma resinosum (=Polyporus resinosus = P. benzoinus = P. fuliginosus = P. fuscus)*	*Basidiomycetes, Aphyllophorales*	Russia: widespread	Widespread	Widespread in Northern hemisphere	Coniferous and some deciduous	Trunks (wood)	L – M	
7a.43	*Lachnella* [*Dasyscypha*] *(= Lachnellula = Dasyscyphus = Trichoscyphella) willkommii*	*Ascomycetes, Helotiales*	Widespread in susceptible larches area	North-East (not widely)	Europe (widely); China; Japan	*Larix decidua*, *L. sibirica (L. rossioa)*, other *Larix*	Trunks and branches (wood)	L – H	Main damage - to young trees
7a.44	*Laetiporus sulphureus*	*Basidiomycetes*	?	Not yet checked	Europe	*Quercus, Acer, Salix, Populus, Fagus, Tilia, Larix*, others	Trunks (wood)	L	Main damage – to wood
7a.45	*Lentinus lepideus*	*Basidiomycetes, ?*	?	USA	Europe	*Pinus*, other coniferous	Wood	L – M	
7a.46	*Lirula macrospora* [*Lophodermium macrosporum*]	*Ascomycetes, Phacidiales*	?	USA	Europe	*Picea*	Needles	L – M	Main damage - to young trees
7a.47	*Lophodermella* [*Hypodermella*] *sulcigena*	*Ascomycetes, Rhytismatales*	?	Not yet checked	Europe	*Pinus*	Needles	L	Main damage – to seedlings

Table 7a. PATHOGENS FUNGI

7a.48	*Lophodermium conigerum*	*Ascomycetes, Rhytismatales*	Estonia	Not yet checked	Europe	*Pinus*	Needles	L	Main damage - to young trees
7a.49	*Lophodermium pinastri*	*Ascomycetes, Rhytismatales*	?	USA	Europe	*Pinus*	Needles	L – M	Main damage - to young trees
7a.50	*Lophodermium seditiosum (= Leptostroma rostrupii)*	*Ascomycetes, Rhytismatales*	Widespread	North (boreal zone)	Northern and Central Europe	*Pinus*	Needles	L – H	Main damage - to seedlings in nurseries (less than 8 year-old)
7a.51	*Massaria inquinans (= M. vomitoria = M. gigaspora)*	*Loculoscomycetes*	Widespread in *Acer* anad Fraxinus areas	Widespread	Europe, Widespread in temperate Northern hemisphere	*Acer & Fraxinus*	Trunks & branches (wood)	L – M	
7a.52	*Melampsora allii-populina*	*Basidiomycetes, Uredinales*	Widespread in *Populus* area	Not known	Europe; Africa; South – West Asia; South America	*Populus*	Leaves & sprouts	L – M	Main damage - to young trees
7a.53	*Melampsora larici-populina*	*Basidiomycetes, Uredinales*	Widespread in *Populus* area	Not known	Europe; Northern Africa; Asia	*Populus*	Leaves & sprouts	L – M	Main damage - to young trees
7a.54	*Melampsora laricis (= M. populnea* f. sp. *laricis)* [*M. larici-tremulae*]	*Basidiomycetes, Uredinales*	Widespread in *Populus* area	Not known	Europe; Middle East; Kenya; South Africa; Uruguay	*Populus, Larix*	Leaves, needles & sprouts	L – M	Main damage – to young trees
7a.55	*Melampsora populnea* f. sp. *pinitorqua* [*M. pinitorqua*]	*Basidiomycetes, Uredinales*	Russia: widespread except Far East; Baltic countries; Belarus; Moldova; Ukraine; Transcaucasus	Not known	Europe; Middle East; Kenya; South Africa; Uruguay	*Pinus, Populus*	Needles leaves, & sprouts	L - M	Main damage - to pine seedlings and young trees of *Populus*
7a.56	*Melampsora populnea* f. sp. *rostrupii* [*M. rostrupii*]	*Basidiomycetes, Uredinales*	Widespread in *Populus* area	Absent	Europe; Middle East; Kenya; South Africa; Uruguay	*Populus*	Leaves and sprouts	L – M	*Mercurialis* (alternative host) doesn't exist in North America
7a.57	*Melampsorella caryophyllacearum* [*M. cerastii*]	*Basidiomycetes, Uredinales*	C. E. Russia, S. E. Russia, S. Siberia; Ukraine	Not yet checked	Europe	*Abies*	Trunks & branches (wood)	L	Main damage - to mono-cultures
7a.58	*Melampsoridium betulae (= M. betulinum = Melampsora betulina)*	*Basidiomycetes, Uredinales*	Widespread in birch area	Widespread	Europe;Widespread in temperate Northern hemisphere; New Zealand	*Betula, Larix*	Leaves, needles	L – M	Main damage – to seedlings
7a.59	*Meria* [= *Hartigiella*] *laricis*	*Ascomycetes, Dothideales*	Russia: widespread except Far East; Baltic countries; Belarus; Moldova; Ukraine	USA	Europe	*Larix sibirica, Larix dahurica,* other *Larix*	Needles	L – H	Main damage - to 2 – 3 year-old seedlings

Table 7a. PATHOGENS FUNGI

7a.60	*Microsphaera alphitoides* [= *Oidium dubium*]	*Ascomycetes, Erysiphales*	Russia: widespread in oak area; Baltic countries; Belarus; Moldova; Ukraine	N. America	Europe	*Quercus*	Leaves	L - M	Main damage – to young seedlings
7a.61	*Microsphaera hypophylla* [= *M. silvatica* sp. *nova*]	*Ascomycetes, Erysiphales*	Russia: widespread in oak area; Baltic countries; Belarus; Moldova; Ukraine	Not yet checked	Europe	*Quercus*	Leaves	VL – L	Main damage – to young seedlings
7a.62	*Mycosphaerella* [*Cercospora*] *microsora* [= *M. millegrana*]	*Ascomycetes, Dothideales*	?	Not yet checked	Europe	*Tilia*	Leaves	L	Main damage – to seedlings
7a.63	*Mycosphaerella tassiana* [*Cladosporium herbarum*]	*Ascomycetes, Dothideales*	?	Not yet checked	Europe	*Pinus* and deciduous	Pine needles, deciduous wood	L	Main damage – to seedlings
7a.64	[*Naemospora croceola (= Diatrype stigma)*]	*?*	?	N. America	Europe	*Quercus*	Trunks, roots and branches (wood)	L	Main damage - to young trees
7a.65	*Nectria cinnabarina* [= *Tubercularia vulgaris*]	*Ascomycetes, Hypocreales*	?	USA	Europe	*Ulmus, Carpinus, Castanea, Populus, Acer, Betula*	Trunks & branches (wood)	L – H	Main damage - to seedlings and young trees
7a.66	*Nummularia bulliardii (= Biscogniauxia nummularia = Hypoxylon nummularium)*	*Pyrenomycetes*	S. E. Russia; Ukraine	Widespread	Widespread in the world	*Quercus, Fagus*	Trunks & branches (bark)	L – M	Main damage - to young trees
7a.67	*Ophiostoma (= Ceratocystis) piceae* [*O. (= Graphium = Verticillium) roboris*]	*Ascomycetes, Ophiostomatales*	S. E. Russia ; Moldova; Ukraine; Transcaucasus; Central Asia	Present (in temperate zone)	Europe	*Quercus*	Acorns, trunks & branches (wood)	L – H	Main damage - to seedlings and young trees
7a.68	*Ophiostoma (= Ceratocystis) piceae* [*O. (= Graphium = Verticillium) valachicum*]	*Ascomycetes, Ophiostomatales*	S. E. Russia ; Moldova; Ukraine; Transcaucasus; Central Asia	Present (in temperate zone)	Europe	*Quercus*	Acorns, trunks & branches (wood)	L – H	Main damage – to seedlings and young trees
7a.69	[*Ophiostoma quercus*](*O. querci*)	*Ascomycetes, Ophiostomatales*	S. E. Russia ; Moldova; Ukraine; Transcaucasus; Central Asia	USA, Canada	Europe	*Quercus*	Trunks & branches (wood)	L – H	Main damage - to young trees and seedlings
7a.70	*Ophiostoma* [= *Ceratocystis = Graphium*] *ulmi*	*Ascomycetes, Ophiostomatales*	C. E. Russia, S. E. Russia; Baltic countries; Belarus; Moldova; Ukraine; Transcaucasus; Central Asia	Canada; USA	Europe (widespread); India; Iran	*Ulmus*	Trunks (wood)	M – VH	Main damage – to European elm species

Table 7a. PATHOGENS FUNGI

7a.71	*Oxyporus populinus*	*Basidiomycetes, Aphyllophorales*	?	N. America	Europe	*Acer, Betula, Alnus, Tilia, Quercus*, other trees	Trunks (wood)	L	Main damage – to wood
7a.72	*Paxillus panuoides*	*Basidiomycetes*	?	USA	Europe	Coniferous & deciduous	Wood	L – M	Main damage – to buildings
7a.73	*Penicillium purpurogenum*	*Ascomycetes, Eurotiales*	?	N. America	Europe	Coniferous & deciduous	Wood	L	
7a.74	[*Penicillium roseum*] = *Gliocladium roseum*	*Ascomycetes, Eurotiales*	?	N. America	Europe	Coniferous & deciduous	Wood	L	
7a.75	*Peniophora gigantea*	*Basidiomycetes, ?*	?	USA	Europe	Coniferous	Wood with bark	L – M	
7a.76	*Phacidium infestans (= P. abietis = P. pini–cembrae = Gremmenia gigaspora)*	*Ascomycetes, Phacidiales*	Russia: widespread in pine area; Baltic countries; Belarus; Moldova; Ukraine	North of USA	Europe; Japan - ?	*Pinus, Juniperus, Picea, Abies*	Needles	L – H	Main damage – to seedlings and young trees
7a.77	*Phaeolus* [= *Polyporus*] *schweinitzii*	*Basidiomycetes, Aphyllophorales*	Widespread	USA	Europe	*Pinus, Larix, Picea, Thuja, Abies, Quercus, Prunus*	Roots and trunks (wood)	L – M	
7a.78	*Phellinus hartigii (= Fomes hartigii = F. robustus)* [*Ph. hartigi*]	*Basidiomycetes, Aphyllophorales*	N. E. Russia, C. E. Russia, N.E. Siberia, N.W. Siberia, S. Siberia; Baltic countries; Belarus; Ukraine; Transcaucasus	Widespread	Europe, World-wide distribution	*Abies, Picea, Pinus, Tsuga, Taxus*, some other coniferous	Trunks (wood)	L – M	Main damage – to wood
7a.79	*Phellinus igniarius*	*Basidiomycetes, Aphyllophorales*	Widespread in aspen area	USA	Europe	*Populus tremula*, other trees	Trunks (wood)	L	Main damage – to wood
7a.80	*Phellinus pini (= Fomes pini)*	*Basidiomycetes, Aphyllophorales*	Widespread	Present	Northern Europe; Asia	*Pinus, Larix, Abies*, other coniferous	Trunks (wood)	L – M	Main damage – to wood
7a.81	[*Phellinus pini* var. *abietis (= Fomes pini* var. *abietis)*]= *Phellinus chrysoloma*	*Basidiomycetes, Aphyllophorales*	Russia: widespread; Baltic countries; Belarus; Ukraine; Transcaucasus; Central Asia	N. America	Europe	*Picea, Pinus, Larix, Abies*, some other coniferous	Trunks (wood)	L – M	Main damage – to wood
7a.82	*Phellinus robustus (= Fomes robustus = F. hartigii)*	*Basidiomycetes, Aphyllophorales*	Widespread in oak area	Widespread	Europe, World-wide distribution	*Quercus, Castanea, Carpinus*, other trees	Trunks (wood)	L – M	Main damage – to wood
7a.83	*Phellinus tremulae (= Fomes tremulae)*	*Basidiomycetes, Aphyllophorales*	Widespread in aspen area	USA	Europe	*Populus tremula*, some other *Populus*	Trunks (wood)	L – H	Main damage – to wood

Table 7a. PATHOGENS FUNGI

7a.84	*Pholiota adiposa*	*Basidiomycetes, Agaricales*	?	Not yet checked	Europe	*Abies, Picea, Populus, Betula, Tilia*	Trunks (wood)	L	Main damage – to wood
7a.85	[*Phyllosticta quercus*]	*Ascomycetes, Dothideales*	?	N. America	Europe	*Quercus*	Leaves	VL - L	Main damage – to seedlings
7a.86	*Polyporus squamosus*	*Basidiomycetes, Aphyllophorales*	?	USA	Europe	*Quercus, Populus, Ulmus,* others	Trunks and roots (wood)	L – M	
7a.87	[*Polystictus circinatus* var. *triqueter*]	*Basidiomycetes, ?*	N. E. Russia, C. E. Russia, S.E. Russia, S. Far East; Baltic countries; Belarus; Moldova; Ukraine	Not known	?	*Picea, Pinus, Larix,* other coniferous	Trunks and roots (wood)	L – H	
7a.88	*Pucciniastrum areolatum* [*Thecopsora padi*]	*Basidiomycetes, Uredinales*	?	Not known	Europe (widely); Asia (incl. Japan)	*Picea*	Cones and seeds	L – M	
7a.89	*Rhizina undulata* [*Rhizina inflata*]	*Ascomycetes, Pezizales*	S. E. Russia; Ukraine	USA	Europe	*Pinus, Picea, Larix, Abies,* other trees	Roots and trunks (wood)	L – M	Main damage - to young trees
7a.90	*Rosellinia quercina*	*Ascomycetes, Sphaeriales*	?	USA	Europe	*Quercus,* deciduous & coniferous	Roots of seedlings	L – M	Main damage – in nurseries
7a.91	*Schizophyllum commune*	*?*	?	USA	Europe	Coniferous & deciduous	Wood	L – M	
7a.92	*Sclerotinia borealis* [*S. graminearum*] = *Myriosclerotinia borealis*	*Ascomycetes, Helotiales*	N. E. Russia, C. E. Russia, S.E. Russia, S. Siberia, S. Far East; Baltic countries; Belarus; Moldova; Ukraine	Present	Northern Europe; Japan	*Pinus*	Buds of 1-year seedlings	L – M	Main damage – to seedlings
7a.93	*Sclerotinia* [*Stromatinia*] *pseudotuberosa*	*Ascomycetes, Helotiales*	Widespread	Not known	Europe	*Quercus*	Acorns	L – M	Main damage – in storage
7a.94	*Septoria betulae*	*Ascomycetes, Dothideales*	?	USA (not widely)	Europe	*Betula*	Leaves	L	Main damage – to seedlings
7a.95	[*Septoria caraganae (= Mycosphaerella jaczewskii)*]	*Ascomycetes, Dothideales*	?	Temperate N. America	Europe	*Caragana*	Leaves	L	Main damage – to seedlings
7a.96	*Septoria quercina = S. quercicola*	*Ascomycetes, Dothideales*	?	USA	Europe	*Quercus*	Leaves	VL - L	Main damage – to seedlings
7a.97	*Serpula (= Boletus) lacrymans*	*?*	Widespread	Widespread	Europe: Widespread in the world	Coniferous & deciduous	Wood	M – VH	Main damage – to buildings
7a.98	*Stereum sanguinolentum*	*Basidiomycetes, Aphyllophorales*	?	USA	Europe	*Pinus, Picea, Larix*	Trunks (wood)	L – M	
7a.99	*Sydowia polyspora* [*Sclerophoma pithyophila (= Dothichiza ferruginosa)*]	*Ascomycetes, Dothideales*	?	Present	Europe (widely)	*Pinus*	Needles	L – M	Main damage - to seedlings in nurseries

7a.100	*Taphrina johansonii* [= *T. johansoni*]	*Ascomycetes, Taphrinales*	?	Not yet checked	Europe	*Populus tremula*	Fruits	L	
7a.101	*Taphrina pruni*	*Ascomycetes, Taphrinales*	?	N. America	Europe	*Prunus padus*	Fruits	L	
7a.102	*Taphrina rhizophora* [= *T. rhizophorus*]	*Ascomycetes, Taphrinales*	?	Not yet checked	Europe	*Populus*	Fruits	L	
7a.103	[*Trichoderma lignorum*] = *T. viride*	*?*	?	N. America	Europe	*Pinus, Picea*	Wood	L	
7a.104	*Valsa sordida* [= *Cytospora chrysosperma*]	*Ascomycetes, Diaporthales*	?	USA	Europe	*Populus, Tilia*	Trunks & branches (bark and wood)	L – H	Main damage – to young trees
7a.105	*Venturia tremulae* [= *Pollaccia radiosa*]	*Deuteromycetes, Hyphomycetales*	?	USA	Europe	*Populus tremula* & other *Populus*	Leaves and sprouts	L – H	Main damage – to 1 – 5 year-old seedlings
7a.106	*Verticillium albo-atrum*	*Ascomycetes, Hypocreales*	Russia: widespread; Baltic countries; Belarus; Moldova; Ukraine; Kyrgyzstan; Uzbekistan	Widespread	Europe (widely); Asia (widely); Africa (widely); Australia; New Zealand	*Quercus, Acer, Ulmus, Tilia, Betula, Populus*, other deciduous	Trunks (wood)	M – H	Main damage – to seedlings and young trees
7a.107	*Verticillium dahliae*	*Ascomycetes, Hypocreales*	Russia: widespread; Baltic countries; Belarus; Moldova; Ukraine; Transcaucasus; Central Asia	Canada; USA	Europe (widely); Asia (widely); Africa (widely); South America (widely); New Zealand; Australia	*Quercus, Acer, Ulmus, Tilia, Betula, Populus*, other deciduous	Trunks (wood)	M – H	Main damage – to seedlings and young trees
7a.108	[*Verticillium lateritium*] = *V. tenerum*	*Ascomycetes, Hypocreales*	?	N. America	Europe	Deciduous & coniferous	Wood	L	
				Bacteria					
7a.109	[*Pseudomonas quercus*]	*Gracilicutes, Pseudomonada-ceae*	Widespread in oak area	Not known	?	*Quercus*	Trunks & branches (wood)	L – M	Vector – aphid *Lachnus roboris*
7a.110	[*Pseudomonas remifaciens*]	*Gracilicutes, Pseudomonada-ceae*	Widespread	Not known	?	*Populus (*including *P. tremula)*	Trunks & branches (wood)	L – M	
7a.111	*Pseudomonas syringae*	*Gracilicutes, Pseudomonada-ceae*	?	USA	Europe	*Populus*	Trunks & branches (wood)	L – M	

Table 7b. Forest diseases causing significant damage on the territory of the former USSR, which may present risk only or mainly to plants, which are not considered as forest trees and shrubs in most of the non-Asian part of the EPPO region

N°	Pest	Group of organisms	Distribution			Main host plants in the former USSR	Damaged parts of plants	Economic significance in area of origin	Remarks
			In the former USSR	In North America	In other countries				
Fungi									
7b.1	[*Fusarium caraganae*]	*Ascomycetes, Hypocreales*	?	Not yet checked	Not yet checked	*Caragana*	Wood	L	
7b.2	*Marssonina juglandis* (Lib.) Magn.	*Deuteromycetes, Melanconiales*				*Juglans*	Fruits, leaves, sprouts	L – M	
7b.3	*Taphrina polyspora* (Svr.) Joh.	*Ascomycetes, Taphrinales*				*Acer tataricum*	Leaves	L – M	Main damage to nurseries and city plantations
Bacteria									
7b.4	*Xanthomonas juglandis* Pierse	Gracilicutes, Pseudomonada-ceae				*Juglans*	Fruits	L – H	

Table 8. Forest diseases causing significant damage on the territory of the former USSR added to the data base and not yet prioritized

N°	Pest	Group of organisms	Distribution			Main host plants in the former USSR	Damaged parts of plants	Economic significance in area of origin	Remarks
			In the former USSR	In North America	In other countries				
Fungi									
8.1	*Alternaria tenuis* Nees.	*Ascomycetes, Dothideales*			Europe	Many trees	Seeds, seedlings	L – H	
8.2	*Aspergillus glaucus* Link.	*Ascomycetes, Eurotiales*			Europe	*Quercus*	Acorns	L – H	Main damage in storage
8.3	*Aspergillus niger* Link	*Ascomycetes, Eurotiales*				Many trees	Seeds	L – M	
8.4	*Bjerkandera adusta* Karst.	*?*				Deciduous	Wood	L – M	
8.5	*Ceratocystis coeruleum* (Münch) H. et Syd.	*Ascomycetes, Ophiostomatales*				*Pinus, Picea*	Wood	L	Leads to the blue colour of wood
8.6	*Ceratocystis pini* (Münch) H. et Syd.	*Ascomycetes, Ophiostomatales*				*Pinus, Picea*	Wood	L	Leads to the blue colour of wood
8.7	*Ceratocystis roboris* Georg. et Teod.	*Ascomycetes, Ophiostomatales*	S. E. Russia, C. E. Russia, Moldova, Ukraine, Transcaucasus, Central Asia			*Quercus*	Trunks & branches (wood)	L – VH	Spread by insects (scolytids, cerambycids, buprestids), water & wind
8.8	*Cercospora acerina* Hart.	*Ascomycetes, Dothideales*			Europe	*Acer*	Fruits, seeds, seedlings	L – M	
8.9	*Coleosporium campanulae* Pers.	*Basidiomycetes, Uredinales*			Europe	*Pinus*	Needles	VL – L	
8.10	*Coleosporium senecionis* Fr.	*Basidiomycetes, Uredinales*			Europe	*Pinus*	Needles	VL – L	
8.11	*Coleosporium sonchiarvensis* Lev.	*Basidiomycetes, Uredinales*			Europe	*Pinus*	Needles	VL – L	
8.12	*Coleosporium tussilaginis* Lev.	*Basidiomycetes, Uredinales*			Europe	*Pinus*	Needles	VL – L	
8.13	*Coriolellus serialis* (Fr.) Murr.	*?*			?	Coniferous	Wood	L – M	
8.14	*Coriolus versicolor* (L.) Quel.	*Basidiomycetes, ?*			Europe	Deciduous & coniferous	Wood	L – M	
8.15	*Coriolus zonatus* (Fr.) Quel.	*Basidiomycetes, ?*			Europe	Deciduous	Wood	L – M	
8.16	*Daedalia quercina* (L.) Fr.	*Basidiomycetes, ?*			Europe	*Quercus*	Butt part of trunks (wood)	L – M	

Table 8. PATHOGENS FUNGI

8.17	*Dothidella betulina* (Fr.) Sacc.	Ascomycetes, Dothideales				*Betula*	Leaves	L	
8.18	*Dothidella ulmi* (Duv.) Wint.	Ascomycetes, Dothideales			Europe	*Ulmus*	Leaves	L – M	Main damage to ornamentals in cities
8.19	*Ganoderma applanatum* (Pers. ex Wallr.) Pat.	*Basidiomycetes, Aphyllophorales*				*Tilia, Acer, Salix, Populus, Ulmus*, some coniferous	Butt part of trunks (wood)	L – M	Main damage – to city plantations
8.20	*Gloeophyllum abietinum* (Butt.) Karst.	*Basidiomycetes, ?*			?	*Picea, Abies* other coniferous	Wood	L – M	
8.21	*Gloeosporium betulinum* West.	*Deuteromycetes, Melanconiales*			Europe	*Betula*	Leaves	L	
8.22	*Gloeosporium tiliae* Oud.	*Deuteromycetes, Melanconiales*			Europe	*Tilia*	Leaves	L – M	Main damage to nurseries and city plantations
8.23	*Gloeosporium tremulae* Pass.	*Deuteromycetes, Melanconiales*			?	*Populus tremula*	Leaves	L – M	Main damage to nurseries and city plantations
8.24	*Hendersonia acicola* Münch. et Tub	*Ascomycetes, Sphaeriales*			Europe	*Pinus*	Needles	L – H	Main damage – to 3 – 12 old trees
8.25	*Hirschioporus fusco-violaceus* (Fr.) Donk.	*Basidiomycetes, ?*			?	*Pinus, Larix*	Wood	L – M	
8.26	*Hysterographium fraxini* (Pers.) De Not.	*Ascomycetes, Ophiostomatales*			Europe	*Fraxinus*	Trunks & branches (wood)	L – H	
8.27	*Inonotus dryadeus* (Pers. et Fr.) Murr.	*Basidiomycetes, Aphyllophorales*	S. E. Russia, Transcaucasus		Europe	*Quercus, Fagus, Castanea, Abies nordmanniana*	Butt part of trunks (wood) & roots	L – H	Main damage – to 80-year and more old trees (mainly *Quercus*)
8.28	*Inonotus obliquus* (Pers.) Pil.	*Basidiomycetes, Aphyllophorales*			Europe	*Betula, Acer, Fagus, Sorbus, Fraxinus*, etc.	Trunks (wood)	L – M	
8.29	*Lenzites betulina* (L. ex Fr.) Fr.	*Basidiomycetes, ?*			Europe	*Betula* & other deciduous	Wood	L – M	
8.30	*Lophodermium juniperinum* (Fr.) de Not	*Ascomycetes, Phacidiales*	S. E. Russia, C. E. Russia (East - Ural), Siberia		Europe	*Juniperus*	Needles	L – H	
8.31	*Marssonina betulae* (Zied.) Magn.	*Deuteromycetes, Melanconiales*			Europe	*Betula*	Leaves	L	

Table 8. PATHOGENS FUNGI

8.32	*Marssonina populi* Kleb.	*Deuteromycetes, Melanconiales*			Europe	*Populus*	Leaves	L – M	Main damage to nurseries and city plantations
8.33	*Nectria ditissima* Tul.	*Ascomycetes, Hypocreales*			Europe	*Fagus, Populus*	Trunks & branches (wood)	L – M	Main damage to city plantations
8.34	*Nectria galligena* Bres.	*Ascomycetes, Hypocreales*			Europe	*Acer, Fagus, Quercus,* fruit and other deciduous trees	Trunks & branches (wood)	L – M	Main damage to city plantations
8.35	*Penicillium glaucum* Link.	*Ascomycetes, Eurotiales*			Europe	*Quercus*	Acorns	L – H	Main damage in storage
8.36	*Penicillium italicum* Pers.	*Ascomycetes, Eurotiales*			Europe	*Quercus*	Acorns	L – H	Main damage in storage
8.37	*Peniophora sanguinea* (Fr.) Bres.	*?*			?		Wood	L – M	
8.38	*Phomopsis quercella (*Sacc*)*	*Ascomycetes, Diaporthales*			Europe	*Quercus*	Acorns	L – M	Main damage in storage
8.39	*Phytophthora cactorum* (L et C) Schröt	*Oomycetes, Peronosporales*			Europe	Deciduous and coniferous	Seedlings	L	
8.40	*Piptoporus betulinus* (Bull. ex Fr.) Karst.	*Basidiomycetes, ?*			Europe	*Betula*	Trunks (wood)	L	
8.41	*Pollaccia elegans* Serv. (= *Venturia populina* (Vuill.) Fabr.)	*Deuteromycetes, Hyphomycetales*			Europe	*Populus tremula*	Leaves & sprouts	L – M	Main damage to nurseries and city plantations
8.42	*Rhizopus nigricans* Hhr.				Europe		Seeds	L	
8.43	*Rhizosphaeria kalkhoffii* Bub.	*Deuteromycetes,*	Estonia, N. E. Russia (Karelia)		Europe	*Picea*	Needles, seedlings	L – M	Main damage – to seedlings and young trees
8.44	*Rhizosphaeria pini(*Corda*)* Maubl.	*Deuteromycetes,*	S. E. Russia, C. E. Russia (East - Ural), Siberia, Transcaucasus		Europe	*Abies*	Needles, seedlings	L – M	Main damage – to seedlings and young trees
8.45	*Rhytisma acerinum* (Pers.) Fr.	*Ascomycetes, Rhytismatales*			Europe	*Acer*	Fruits	L – M	Main damage in nurseries
8.46	*Rhytisma punctatum* Rehm.	*Ascomycetes, Rhytismatales*			?	*Acer*	Leaves	VL – L	Main damage in nurseries
8.47	*Rhytisma salicinum* Rehm.	*Ascomycetes, Rhytismatales*			Europe	*Salix*	Leaves	L – M	

Table 8. PATHOGENS FUNGI

8.48	*Septoria populi*	Ascomycetes, Dothideales				*Populus*	Leaves	L – M	Main damage to nurseries and city plantations
8.49	*Taphrina alni-incanae* (Kühn.) Magn.	*Ascomycetes, Taphrinales*			?	*Alnus*	Fruits	VL – L	Cause a deformation of fruits
8.50	*Taphrina auctumnalis*	*Ascomycetes, Taphrinales*			?	*Betula*	Leaves	VL – L	
8.51	*Taphrina aurea* (Pers.) Fr.	*Ascomycetes, Taphrinales*				*Populus*	Leaves	VL – L	Main damage to nurseries and city plantations
8.52	*Taphrina betulina* Rostr.	*Ascomycetes, Taphrinales*				*Betula*	Leaves	VL – L	
8.53	*Taphrina carnea* Joh.	*Ascomycetes, Taphrinales*				*Betula*	Leaves	VL – L	
8.54	*Taphrina epiphylla* Sacc.	*Ascomycetes, Taphrinales*				*Alnus incana*	Leaves	VL – L	
8.55	*Taphrina tosquinettü* (West.) Magn.	*Ascomycetes, Taphrinales*				*Alnus glutinosa*	Leaves	VL – L	
8.56	*Thamnidium elegans* Link						Seeds	L	
8.57	*Thelephora terrestris* Ehr.	*Basidiomycetes,*			Europe	Coniferous	Seedlings	L – M	
8.58	*Thyrostroma compactum* Sacc.	*Deuteromycetes, Hyphomycetales*	N. E. Russia, C. E. Russia, S. E. Russia, Ural		?	*Tilia, Ulmus, Acer*	Trunks & branches (wood)	L – H	
8.59	*Trichothecium roseum* Link					*Acer, Fraxinus, Quercus, Pinus, Picea*	Seeds	L – M	
8.60	*Verticillium leave* Fr.	*Ascomycetes, Hypocreales*			?	*Pinus*, *Picea*, other coniferous	Wood	L	Leads to the red colour of wood
8.61	*Vuilleminia comedens* Maize.	*Basidiomycetes, Aphyllophorales*			?	*Quercus*	Trunks & branches (wood)	L – M	

Table 8. PATHOGENS BACTERIA

Bacteria									
8.62	*Erwinia quercina* Held. et Schr.	Gracilicutes, Enterobacteria-ceae			Europe	*Quercus*	Acorns	L – M	Main damage in storage
8.63	*Pseudomonas fluorescens* Migula	Gracilicutes, Pseudomonada-ceae			Europe	*Pinus*	Seedlings	L – M	Main damage – to 1-year seedlings
8.64	*Pseudomonas fraxini* Vuill. (= P. savastanoi pv. fraxini (Janse) Young et al.)	Gracilicutes, Pseudomonada-ceae				*Fraxinus*	Trunks & branches (wood)	L – M	
8.65	*Pseudomonas pini* Vuill.	Gracilicutes, Pseudomonada-ceae	N. E. Russia, C. E. Russia, Siberia			*Pinus*	Trunks & branches (wood)	L – H	Main damage – to 60-year and more old trees

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EUROPEAN AND MEDITERRANEAN PLANT PROTECTION ORGANIZATION
ЕВРОПЕЙСКАЯ И СРЕДИЗЕМНОМОРСКАЯ ОРГАНИЗАЦИЯ ПО КАРАНТИНУ И ЗАЩИТЕ РАСТЕНИЙ
ORGANISATION EUROPEENNE ET MEDITERRANEENNE POUR LA PROTECTION DES PLANTES

05/12249

Forest pests on the territories of the former USSR

As part of a broader programme of analysis of the risk of forest pests in the former USSR to other parts of EPPO region, the EPPO Secretariat has made a collection of information concerning the pests of forest trees in the former USSR. The table first presented at the Panel meeting in Helsinki (2000-02-8/10) and then in Perm' (2000-07-04/07), Paris (2001-03-13/15), Zagreb (2001-07-03/05), Vilnius (2002-03-12/14), Paris (2002-09-24/26), Riga (2003-04-01/04), Venezia (IT, 2003-10-1/3) and Grisslehamn (SE, 2004-09-27/29) was devided into 10 tables: (1) the most important (for non-European part of the EPPO region) pests for which PRA was performed by the Panel; (2) forest pests causing significant damage on the territory of the former USSR (intended to be included into the PQR system), for which either more information is needed, or for which pathways do not at present exist, or whose host plants are not of importance for Central and Western Europe; (3a) less important (for non-European part of the EPPO region) pests which are present in Central/Western Europe; (3b) forest pests causing significant damage on the territory of the former USSR, which may present risk only or mainly to plants, which are not considered as forest trees and shrubs in most of the non-Asian part of the EPPO region; (4) pests causing significant damage on the territory of the former USSR added to the data base and not yet prioritised; (5) first priority (for non-European part of the EPPO region) forest diseases; (6) forest diseases, for which more information is needed; (7a) forest diseases causing significant damage on the territory of the former USSR, but which are already present in other parts of the EPPO region; (7b) forest diseases causing significant damage on the territory of the former USSR, which may present risk only or mainly to plants, which are not considered as forest trees and shrubs in most of the non-Asian part of the EPPO region; (8) forest diseases causing significant damage on the territory of the former USSR added to the data base and not yet prioritised. The information is presented in the form of tables which, it is intended, will finally include all recorded forest pests. The data has been obtained mainly from a study of the major forestry publications in the Russian language, and continue by an analysis of regionally-oriented literature in order to ensure that those pests are included that may be of concern to only a relatively small part of this large geographic area or that may attack host plants of minor importance.

The further continuation of this programme will be to prioritize these pests into categories of importance as potential quarantine pests to the rest of EPPO region; thereafter, more detailed information will be collected about the priority pests in order to perform PRAs to decide whether these pests should be quarantine pests and what measures should be taken to prevent their introduction.

Structure of the table

The table is arranged in order of the following pest groups, insects, mites, nematodes, fungi and bacteria, and then subdivided according to the taxonomy of the groups. It presents the identity of each pest, with the scientific name, (as verified by the Arthropod Name Index (ANI) data base of CABI, or the EPPO Plant Protection Thesaurus), as well as the name generally used in Soviet literature (placed in square brackets).

Information on distribution of the pest covers distribution in the former USSR and distribution in other countries. The distribution in the former USSR covers the fifteen Soviet Socialist Republics (Armenia, Azerbaijan, Belarus, Estonia, Georgia, Kazakhstan, Kyrgyzstan, Latvia, Lithuania, Moldova, Russian Federation, Tadjikistan, Turkmenistan, Ukraine and Uzbekistan). In this report, because of its large geographic area, the Russian Federation is subdivided into the following arbitrary units, which do not correspond exactly with the administrative subdivisions[1] (see Figure 1):

1. **North European Russia** (N.E.Russia) – republics of Karelia and Komi; oblast's of Arkhangel'sk and Murmansk;
2. **Central European Russia** (C.E.Russia) – republics of Bashkiria, Chuvashia, Maryi, Mordovia, Tatarstan and Udmurtia; oblast's of Bryansk, Vladimir, Gor'ki, Ivanovo, Kaliningrad, Kaluga, Kirov, Kostroma, Leningrad, Lipetsk, Moscow, Novgorod, Oryol, Penza, Perm', Ryasan', Smolensk, Tambov, Tula, Tver', Ulianovsk, Vologda and Yaroslavl';
3. **South European Russia** (S.E.Russia) – krays of Krasnodar and Stavropol'; republics of Chechnya, Dagestan, Kabardino-Balkaria, Kalmykia and North Ossetia; oblast's of Astrakhan', Belgorod, Kursk, Nizhnii Novgorod, Orenburg, Rostov, Samara, Saratov, Volgograd and Voronezh;
4. **North – Western Siberia** (N.W.Siberia) – north-west of Krasnoyarsk kray; north of Tyumen' oblast';
5. **North – Eastern Siberia** (N.E.Siberia) – republic of Sakha; north-east of Krasnoyarsk kray;
6. **Southern Siberia** (S.Siberia) – republic of Tuva; Altay kray, south of Krasnoyarsk kray; oblast's of Chelyabinsk, Irkutsk, Kemerovo, Kurgan, Novossibirsk, Omsk, Sverdlovsk and Tomsk; south of Tyumen' oblast';
7. **Transbaikalia** (Transbaik.) – republic of Buryatia; oblast' of Chita;
8. **North of the Russian Far East (N.FarEast)** – oblast's of Kamchatka and Magadan;
9. **South of the Russian Far East (S.FarEast)** – krays of Khabarovsk and Primorie; oblast's of Amur and Sakhalin.

Also for convenience, some of the other Soviet Socialist Republics are grouped as follows:
Baltic countries – 3 countries: Estonia, Latvia and Lithuania and Kaliningrad oblast' of Russia;
Central Asia – 4 countries: Kyrgyzstan, Tadjikistan, Turkmenistan and Uzbekistan;
Transcaucasus – 3 countries: Armenia, Azerbaijan and Georgia.

The table contains a column giving the main host genera, in order of host importance, and a column with the parts of the host plants that are damaged by the pest (e.g. fruits, seeds, leaves, trunks and branches, roots, cut wood). Then the economic significance of the pest damage in the areas of origin is given according to the following broad categories: **VH** – very high; **H** – high; **M** – medium; **L** – low; **VL** – very low, often with a range (e.g. L – H) showing differences in importance in different parts of the region. If the pest is regarded as a quarantine pest in another part of the world, this is noted in the next column. Finally, the last column presents some remarks concerning damage, host plants or vector status.

[1] Note that the Russian Federation is divided into territorial units each called either "republic", "oblast'" or "kray", the differences between these units depending on their level of autonomy.

Figure 1. The area of the former USSR.
Countries are shown by their two-letter country codes: AM – Armenia; AZ – Azerbaijan; BY – Belarus; EE – Estonia; GE – Georgia; KG- Kyrgyzstan; KZ – Kazakhstan; LT – Lithuania; LV – Latvia; MD – Moldova; RU – Russian Federation; TJ – Tajikistan; TM – Turkmenistan; UA – Ukraine; UZ – Uzbekistan. For the purposes of displaying pest distribution in this project, the Russian Federation is divided into nine sub-units (as described in the text).

Table 1. Most important forest pests causing significant damage on the territory of their actual distribution for wich PRA has been conducted

N°	Pest	Group of organisms	Distribution			Main host plants in the former USSR	Damaged parts of plants	Economic signifi-cance in the area of origin	Remarks
			In the former USSR	In North America	In other countries				
Insecta									
Coleoptera									
1.1	*Agrilus planipennis* (=*Agrilus feretrius* Obenberger = *Agrilus marcopili* Obenberger = *Agrilus marcopoli ulmi* Kurowasa) **	*Buprestidae*	Not known, but according to Haack et al. (2002) is present in the Far East of Russia	Introduced: Canada (Ontario: Essex county), USA (Michigan: Livingston, Macomb, Oakland, Monroe, Washtenaw and Wayne counties; Ohio: Lucas county)	North-eastern China (Jilin, Liaoning, Heilogjiang, Inner Mongolia, Hebei and Shandong Provinces), Japan, Korea Republic, Mongolia and Taiwan	*Fraxinus americana, F. chinensis, F. japonica, F. lanunginosa, F. mandshuriana, F. mandshurica, F. nigra, F. pennsylvanica, F. rhynchophylla, Juglans mandshurica, Pterocarya rhoifolia, Ulmus davidiana* and *U. propinqua*. No data is given on the susceptibility of ash species commonly growing in Europe (e.g. *F. excelsior, F. angustifolia*).	Trunks (under bark)	M – H	
1.2	*Melanophila guttulata* Gebler (= *Phaenops guttulatus* Gebler = *Phaenops guttulata* Gebler = *Melanophila discopunctata* Fald. = *Melanophila fulvoguttata* Kerr. = *Phaenops fulvoguttata* Jacobs.) *	*Buprestidae*	Russia (Eastern half of European Russia, Siberia, Transbaïkalia, Far East)	Absent	Absent, intercepted in 1985 in pine wood (*Pinus sylvestris*) imported from Russia to Finland	Attacks mainly larch (*Larix sibirica, L. gmelinii* and other larch species), but also *Abies* (*A. sibirica, A. sp.*), *Picea* (*P. abies, P. ajanensis, P. obovata, P. sp.*), *Pinus* (*P. sibirica, P. sylvestris, P. sp.*)	Trunks (under bark)	M – VH	

Table 1. INSECTS *COLEOPTERA*

1.3	*Aeolesthes sarta* Solsky **	*Cerambycidae*	Turkmenistan, Uzbekistan, Tajikistan, Kyrgyzstan (south)	Absent	India (Western Himalayas), Pakistan (north), Afghanistan, Iran	Many species of *Ulmus*, *Populus*, *Salix*, *Platanus*, *Malus*, *Prunus*, *Pyrus*, *Juglans*, *Quercus*, *Betula*, *Fraxinus*, *Acer*, *Morus*, *Gleditsia*, *Robinia*, *Elaeagnus* and many other hardwoods and fruit trees. Its preferred hosts are: *Ulmus minor*, *Ulmus pumila*, *Populus diversifolia*, *Populus euphratica*, *Populus talassica*, *Populus alba*, *Populus X euroamericana*, *Salix acmophylla*, *Salix turanica*, *Salix aongarica*, *Platanus orientalis*, *Platanus acerifolia*, *Malus pumila* and *Juglans regia*.	Trunks (wood)	M – VH	Main damage – in mountains and in city plantations
1.4	*[Corymbia succedanea* L. (= *Leptura succedanea* L. = *Anoplodera succedanea* Lew.)*]* *	*Cerambycidae*	Russia (Transbaikalia, South Far East)	Absent	Northern China, Japan, Koreas	All available of conifer species, but prefers *Pinus koraiensis*, *Pinus pumila* and *Picea* species (*P. abies*, *P. ajanensis*, *P. obovata*, *P. sp.*)	Trunks (wood)	VL – L	
1.5	*Dokhtouroffia* (= *Dokhturovia* = *Dochturovia*) *baeckmanni* Yankovskii *	*Cerambycidae*	Kyrgyzstan; Kazakhstan; Uzbekistan	Absent	Absent	Spruce and fir, especially *Picea schrenkiana* and *Abies semenovii*	Trunks (wood)	L – M	
1.6	*Hesperophanes campestris* (=*Trichoferus campestris* Faldermann = *Trichoferus turkestanicus* Heyden = *Trichoferus flavopubescens* Kolbe = *Trichoferus rusticus* Ganglbauer) **	*Cerambycidae*	Armenia (recently), southern Kazakhstan, Kyrgyzstan, Russia (south-east of European part - recently, Transbaikalia, Eastern Siberia, Far East), Tajikistan, Uzbekistan.	Absent	Japan, Northern China, Northern Korea, northern Mongolia	Attacks *Malus* (*M. domestica*, *M. sp.*), *Morus*, *Sorbus (= Micromeles) alnifolia*, *Astragalus*, *Gleditsia*, *Salix*, *Betula*, *Broussonetia papirifera* and other fruit and deciduous trees, preferring mainly *Malus* and *Morus*, may attack cut wood of *Picea* (*P. schrenkiana*) and *Pinus*		L – H	
1.7	*Monochamus impluviatus* Motschulsky *	*Cerambycidae*	N.E.Russia (East), C.E.Russia (East), N.E.Siberia, N.W. Siberia, S.Siberia, Transbaikalia, S.Far East	Absent	Northern Mongolia; Northern China; Japan; Korea	Attacks all available species of coniferous in its natural area (*Larix*, *Pinus*, *Picea*, *Abies* and others), but prefers *Larix* (*L. gmelinii*, *L. sibirica*, *L. sp.*) and *Pinus sibirica*	Trunks (wood)	L – M	

Table 1. INSECTS *COLEOPTERA*

1.8	*Tetropium gracilicorne* Reitter **	*Cerambycidae*	N.E. Siberia (introduced to Kamchatka where it spread rapidly and is now an important pest), N.W. Siberia, S. Siberia, S. Far East, Kazakhstan	Absent	Northern China, northern Japan (Hokkaido, Honshu), northern Mongolia, Koreas. In 1998 intercepted in Austria in larch wood originating from Siberia	All available species of spruce, fir, larch and pine, but prefers *Larix gmelinii, Larix sibirica, Pinus sibirica, P. koraiensis, P. sylvestris, Abies nephrolepis, Picea ajanensis*	Trunks (under bark)	L – H	
1.9	*Tetropium staudingeri* Pic. (= *Tetropium tjanshanicum* Semenov = *Tetropium staudingeri* Plavilstshikov) *	*Cerambycidae*	Kyrgyzstan, Kazakhstan, Uzbekistan	Absent	Northwestern China	Attacks spruce, especially *Picea schrenkiana*. Many authors note only *Picea schrenkiana* as a host plant	Trunks (under bark)	L – M	
1.10	*[Turcmenigena* (= *Turkmenigena*) *varentzovi* Melgunov*]* *	*Cerambycidae*	Kazakhstan, Turkmenistan, Uzbekistan	Absent	Absent	Attacks mainly saxauls, especially *Haloxylon aphyllum* and *H. persicum*, but also *Salsola*, especially *S. richteri*	Trunks and roots (under bark)	L – M	
1.11	*Xylotrechus altaicus* Gebler (= *Xyloclytus altaicus* Gebler) **	*Cerambycidae*	N. E. Siberia, N. W. Siberia, S. Siberia, N. Far East, Transbaïkalia, S. Far East	Absent	Northern Mongolia	Attacks only larch: *Larix sibirica, L. gmelinii, L. olgensis, L. kamtschatica, L. x maritima* and other larch species present in its natural range	Trunks (wood)	L – H	
1.12	*Xylotrechus namanganensis* Heyden **	*Cerambycidae*	Kyrgyzstan, Kazakhstan, Tajikistan, Turkmenistan, Uzbekistan.	Absent	Afghanistan, China, possibly Iran	*Juglans, Prunus, Malus, Morus, Crataegus, Elaeagnus, Populus, Ulmus, Celtis, Salix, Betula, Alnus, Platanus*, other deciduous trees	Trunks (wood)	L – H	
1.13	*Agelastica alni orientalis* Baly (= *A. orientalis* Baly) *	*Chrysomelidae*	Kazakhstan (South-East); Kyrgyzstan; Uzbekistan, Tajikistan, Turkmenistan	Absent	China, Iran, possibly Afghanistan	Attacks *Salix, Populus* (*P. alba, P. sp.*), *Prunus dulcis*, *Malus* and *Betula*	Leaves	L – M	Main damage - to young trees
1.14	*Hylobius albosparsus* Boheman *	*Curculionidae*	Russia (North-East of the European part, Siberia, Transbaikalia, Far East, including Sakhalin, Kamchatka and Magadan)	Absent	China, Japan, Korea, Mongolia	Attacks all available species of conifers within its natural range, but prefers *Larix* (*L. gmelinii, L. sibirica, L. lubarskii, L. olgensis, L. sp.*), *Pinus* (*P. sibirica, P. sylvestris, P. sp.*) and *Picea* (*P. abies, P. obovata, P. sp.*)	Trunks (under bark)	L – M	
1.15	*Polyphylla* (= *Xerasiobia*) *alba* Pallas (= *Polyphylla hololeuca* Pallas) *	*Scarabaeidae*	C.E.Russia, S.E.Russia, S. Siberia; Azerbaijan, Armenia, Georgia, Kazakhstan, North of Turkmenistan, Uzbekistan, Ukraine	Absent	Northern and central China (Djungaria, Gobi desert, Guansi), Mongolia	Feeds on roots of many plants including forest trees. Among agricultural crops, the most often damages roots of fruit trees, grape wine, potato, beet and strawberry	Roots	L – M	Main damage – to young plantations

Table 1. INSECTS *COLEOPTERA*

1.16	*Ips golovjankoi* Pjatnitzkii (*Orthotomicus golovjankoi* Pjatnitzkii) *	*Scolytidae*	N. E. Siberia, S. Siberia (East), Transbaik.; S. Far East	Absent	Northern China, northern Japan, northern Korea	Attacks pine, especially *Pinus koraiensis, P. sibirica* and *P. x funebris,* and spruce, especially *Picea ajanensis* and *P. obovata*	Trunks (under bark)	VL – L	
1.17	*Ips hauseri* Reitter **	*Scolytidae*	S. Siberia (Altai Kray); Kyrgyzstan, Kazakhstan, Tajikistan	Absent	Absent	Attacks spruce, pine and larch, especially *Picea schrenkiana, Larix sibirica, Pinus sylvestris* and *Pinus pallasiana*	Trunks (under bark)	M – H	Main damage – to forests in mountains
1.18	*Ips spessivtsevi* Lebedev (= *Pityogenes spessivtsevi* Lebedev = *Pityogenes perfosus* Bees.) *	*Scolytidae*	Kazakhstan, Kyrgyzstan, Tadjikistan	Absent	Absent	Attacks spruce, especially *Picea schrenkiana*	Trunks (under bark)	M – H	
1.19	*Ips subelongatus* Motschulsky (=*Ips fallax* Egg.) **	*Scolytidae*	Russia (north-east of European Russia, all Siberia, Transbaikalia and Far East)	Absent	Northern Mongolia; Northern China	Attacks mainly larch: *Larix sibirica, L. gmelinii, L. olgensis,* and other larch species, but also *Pinus* (*P. sylvestris, P. sibiricus, P. koraiensis*), *Picea*, *Abies* and other coniferous present in its natural range	Trunks (under bark)	L – H	
1.20	*Scolytus morawitzi* Semenow (=*Eccoptogaster morawitzi* Semenow = *Scolytus pini* Eggers) **	*Scolytidae*	Russia (centre and north of European Russia, Southern Siberia, south of N. E. Siberia, south of N. W. Siberia, Transbaikalia, Far East)	Absent	Northern Mongolia	Attacks mainly larch: *L. gmelinii, L. olgensis, L. kamtschatica, Larix sibirica, L. x maritima* and other larch species present in its natural range, but also *Pinus sibiricus, P. koraiensis* and other coniferous	Trunks (under bark)	L – M	

Table 1. INSECTS *DIPTERA & HOMOPTERA*

Diptera									
1.21	*Strobilomyia [= Lasiomma] luteoforceps* Fan & Fang (=*Lasiomma jurtschenkoi* Elberg)*	*Anthomyiidae*	S. Far East	Absent	Northeastern China	*Larix gmelini*, *L. olgensis*, and *L. cajanderi*	Cones and seeds	M - H	
1.22	*Strobilomyia viaria* Huckett (= *Lasiomma melaniola* Fan. = *Strobilomyia melaniola* Fan.) **	*Anthomyiidae*	N. E. Siberia, S. Siberia (Baikal area), Transbaikalia, N. Far East (Kamtchatka)	Widespread in Western Canada and USA	Northeastern (Lianoning, Jilin, Heilongjiang Inner Mongolia) and Central China	Attacks cones of larch species: *Larix gmelini*, *L. olgensis*, *L. principis-rupprechti*, and *L. cajanderi*	Cones and seeds	M – H	Data of Dr. Alain Roques
1.23	*Cecidomyia pumila* Mamaev*	*Cecidomyiidae*	N. Far East	Absent	China	*Pinus pumila*, may also occasionnally infest *Pinus sibirica*	Cones and Seeds	M-H	Data of Dr. Alain Roques
1.24	*Resseliella ingrica* Mamaev (= *Thomasiniana ingrica* Mamaev) *	*Cecidomyiidae*	C. E. Russia (Leningrad region), S. Siberia (Krasnoyarsk territory)	Absent	Absent	Infests cones of spruce, *Picea abies* and *P. obovata*	Cones and seeds	M - H	Data of Dr. Alain Roques
Homoptera									
1.25	*Adelges lapponicus* Kholodkovskii (= *Chermes lapponicus* var. *praecox* Kholodkovskii = *Adelges laplanicus* Kholodkovskii) *	*Adelgidae*	N. E. Russia, C. E. Russia; Baltic countries; Belarus	Absent	Estonia (in parks), Finland, Kyrgyzstan (introduced)	Prefers *Picea abies* but may develop on *P. obovata, P. glauca, P. mariana, P. schrenkiana, P. pungens, P. ajanensis* and other spruce species	Young sprouts and needles	L – M	Main damage - to young trees in plantations and nurseries
1.26	*Ceroplastes japonicus* Green (= *Cerostegia japonicus* Green = *Ceroplastes floridensis* Comst. = *Ceroplastes floridensis var. japonicus* Green) *	*Coccidae*	S. E. Russia (introduced); Transcaucasus, Azerbaijan (introduced), Georgia including Adzharia and Abkhasia (introduced), China, Japan, Republic of Korea	Not yet checked	China, Japan, Republic Korea, New Zealand, Great Britain (introduced), south-eastern France (introduced), Italy (introduced), Slovenia (introduced)	Damages 95 to 121 plant species, prefers *Laurus nobilis, Diospyros kaki, Camellia sinensis* and *Morus* spp. Less preferable are *Prunus laurocerasus*, *Citrus reticulata*, *Citrus unshiu* and some other *Citrus* spp., then come *Malus* spp., *Magnolia* spp., *Poncirus trifoliata*, *Camellia* spp., *Pittosporum*, *Crataegus* spp.	Trunks, leaves & branches	L – H	*Coccidae*
1.27	*Ceroplastes sinensis* Del Guercio *	*Coccidae*	Southern Russia (introduced); Azerbaijan (introduced), Georgia including Adzharia and Abkhasia (introduced), Tajikistan (introduced), Uzbekistan (introduced)	Mexico, USA	Algeria, Australia, Benin, Brazil, China, Cot d'Ivoire, Egypt, France, Hawaii, India, Iran, Italy, Japan, Morocco, Mozambique, New Zealand, Portugal, Spain, Syria, Togo, Tunisia, Turkey, Viet Nam	Damages 30 to 137 species of plants. It prefers different *Citrus* species (especially *Citrus sinensis*), *Punica granatum*, *Laurus nobilis*, *Diospyros kaki*, *Camellia sinensis*, *Eriobotrya japonica*, *Juglans regia*, *Prunus persica*, *Pyrus* spp. and many other plants. On herbaceous plants, the pest may develop only larvae of the first and the second stages.	Trunks, leaves & branches	L – H	*Coccidae*

Table 1. INSECTS HOMOPTERA, HYMENOPTERA & ISOPTERA

1.28	*Lepidosaphes ussuriensis* Borchsenius (= *Paralepidosaphes ussuriensis* Borchsenius) **	*Diaspididae*	Russia (South of the Far East and Sakhalin)	Not known	Northern China, Japan (Hokkaido, Honshu)	Polyphagous pest, damaging *Ulmus, Alnus, Malus, Populus, Betula, Euonymus, Syringa,* and many other plants	Trunks & branches (on the bark)	L – M	Main damage - to young plants
				Hymenoptera					
1.29	*Dryocosmus* (=*Biorhiza*) *kuriphilus* Yasumatsu **	*Cynipidae*	Absent	USA. (south east: Georgia, Alabama, North Carolina and Tennessee)	China, Italy (Piedmont region, South of Cuneo province) Japan, Korea	Attacks *Castanea crenata, C. dentata, C. mollissima, C. sativa* and their hybrids. Infests also *C. seguinii* in China, but not yet other wild North American species of *Castanea*: *C. pumila* and *C. alnifolia*, which are often grown adjacent to infested chestnuts	Twigs & nuts	L – M	
1.30	*Sirex ermak* Semenov-Tian-Shanskii (=*Paururus ermak* Semenov) **	*Siricidae*	N. W. Siberia, N. E. Siberia, S. Siberia, Transbaikalia, S. Far East (including Sakhalin island)	Absent	Not known. Possibly northern Mongolia and northern China	Attacks several species of *Larix (L. gmelinii, L. sibirica*, preferred hosts, *L. sp.), Picea* (*P. ajanensis, P. obovata, P. sp.*), *Pinus (P. sibirica, P. sp.)* and *Abies* (*A. sibirica, A. sp.*)	Trunks (wood)	VL – M	
				Isoptera					
1.31	*Anacanthotermes (= Hodotermes = Acanthotermes) ahngerianus* Jacobson *	*Termitidae*	Kyrgyzstan, southern Kazakhstan, Tajikistan, Turkmenistan, Uzbekistan	Absent	Iran	Attacks all available kinds of wood (coniferous and deciduous) paper and cardboard, cotton textile and other materials containing cellulose; also may damage plastic materials: peno-polyurethane, polyethylene, foam plastic, glass-fibre plastics, etc. Known to damage seeds and plants of *Haloxylon* sp., *Salsola* (*S. richteri, S. gemmascens, S. arbuscula, S. dendroides, S.* sp.), *Artemisia* (*A. harba alba, A. kemrudica, A.* sp.), *Alhagi persarum, Lagonychium farctum, Gossypium* sp., *Ephedra strobilacea, Astrogalus unifoliolatus, Euclidium syriacum, Carex pachistilis, Koelpinia linearis, Lepidium perfoliatum, Reaumuria* sp., *Malcolmia* sp., *Alyssum* sp., *Gramineae*, and some other	Wood	M – H	Main damage - to telegraph-poles, wood in buildings, etc.

Table 1. INSECTS ISOPTERA & *LEPIDOPTERA*

1.32	*Anacanthotermes (= Hodotermes = Acanthotermes) turkestanicus* Jacobson *	*Termitidae*	Tajikistan, Turkmenistan, Uzbekistan	Absent	Iran	Attacks all available kinds of wood (coniferous and deciduous) paper and cardboard, cotton textile and other materials containing cellulose; also may damage plastic materials: peno-polyurethane, polyethylene, foam plastic, glass-fibre plastics, etc. Known to damage seeds and plants of *Salsola dendroides* and *S.* sp., *Alchagi persarum*, *Morus alba*, *Vitis vinifera*, *Malus domestica*, *Gleditsia*, *Gramineae*, cotton and some other	Wood	M – H	Main damage - to telegraph-poles, wood in buildings, etc.
				Lepidoptera					
1.33	*Coleophora dahurica* Fal'kovich *	*Coleophoridae*	N.E. Siberia, S. Siberia (East), Transbaik., N. Far East, S. Far East	Absent	China, Mongolia	Attacks larch, especially *Larix gmelinii*, *L. sibirica* and *L. olgensis*	Needles	L – M	
1.34	*Erannis jacobsoni* Diakonoff *(= Hybernia jacobsoni* Diakonoff *	*Geometridae*	N.E. Siberia (South), S. Siberia (East), Transbaik., N. Far East, S. Far East (South)	Absent	Mongolia	Attacks only larch, especially *Larix gmelinii* and *Larix sibirica*	Leaves	L – H	
1.35	*Phyllonorycter* (= *Lithocolletis* = *Phyllorycter*) *issikii* Kumata *	*Gracillariidae*	C. E. Russia (introduced), S. E. Russia (introduced), S. Far East; Ukraine (introduced)	Absent	Korea, Japan, Lithuania (introduced), Czekia (introduced), Germany (introduced), Austria (introduced), Poland (introduced)	Make plicated mines in the lower side of leaves of *Tilia cordata* (preferred host), *T. amurensis*, *T. mandshurica*, *T. maximowicziana* and other *Tilia*, but also *Betula platyphylla*	Leaves	L – H	Main damage – in city plantations
1.36	*Dendrolimus sibiricus* Tschetverikov (= *D. superans sibiricus* Tschetverikov) (= *D. laricis* Tschetverikov) **	*Lasiocampidae*	N.E.Russia, C.E. Russia, N.E.Siberia, N.W. Siberia, S. Siberia, Transbaik., N. Far East, S. Far East; Kazakhstan	Absent	Northern China; Korea Democratic People's Republic, Korea Republic; Northern Mongolia	Attacks more than 20 species of *Abies*, *Pinus*, *Larix*, *Picea* and *Tsuga*. Develops on practically all coniferous species in its natural area but prefers *Abies sibirica*, *Abies nephrolepis*, *Pinus sibirica*, *Pinus koraiensis*, *Larix gmelinii*, *Larix sibirica*, *Picea ajanensis*, *Picea obovata*	Needles	H – VH	

Table 1. INSECTS *LEPIDOPTERA*

1.37	***Dendrolimus superans*** Butler *(= D. superans albolineatus* Butler = *Dendrolimus albolineatus* Matsumura = *Dendrolimus jezoensis* Matsumura = *Dendrolimus yezoensis* Matsumura = *Odonestis superans* Butler) **	*Lasiocampidae*	S. Far East (Sakhalin, Kuril islands)	Absent	Korea; Japan	Attacks many species of *Abies, Pinus, Larix, Picea* and *Tsuga*. Develops on practically all coniferous species in its natural area but prefers *Pinus pumila, Larix kamtschatica, Larix maritima, Picea ajanensis* and *Abies sachalinensis*	Needles	H – VH	
1.38	*Malacosoma parallela* Staudinger**	*Lasiocampidae*	Armenia, eastern Kazakhstan, Kyrgyzstan, Uzbekistan, Tajikistan, and Turkmenistan.	Absent	Northern Iran, Syria, Turkey	*Atraphaxis pyrifolia, Berberis integerrima, Cerasus verrucosa, Chaenomeles japonica, Cotoneaster acutiuscula, C. insignis, C. suavis, Crataegus hissarica, C. pontica, C. turkestanica, Cydonia oblonga, Fraxinus sogdiana, Hippophae rhamnoides, Juglans regia, Lonicera korolkowii, L. nummulariifolia, Malus domestica, M. sieversii, Myricaria bracteata, Populus alba, P. tremula, Prunus mahaleb, P. avium, P. armeniaca, P. bucharica, P. cerasus, P. divaricata, P. dulcis, P. padus var. pubescens, P. persica, Pyrus communis, Quercus boissieri, Q. macranthera, Q. robur subsp. robur, Ribes nigrum, R. rubrum, Rosa canina, R. corymbifera, R. kokanica, R. maracandica, Rubus idaeus, R. turkestanicus, Salix excelsa, S. tenuijulis, Sorbus persica, S. turkestanica* and *Ulmus* sp. The most important damage occurs on almond, oak and wild apple trees. Important damage also occurs on *Berberis, Chaenomeles, Cotoneaster, Crataegus, Cydonia, Malus, Prunus, Pyrus, Rosa, Salix* and *Sorbus* species. Other plants are damaged occasionally	Leaves	L – M	

Table 1. INSECTS *LEPIDOPTERA*

1.39	*Dasychira albodentata* Bremer *	*Lymantriidae*	N.E.Siberia (south), N.W. Siberia, S. Siberia (east), Transbaïkalia, S. Far East	Absent	north of Mongolia, north of China	Attacks several species of *Larix* (mainly *Larix gmelinii*), *Pinus* (mainly *Pinus sylvestris, Pinus pumila* and *Pinus koraiensis*) and some other coniferous. Preferred hosts are *Larix gmelinii* and *Pinus sylvestris*	Needles	L – M	
1.40	*Euproctis (= Porthesia) kargalika* Moore *(=Euproctis karghalica* Moore = *Porthesia karghalika* Strand = *Euproctis kargalica* Grum-Grzhimailo = *Porthesia flavosulphurea* Grum-Grzhimailo) *	*Lymantriidae*	S. Siberia (Altai Kray); Kazakhstan, Kyrgyzstan, Uzbekistan, Tajikistan and Turkmenistan	Absent	Iran, China (north-west)	*Acer campestre, A. regelii, A. tataricum, A. turkestanicum, Alhagi* sp., *Atraphaxis pyrifolia, Betula pendula, Betula pubescens, Caragana arborescens, Cerasus verrucosa, Cotoneaster acutiuscula, C. insignis, C. suavis, Crataegus turcestanica, Cydonia oblonga, Elaeagnus angustifolia, Fragaria* sp., *Hippophae rhamnoides, Irga* sp., *Malus domestica, M. sieversii, Pistacia vera, Prunus armeniaca, P. avium, P. bucharica, P. cerasus, P. divaricata, P. dulcis, P. mahaleb, P. persica, Punica granatum, Pyrus bucharica, P. communis, Quercus* sp., *Rhucs coriaria, Ribes nigrum, R. rubrum, Robinia pseudoacacia, Rosa canina, R. corymbifera, R. kokanica, R. maracandica, Rubus caesius, R. idaeus, Rumex sp., Salix excelsa, S. tenuijulis, Spirea hypericifolia, Ulmus effusa, Ulmus foliacea* var. *campestris.* Other plants are damaged occasionally	Leaves	L – M	
1.41	*Lymantria* (=*Porthetria* = *Ocneria*) *mathura* Moore (= *Lymantria aurora* Butler = *Lymantria fusca* Leech = *Lymantria mathura aurora* Butler) **	*Lymantriidae*	S. Far East (South)	Absent	China (Western and Northern), India (Northern), Nepal, Japan, Koreas, Pakistan	Attacks many species of *Quercus, Juglans, Malus, Ulmus, Tilia, Salix, Betula, Castanea* and other deciduous trees. Preferred hosts are: *Juglans mandshurica, Malus mandshurica, Quercus mongolica, Quercus dentata, Ulmus japonica, Ulmus macrocarpa, Ulmus pumila, Tilia amurensis, Tilia mandshurica, Tilia pekinensis, Tilia taquetii*	Leaves	L – M	

Table 1. INSECTS *LEPIDOPTERA*

1.42	*Erschoviella* (= *Sarrothripus* = *Nycteola*) *musculana* Ershov **	*Noctuidae*	Southern Kazakhstan, Kyrgyzstan, Uzbekistan, Tajikistan, Turkmenistan Kazakhstan; Central Asia	Absent	Probably Afghanistan and Iran	Wild and cultivated varieties *Juglans regia*	Leaves, sprouts & nuts	L - M	
1.43	*Sphinx (= Hyloicus) morio* Rotsch. et Jord (=*H. laricis* Rozh.) *	*Sphingidae*	N. W. Siberia, N. E. Siberia, S. Siberia, N. Far East, S. Far East, Kazakhstan	Absent	China, Japan	Attacks mainly larch (*Larix sibirica, L. gmelinii* and other larch species) and *Pinus* (*Pinus sylvestris, P. sibiricus, P. koraiensis*).	Needles	L – M	
1.44	*Cydia (=Laspeyresia = Grapholitha*) *illutana ssp dahuricolana* Kuznetsov *	*Tortricidae*	N.E.Siberia, N.W. Siberia, S. Siberia, Transbaikalia	Absent	Absent	Attacks cones of larch, especially *Larix gmelinii* and *L. sibirica*, spruce, especially *Picea obovata*, fir and other coniferous	Cones and seeds	M – H	

* - species for which PRA was provided by the Panel but not recommended for inclusion into the EPPO lists
** - species for which PRA was provided by the Panel and recommended for inclusion into the EPPO lists

Table 2. Transition table: Forest pests to be included into the PQR system causing significant damage on the territory of the former USSR, for which either more information is needed, or for which pathways do not at present exist, or whose host plants are not of importance for Central and Western Europe

N°	Pest	Group of organisms	Distribution			Main host plants in the former USSR	Damaged parts of plants	Economic signifi-cance in the area of origin	Remarks
			In the former USSR	In North America	In other countries				
Acari (Arachnida)									
2.1	*Trisetacus kirghisorum* Shevchenko	*Phytoptidae* (Acariformes, Tetrapodili)	Armenia (introduced), Kazakhstan, Kyrgyzstan, Tadjikistan, Turkmenistan, Uzbekistan	Absent	Absent	*Juniperus semiglobosa, J. sabina, J. turkestanica, J. foetidissima, J. polycarpos*	Seeds	L - H	
Insecta									
Coleoptera									
2.2	*Dinoderus minutus* Fabr.	*Bostrichidae*	Ukraine (Crimea, introduced)	In tropical regions	Cosmopolitan in tropical regions	All deciduous and coniferous wood	Wood	L – M	Main damage – to wood in buildings
2.3	*[Enneadesmus scopini* Fursov.*]*	*Bostrichidae*	Kyrgyzstan, Tadjikistan, Turkmenistan, Uzbekistan & Kazakhstan	Absent	Absent	All deciduous and coniferous wood & *Elaeagnus angustifolia, E. orientalis*	Wood, branches of *Elaeagnus*	L – M	Main damage – to wood in buildings
2.4	*Psoa dubia ?*	*Bostrichidae*	Ukraine (Crimea, introduced)	Not known	Not yet checked	All deciduous and coniferous wood & *Vitis vinifera*	Wood	L – M	Main damage – to wood in buildings
2.5	*Xylogenes dilatatus* Rtt.	*Bostrichidae*	Kyrgyzstan, Tadjikistan, Turkmenistan, Uzbekistan & Kazakhstan	Absent	Syria, Iran	*Tamarix* (*T. laxa, T. ramosissima, T. hispida, T. pallasii, T. arceuthoides*) and other deciduous	Wood, under bark	L – M	Main damage – to wood in buildings
2.6	*Agrilus graminis* C. G (= *A. disparicornis* Bed.)	*Buprestidae*	C. E. Russia, S. E. Russia ; Baltic countries; Belarus; Moldova; Ukraine; Transcaucasus	Absent	Italy, Bulgaria	*Quercus cerris, Quercus sp., Castanea sativa, Rosa damascena*, other plants	Trunks (under bark)	L	
2.7	*Agrilus hastulifer* Ratz.	*Buprestidae*	N. E. Russia, C. E. Russia, S.E. Russia; Baltic countries; Belarus; Moldova; Ukraine; Transcaucasus	Absent	Italy	*Quercus* sp.	Trunks (under bark)	L	
2.8	*Anthaxia (= Melanthaxia) conradti* Semenov	*Buprestidae*	Kyrgyzstan, Tadjikistan, Turkmenistan, Uzbekistan (mainly mountains)	Absent	Absent	*Juniperus sabina, J. turcomanica, Juniperus* sp.	Trunks (under bark)	L – H	

Table 2. INSECTS *COLEOPTERA*

2.9	*Anthaxia manca* L. (= *Cratomerus mancus* L = *Trichocratomerus mancus* L)	*Buprestidae*	S. E. Russia, Azerebaijan, Armenia, Estonia, Georgia, Moldova, Latvia, Lithuania, Ukraine	Absent	Algeria, Austria, Bosnia, Bulgaria, Croatia, Czekia, France, Germany, Hungary, Italy, Iran, Macedonia, Poland, Portugal, Romania, Serbia, Slovakia, Slovenia, Spain, Switzerland, Turkey	*Ulmus* sp., *Robinia pseudoacacia, Populus tremula, Rhamnus alaternus*	Trunks (under bark)	VL – M	
2.10	*Cratomerus (= Trichocratomerus) aurulentus* F. *(= Anthaxia aurulenta* F.*)*	*Buprestidae*	S. E. Russia ; Moldova; Ukraine	Absent	West of Mediterranean region, south-eastern and eastern Europe	*Ulmus* sp., *Salix alba*	Trunks (under bark)	VL – M	
2.11	*Lampra mirifica* Mulsant	*Buprestidae*	C. E. Russia, S. E. Russia ; Baltic countries; Belarus; Moldova; Ukraine; Transcaucasus	Absent	Mediterranean region	*Ulmus*	Trunks (under bark)	L – M	
2.12	*Monochamus grandis* Waterhouse	*Cerambycidae*	S. Far East (Kurile islands: Kunashir, Shikotan)	Absent	Japan	*Pinus koraiensis, P. parviflora, P. pumila, P. funebris, Abies sachalinensis, A. holophylla, A. nephrolepis, A. mariesii, A. firma, Picea ajanensis, P. glehnii, P. koraiensis, Tsuga* sp., other conif.	Trunks (wood)	L – H	
2.13	*Monochamus nitens* Bates	*Cerambycidae*	S. Far East (Sakhalin, Kunashir)	Absent	China (North), Japan	*Picea ajanensis, P. glehnii, P. koraiensis, Pinus koraiensis, P. parviflora, P. pumila, P. funebris, Abies mariesii, A. firma, Larix leptolepis*	Trunks (wood)	L – M	
2.14	*Semanotus semenovi* Okunev	*Cerambycidae*	Kyrgyzstan, Tadjikistan, Turkmenistan, Uzbekistan	Absent	Absent	*Juniperus semiglobosa, J. polycarpa, J. sabina, J. turcomanica, , J. turkestanica, J. foetidissima, J.* sp.	Trunks (wood)	L – M	
2.15	*Pissodes cembrae* Motsch.	*Curculionidae*	S. Siberia, N.E. Siberia, N. Far East, S. Far East	Absent	Northern China; Japan	*Pinus sibirica* (preferred host), *P. koraiensis, P. pumila, P.* sp., *Larix* sp., *Picea* sp., *Abies* sp.	Trunks and roots (under bark), twigs (at the additional feeding)	L – H	
2.16	*[Pissodes gallosi ? (= P. galloisi)]*	*Curculionidae*	S. Far East	No data	No data	*Pinus*, other coniferous	Trunks and roots (under bark)	L	

Table 2. INSECTS *COLEOPTERA*

2.17	*[Pissodes insignitus* Boh. *(= P. insignatus)]*	*Curculionidae*	N.E. Siberia, S. Siberia, Transbaik., N. Far East, S. Far East	Absent	Absent	*Pinus sibirica, P. pumila, Larix gmelinii, Larix sibirica, Larix* sp.	Trunks (under bark)	L – M	
2.18	*Pissodes irroratus* Reiit.	*Curculionidae*	N.E. Siberia, N. Far East, S. Far East	Absent	Absent	*Pinus sibirica, P. pumila, Larix gmelinii, Larix sibirica, Larix* sp., *Abies* sp., other coniferous	Trunks (under bark)	L – M	
2.19	*Pissodes (=P. strobi* Say.*) nemorensis* Germ.	*Curculionidae*	S. Far East	Canada, USA	Japan, South Africa	*Pinus funebris, P. koraiensis, P.* sp., *Picea*	Trunks (under bark)	L – M	
2.20	*Pissodes nitidus* Roel.	*Curculionidae*	N. Far East, S. Far East	Absent	Japan, China	*Pinus funebris, P. sylvestris, P. densiflora, P. koraiensis, P.* sp.	Trunks (under bark)	L – M	
2.21	*Agriotes gurgistanus* Faldermann	*Elateridae*	S. E. Russia ; Moldova; Ukraine; Transcaucasus; Turkmenistan	Absent	Balcanians; Turkey, south-eastern Europe	Deciduous, coniferous and other plants, mainly agricultural crops (cereals, etc.)	Roots	L – M	Main damage - to young plants and in nurseries
2.22	*Selatosomus latus* F	*Elateridae*	C. E. Russia, S. E. Russia, S. Siberia (West), Transbaik., S. Far East; Baltic countries; Belarus; Moldova; Ukraine; Transcaucasus	Absent	Central and southern Europe, China, Iran, Japan, Mongolia, Turkey	Deciduous, coniferous and other plants, mainly agricultural crops (sugarbeet, cereals, vegetables, etc.) except tomato and cabbage	Roots	L – M	Main damage - tn young plants and in nurseries
2.23	*Lethrus apterus* Laxmann	*Geotrupidae*	S. E. Russia, S. Siberia; Baltic countries; Belarus; Moldova; Ukraine, Tadjikistan	Absent	China, Netherlands	Deciduous, coniferous and other plants, mainly agricultural crops	Roots	L – M	Main damage - to young plants and in nurseries
2.24	*[Carphoborus jurinskii* Eggers*]*	*Scolytidae*	N.E.Siberia, N.W. Siberia, S. Siberia	Absent	Absent	*Picea, Pinus*	Trunks (under bark)	VL – L	
2.25	*[Cryphalus (=C. punctulatus* Eggers*) kurenzovi* Stark*]*	*Scolytidae*	S. Far East (including Sakhalin & Kuril islands)	Absent	Absent	*Abies nephrolepis* (preferred host), *Pinus pumila, Picea* sp.	Trunks (under bark)	VL – L	
2.26	*Cryphalus latus* Eggers	*Scolytidae*	Transbaik., S. Far East (including Sakhalin)	Absent	North-west China	*Larix gmelinii, Larix olgensis* (preferred hosts), *Picea ajanensis, Picea obovata, Abies nephrolepis, Abies holophylla*	Trunks (under bark)	VL – L	
2.27	*Cryphalus orientalis* Eggers	*Scolytidae*	Transcaucasus	Absent	Absent	*Abies nordmanniana, Picea orientalis,* other coniferous	Trunks & branches (under bark)	L – M	Main damage – to young trees

Table 2. INSECTS *COLEOPTERA*

2.28	*Cryphalus piceus* Eggers	*Scolytidae*	S. Far East (including Sakhalin)	Absent	North-east China, Japan	*Picea ajanensis, P. obovata, P. koraiensis* (preferred hosts), *Abies nephrolepis, A. holophylla* (preferred hosts), *Pinus funebris, Larix gmelinii, Larix olgensis*	Trunks (under bark)	VL – L	
2.29	*Cryphalus redikorzevi* Berger	*Scolytidae*	S. Far East (including Sakhalin & Kuril islands)	Absent	North-east China, Koreas	*Abies nephrolepis, A. holophylla* (preferred hosts), *Abies* spp., *Picea* spp.	Trunks (under bark)	VL – L	
2.30	*[Cryphalus sichotensis* Kur.*]*	*Scolytidae*	S. Far East (Primorie) (including Sakhalin)	Absent	Absent	*Picea ajanensis* (preferred host), *Picea* spp.	Trunks (under bark)	VL – L	
2.31	*[Cryphalus ussuriensis* Eggers*]*	*Scolytidae*	S. Far East (Primorie)	Absent	Absent	*Abies* spp.	Trunks (under bark)	VL – L	
2.32	*Crypturgus tuberosus* Niis.	*Scolytidae*	S. Far East (Primorie) (including Sakhalin)	Absent	Northern Japan	*Picea ajanensis* (preferred host), *P. glehnii, Pinus pumila, P. koraiensis*	Trunks (under bark)	VL – L	
2.33	*Dryocoetes abietinus* Kono et Tamanuki (= *D. striatus* Eggers)	*Scolytidae*	S. Far East (Sakhalin)	Absent	Japan	*Abies sachalinensis, A. nephrolepis, A. holophylla*	Trunks (under bark)	VL – L	
2.34	*Dryocoetes baicalicus* Reitter *(=D. budkovi* Sem.*)*	*Scolytidae*	Russia: widespread in coniferous area	Absent	Mongolia	*Larix sibirica, L. gmelinii, L. plgensis,* (preferred hosts), *Larix* spp., *Pinus korajensis, P. sibirica, Pinus* spp., *Abies nephrolepis, A. holophylla, Abies* spp.	Trunks (under bark)	VL – L	
2.35	[*Dryocoetes orientalis* Kur.]	*Scolytidae*	S. Far East (Primorie)	Absent	Absent	*Pinus korajensis* (preferred host), *Pinus* spp., *Abies* spp.	Trunks (under bark)	VL – L	
2.36	[*Dryocoetes pini* Niijima]	*Scolytidae*	S. Far East (Sakhalin)	Absent	Japan	*Pinus pumila* (preferred host), *Pinus* spp., *Larix* spp., *Abies* spp., *Picea* spp.	Trunks (under bark)	VL – L	
2.37	*Dryocoetes rugicollis* Eggers	*Scolytidae*	S. Far East (including Sakhalin & Kuril islands)	Absent	North-east China, Japan	*Picea obovata* (preferred host), *Picea* spp., *Abies nephrolepis, Abies* spp.	Trunks (under bark)	VL – L	
2.38	[*Hylurgops imitator* Reitter]	*Scolytidae*	N.E.Siberia, N.W. Siberia, N. Far East, S. Far East	Absent	China, Koreas, Japan	*Pinus korajensis* (preferred host), *Pinus* spp., *Picea ajanensis, Picea* spp., *Larix* spp.	Trunks (under bark)	VL – L	
2.39	[*Hylurgops interstitialis* Chapuis]	*Scolytidae*	S. Far East, N.E. Siberia (introduced)	Absent	Absent	*Pinus korajensis, Abies holophylla* (preferred hosts), *Abies nephrolepis, Abies* spp., *Pinus funebris, Pinus* spp., *Picea ajanensis, Picea* spp.	Trunks (under bark)	VL – L	
2.40	*Hylurgops longipilis* Reitt.	*Scolytidae*	N. Far East (introduced), S. Far East (including Sakhalin)	Absent	Absent	*Pinus korajensis* (preferred host), *Pinus* spp., *Larix gmelinii, Larix* spp., *Picea ajanensis, Picea* spp.	Trunks (under bark)	VL – L	

Table 2. INSECTS *COLEOPTERA*

2.41	*Hylurgops palliatus* Gyll. (= *H. parvus* Eggers = *H. helferi* Villa)	*Scolytidae*	N. E. Russia, C. E. Russia, N. W. Siberia, N. E. Siberia, S. Far East (Primorie) (including Sakhalin & Kuril islands); Kazakhstan	Absent	W. Europe, Japan, Koreas, China	*Pinus korajensis* (preferred host), *Pinus sibirica, P. pumila, Pinus* spp., *Picea* spp.	Trunks (under bark)	VL – L	
2.42	[*Hylurgops spessivtzevi* Eggers (= *H. tuberculatus* = *H. transbaicalicus*)]	*Scolytidae*	N.E.Siberia, N.W. Siberia, N. Far East, S. Far East (including Sakhalin)	Absent	North-east China	*Pinus korajensis* (preferred host), *P. sylvestris, Pinus* spp., *Picea obovata, Picea* spp., *Larix gmelinii, Larix* spp.	Trunks (under bark)	VL – L	
2.43	[*Hylurgops starki* Eggers (= H. cunicularius)]	*Scolytidae*	N. E. Russia, C. E. Russia, N.W. Siberia	Absent	Finland, Sweden	*Picea abies, Pinus sylvestris* (preferred hosts), *Picea* spp., *Pinus* spp., *Larix* spp.	Trunks (under bark)	VL – L	
2.44	[*Ips ussuriensis* Reitter]	*Scolytidae*	S. Far East (Primorie)	Absent	Absent	*Pinus* spp., *Picea* spp., *Abies* spp., *Larix* spp.	Trunks (under bark)	L – M	
2.45	*Phloeosinus turce-stranicus* Semenov	*Scolytidae*	Central Asia	Absent	Absent	*Juniperus pseudosabina, J. polycarpos, J excelsa, J. communis, Juniperus* spp.	Trunks (under bark)	L – H	
2.46	[*Phloeotribus caucasicus* Reitter]	*Scolytidae*	S.E. Russia; Baltic countries; Belarus; Moldova; Ukraine; Transcaucasus; Central Asia	Absent	Absent	*Fraxinus excelsior, Fraxinus* spp.	Trunks (under bark)	L	
2.47	[*Pityogenes aizawai* Kôno]	*Scolytidae*	S. Far East (Sakhalin)	Absent	Absent	*Picea* spp., *Abies* spp.	Trunks (under bark)	VL – L	
2.48	[*Pityogenes foveolatus* Eggers]	*Scolytidae*	N.E.Siberia, N.W. Siberia, S. Siberia, Transbaik., N. Far East, S. Far East	Absent	Japan	*Pinus pumila, Pinus* spp., *Picea ajanensis, Picea* spp.	Trunks (under bark)	L	
2.49	[*Pityogenes rudnevi* Sok.]	*Scolytidae*	S. Far East (Primorie)	Absent	Absent	*Picea* spp.	Trunks (under bark)	VL – L	
2.50	[*Pityogenes seirindensis* Murayama]	*Scolytidae*	S. Far East	Absent	Koreas, northern Japan	*Picea ajanensis*, *Picea obovata* (preferred hosts), *Picea* spp., *Abies nephrolepis, Abies* spp.	Trunks (under bark)	VL – L	
2.51	[*Pityophthorus jucundus* Blandford]	*Scolytidae*	S. Far East (Sakhalin)	Absent	Koreas, Japan	*Picea ajanensis* (preferred host), *Picea* spp., *Pinus* spp.	Trunks (under bark)	VL – L	
2.52	[*Pityophthorus kurenzovi* Krivolutskaja (= *P. abietis* Kurentzov = P. sibiricus Nunberg)]	*Scolytidae*	S. Far East (Primorie)	Absent	Absent	*Abies holophylla, Abies nephrolepis, Abies* spp.	Trunks (under bark)	VL – L	
2.53	[*Pityophthorus lapponicus* Stark]	*Scolytidae*	N. E. Russia, C. E. Russia, S. Far East	Absent	Absent	*Picea abies, Picea obovata, Picea* spp.	Trunks (under bark)	VL – L	

Table 2. INSECTS *COLEOPTERA*

2.54	[*Pityophthorus pini* Kurentzov]	*Scolytidae*	N.E.Siberia, N.W. Siberia, S. Siberia, N. Far East, S. Far East	Absent	Absent	*Pinus sibirica, P. koraiensis, Pinus* spp., *Picea* spp.	Trunks (under bark)	VL – L	
2.55	[*Pityophthorus rossicus* Eggers]	*Scolytidae*	C. E. Russia (Tambov)	Absent	Absent	*Pinus sylvestris, Pinus* spp.	Trunks (under bark)	VL – L	
2.56	[*Pityophthorus sachalinensis* Kriv.]	*Scolytidae*	S. Far East (Sakhalin)	Absent	Absent	*Abies sachalinensis, Abies* spp.	Trunks (under bark)	VL – L	
2.57	[*Pityophthorus sichotensis* Kurentzov]	*Scolytidae*	N.E.Siberia, N.W. Siberia, S. Siberia, S. Far East	Absent	Absent	*Picea ajanensis, Picea* spp.	Trunks (under bark)	VL – L	
2.58	*Polygraphus gracilis* Niijima	*Scolytidae*	S. Far East (including Sakhalin & Kuril islands)	Absent	Japan	*Picea ajanensis, Picea glehnii, Picea* spp., *Abies sachalinensis, Abies* spp.	Trunks (under bark)	VL – L	
2.59	*Polygraphus griseus* Eggers	*Scolytidae*	N. E. Russia (Kolsk peninsula)	Absent	Sweden, Finland	*Picea obovata, Picea* spp.	Trunks (under bark)	VL – L	
2.60	*Polygraphus jezoensis* Niijima	*Scolytidae*	N. Far East, S. Far East (including Sakhalin)	Absent	Japan	*Picea ajanensis, Picea glehnii, Picea* spp., *Pinus* spp.	Trunks (under bark)	VL – L	
2.61	*Polygraphus proximus* Blandford (= P. *abietis* Kurentzov = *P. laticollis* Eggers = *P. miser* Blandford)	*Scolytidae*	S. Far East (including Sakhalin & Kuril islands)	Absent	North Korea, Japan, China	*Abies holophylla, A. sachalinensis, A. nephrolepis* (preferred hosts), *A.* spp., *Pinus koraiensis, Pinus* spp., *Picea ajanensis, Picea* spp., *Tsuga* spp.	Trunks (under bark)	L – M	
2.62	*Polygraphus subopacus* Thoms (= *P. sachalinensis* Eggers)	*Scolytidae*	N.E. Siberia, N. Far East, S. Far East (including Sakhalin & Kuril islands)	Absent	Japan, Koreas, Mongolia, Europe	*Picea ajanensis, P. koraiensis* (preferred hosts), *P.* spp., *Pinus* spp.	Trunks (under bark)	VL – L	
2.63	*Pteleobius kraatzi* Eichhoff	*Scolytidae*	C. E. Russia, S. E. Russia; Baltic countries; Belarus; Moldova; Ukraine; Transcaucasus	Absent	Southern and central Europe, Turkey	*Ulmus campestris, U. effusa, U. montana, Ulmus* spp., *Sorbus aucuparia, Sorbus* spp.	Trunks (under bark)	VL – L	
2.64	*Pteleobius vittatus* F	*Scolytidae*	C. E. Russia, S. E. Russia; Belarus; Ukraine; Transcaucasus	Absent	Southern and central Europe, Turkey	*Ulmus campestris, U. effusa, U. montana, U. pumila, Ulmus* spp.	Trunks (under bark)	VL – L	
2.65	*Scolytoplatypus tycon* Blandford	*Scolytidae*	S. Far East (including Sakhalin & Kuril islands)	Absent	China, Japan, Koreas	*Picea ajanensis, P.* spp., *Abies holophylla, A.* spp., *Pinus koraiensis, P.* spp., *Juglans mandshurica, J.* spp., *Populus tremula, P.* spp., *Fraxinus mandshurica, F.* spp., *Phellodendron amurense, Acer mandshuricum, A. mono, A. pictum, A. pseudosieboldianum, A. barbinerve, Acer* spp., *Lindera thunbergi, Alnus hirsuta, Alnus* spp.	Trunks (under bark)	L – M	

Table 2. INSECTS *COLEOPTERA*

2.66	[*Scolytus amurensis* Eggers]	*Scolytidae*	S. Siberia (East), Transbaik., N. Far East, S. Far East (including Sakhalin)	Absent	Absent	*Betula verrucosa, B. costata, B. japonica, Betula* spp.	Trunks (under bark)	L – M	
2.67	*Tomicus (=Blastophagus) pilifer* Spessivtsev	*Scolytidae*	S. Far East	Absent	Absent	*Pinus korajensis* (preferred host), *P.* spp.	Trunks (under bark)	L	
2.68	*Tomicus puellus* Reitter (=*Blastophagus starki)*	*Scolytidae*	S. Far East (mountains)	Absent	Absent	*Picea ajanensis*, (preferred host), *P.* spp., *Abies holophylla, A. nephrolepis, Abies* spp., *Pinus* spp., *Larix* spp., *Tsuga* spp.	Trunks (under bark)	L – M	
2.69	[*Trypodendron granulatum* Eggers]	*Scolytidae*	N.E.Siberia, N.W. Siberia, S. Siberia, Transbaik., N. Far East, S. Far East (including Sakhalin)	Absent	Mongolia	*Pinus sibirica, Pinus korajensis* (preferred hosts), *Pinus* spp., *Larix* spp.	Trunks (wood)	L – M	
2.70	[*Trypodendron pubipennis* Blandford (T. *pubipennum*)]	*Scolytidae*	S. Far East (including Sakhalin & Kuril islands)	Absent	Japan, Koreas	*Betula japonica, Betula* spp., *Phyllanthus flexuosus, Phyllanthus* spp., *Ficus caria, Ficus* spp., other broadleaves	Trunks (wood)	VL – L	
2.71	[*Xyleborus aequalis* Reitter] (=*Anisandrus aequalis* Reitter)	*Scolytidae*	N.E. Siberia, Transbaik.; S. Far East	Absent	Absent	*Abies holophylla, A. nephrolepis, A.* spp., *Picea ajanensis, Pinus korajensis, P. pumila, P. funebris, P.* spp., *Juniperus communis, J.* spp., *Taxus cuspidata, Populus tremula, Paulownia tomentosa, Ailantes glandulosa, Kalopanax ricinifolium, Akebia quinata, Aralia manshurika, Phellodendron amurense, Fraxinus mandshurica, Betula alba, B. costata, B. dahurica, B. japonica, B.* spp., *Taxus japonica, Vitis amurensis, Gingko biloba, Vistaria sinensis, Carpinus japonica, C. cortada, Malus* spp., *Quercus mongolica, Salix* spp., *Acer ukurunduense, A. mono, A. pictum, A. mandshuricum, A. barbinerve, A.* spp., *Schisandra chinensis, Corylus mandshurica, C. heterophylla, Tilia cordata, T. amurensis, Alnus hirsuta, A. fruticosa, Juglans mandshurica, Rhododendron dahuricum, Sorbus amurensis, Syringa amurensis, Acanthopanax sessiliflora, Rhus succedanea, Spiraea mongolica, S. amurensis, Prunus padus, Morus alba*, etc.	Trunks (under bark)	VL – L	

Table 2. INSECTS COLEOPTERA, *DIPTERA* & HYMENOPTERA

2.72	*Xyleborus eurygraphus* Ratzeburg	*Scolytidae*	N. E. Russia, C. E. Russia, S.E. Russia; Baltic countries; Belarus; Moldova; Ukraine; Transcaucasus	Absent	Southern and central Europe (Poland, Czeckia, Slovakia, Germany, Austria, France, Italy, Yugoslavia, etc.)	*Pinus sylvestris*	Trunks (under bark)	VL – L	
					Diptera				
2.73	*Strobilomyia [Lasiomma] baicalense ?*	*Anthomyiidae*	S. Siberia, Transbaik.	Absent	Absent	*Larix* spp.	Cones and seeds	L	
2.74	*Strobilomyia [Lasiomma) sibirica ??*	*Anthomyiidae*	S. Siberia, Transbaik	Absent	Finland	*Larix* spp.	Cones and seeds	L-M	Data of Dr. Alain Roques
2.75	*Strobilomyia [Lasiomma) svenssoni ??*	*Anthomyiidae*	S. Siberia, Transbaik	Absent	Sweden, Mongolia, China	*Larix* spp., *Picea* spp.	Cones and seeds	L-M	Data of Dr. Alain Roques
2.76	*Resseliella [Thomasiniana] sibirica* Mam. *[Camptomyia laricis]*	*Cecidomyiidae*	Russia: widespread in the *Larix* area; Baltic countries; Belarus, Ukraine	Absent	Absent	*Larix sibirica, Larix* spp.	Cones and seeds	L	
					Hymenoptera				
2.77	*Megastigmus bipunctatus* Swederus (= M. kuntzei Kapuscinski)	*Torymidae*	N. E. Russia, C. E. Russia, S.E. Russia; Baltic countries; Belarus, Ukraine	Absent	Western Europe	*Juniperus communis, J.* spp.	Seeds	L – M	
2.78	*Megastigmus borriesi ??*	*Torymidae*	S. Far East	Absent	Japan, Denmark	*Abies* spp.	Seeds	L-M	Data of Dr. Alain Roques
2.79	*Megastigmus certus ?*	*Torymidae*	Central Asia	Absent	Absent	*Juniperus* spp.	Seeds	L – M	
2.80	*Megastigmus fidus ?*	*Torymidae*	N.E.Siberia, N.W. Siberia, S. Siberia, Transbaik.	Absent	Absent	*Juniperus* spp.	Seeds	L – M	
2.81	*Megastigmus gravis ??*	*Torymidae*	Transcaucasus	Absent	Absent	*Juniperus* spp.	Seeds	L – M	Data of Dr. Alain Roques
2.82	*Megastigmus juniperi* Nik.	*Torymidae*	Central Asia	Absent	Absent	*Juniperus* spp.	Seeds	L – M	
2.83	*Megastigmus validus ?*	*Torymidae*	Central Asia	Absent	Absent	*Juniperus* spp.	Seeds	L – M	

Table 2. INSECTS LEPIDOPTERA

				Lepidoptera					
2.84	*Coleophora sibiricella ? [= C. sibirica ?]*	*Coleophoridae*	S. Siberia	Absent	Absent Finland - ?	*Larix*	Needles	L – M	Main damage – esthetic damage
2.85	*[Anacampsis blattariella* Hbn.*]*	*Gelechiidae*	N. E. Russia, C. E. Russia, S. Siberia (East); Transbaik., S. Far East	Absent	Northern and central Europe	*Betula mandshurica, B. pendula, B. pubescens, Betula* spp.	Leaves	L - M	
2.86	*Eupithecia gigantea ?*	*Geometridae*	S. Far East, N. Far East	Absent	Japan	*Abies*	Cones and seeds	L	Data of Dr. Alain Roques
2.87	*Semiothisa pumila* Kusnezov *[= Semiothisa (= Macaria) continuaria* Ev.*]*	*Geometridae*	S. Siberia, Transbaik., S. Far East	Absent	Absent	*Larix*	Needles	L – M	
2.88	*Vanessa xanthomelas* Esp.	*Nymphalidae*	C. E. Russia, S. E. Russia, S. Siberia, S. Far East; Baltic countries; Belarus; Moldova; Ukraine	Absent	Absent	*Salix, Betula, Alnus*	Leaves	L	
2.89	*Barbara fulgens* Kuznetsov	*Tortricidae*	S. Far East	Absent	Northern China	*Picea obovata, P. sibirica, P. koraiensis, P. ajanensis, Picea* spp., *Abies holophylla, Abies* spp.	Cones and seeds	VL - L	Data of Dr. Alain Roques
2.90	*Retinia* (= *Petrova = Semasia*) *perangustana* Snelb (= *Eucosma impropria = Laspeyresia zonovae* Flor)	*Tortricidae*	C.E. Russia (introduced), N.E. Siberia, N.W. Siberia, S. Siberia, Transbaik., S. Far East	Absent	Widespread in Europe (Czeckia, Slovakia, Poland - introdiced), north-eastern China, Mongolia	*Larix sibirica, L. gmelinii* (preferred hosts), *Larix* spp.	Cones and seeds	L – H	According to Dr. A. Roques
2.91	*Retinia lemniscata* Kuznetsov	*Tortricidae*	S. Far East	Absent	Absent	*Picea koraiensis, Picea* spp.	Cones and seeds	L	Data of Dr. Alain Roques]
2.92	*Retinia monopunctata [R.pini]*	*Tortricidae*	S. Far East	Absent	Japan, China	*Pinus koraiensis* (preferred host), *P. strobus, Pinus* spp., *Abies holophylla, A. sachalinensis, A. homolepis, Abies* spp., *Picea glehnii, P. polita, P. abies, P. ajanensis, Picea* spp., *Larix kaempferi, Larix* spp.	Cones and seeds	L-M	Data of Dr. Alain Roques

Table 3a. INSECTS COLEOPTERA

Table 3a. Forest pests causing significant damage on the territory of the former USSR, which are also present in Central/Western Europe

N°	Pest	Group of organisms	Distribution			Main host plants in the former USSR	Damaged parts of plants	Economic significance in area of origin	Remarks
			In the former USSR	In North America	In other countries				
Insecta									
Coleoptera									
3a.1	*Anobium punctatum* Deg. *[= A. domesticum* Geoffr.*]*	*Anobiidae*	Russia: widespread except Far East; Baltic countries; Belarus; Moldova; Ukraine; Transcaucasus	Present	Western Europe; New Zealand	Coniferous	Wood	M – VH	Main damage – to wood in buildings, furniture, etc.
3.2	*Hadrobregmus pertinax ? [Anobium pertinax* F.*]*	*Anobiidae*	N Russia: widespread except Far East; Baltic countries; Belarus; Moldova; Ukraine; Transcaucasus	Not known	Western Europe, HU	Coniferous	Wood	L – H	Main damage – to cut trees, wood in buildings, furniture, etc.
3a.3	*Amphicerus bimaculatus ?.[Schistoceros bimaculatus* Ol.*]*	*Bostrichidae*	Ukraine; Transcaucasus; Central Asia	Not known	Southern Europe; Northern Africa; Syria	Deciduous and coniferous	Wood, *Vitis* and fruit trees branches	L – M	Main damage – to wood in buildings
3a.4	*Bostrichus capucinus* L.	*Bostrichidae*	C. E. Russia, S. E. Russia, S. Siberia; Baltic countries; Belarus; Moldova; Ukraine; Transcaucasus; Central Asia	USA (limited distribution – NJ)	Western Europe	*Quercus*, other deciduous	Wood, trunks of *Quercus, Morus, Vitis*	L – H	Main damage – to parquet, wood in buildings, telegraph poles, sleepers
3a.5	*Lichenophanes varia* ? *[L. varius ?]*	*Bostrichidae*	C. E. Russia, S. E. Russia; Ukraine; Transcaucasus	Not known	South and Centre of Western Europe	*Buxus*, *Quercus*, other deciduous	Wood	L – M	Main damage – to wood in buildings
3a.6	*Rhyzopertha [Rhizopertha] dominica ?*	*Bostrichidae*	Ukraine	Widespread	Cosmopolitan	Deciduous and coniferous	Wood	L – M	Main damage – to wood in buildings
3a.7	*Scobicia pustulata* Kies.*[= S. chevrieri* Vill.*]*	*Bostrichidae*	S. E. Russia; Ukraine; Transcaucasus; Central Asia	Not known	Southern Europe; Northern Africa; Syria; Iran	Deciduous and coniferous	Wood	L – M	Main damage – to wood in buildings
3a.8	*Stephanopachys linearis* Kug.	*Bostrichidae*	S. E. Russia, S. Siberia; Ukraine; Transcaucasus; Central Asia	Not known	Western Europe	*Pinus*, *Picea*, some other coniferous	Wood, under bark	L – M	Main damage – to wood in buildings
3a.9	*Sinoxylon perforans* Schrnk.	*Bostrichidae*	S. E. Russia ; Ukraine; Transcaucasus; Central Asia	Absent	Balcans	*Quercus*, *Vitis*, other deciduous	Wood and stems of young plants	L – H	Main damage – to wood in buildings and to vineyards
3a.10	*Xylopertha retusa ?. [Xylonites retusus* Ol.*]*	*Bostrichidae*	S. E. Russia, S. Siberia; Moldova; Ukraine; Transcaucasus; Central Asia	Absent	South and Centre of Western Europe	*Quercus* and other deciduous	Wood	L – M	Main damage – to wood in buildings

Table 3a. INSECTS COLEOPTERA

3a.11	*Agrilus angustulus* Ill.	*Buprestidae*	C. E. Russia, S. E. Russia, S. Siberia; Baltic countries; Belarus; Moldova; Ukraine; Transcaucasus	Not known	Western Europe; Northern Africa; Turkey	*Quercus, Fagus, Castanea*	Trunks (under bark)	L – M	Main damage – to plantations in the steppes
3a.12	*Agrilus ater* L.	*Buprestidae*	N. E. Russia, C.E. Russia, S.E. Russia; Baltic countries; Belarus; Moldova; Ukraine	Not yet checked	FI, HU	*Populus, Salix*	Trunks (under bark)	L	
3a.13	*Agrilus betuleti* Rtzb.	*Buprestidae*	Russia: widespread in forest zone; Baltic countries; Belarus	Not yet checked	Northern and Central Europe	*Betula*	Trunks (under bark)	L	
3a.14	*Agrilus elongatus* Hbst.	*Buprestidae*	N. E. Russia, C. E. Russia, S.E. Russia; Baltic countries; Belarus; Moldova; Ukraine; Transcaucasus	Not yet checked	Not yet checked	*Quercus, Fagus*	Trunks (under bark)	VL – L	
3a.15	*Agrilus pannonicus ? [Agrilus biguttatus* F.*]*	*Buprestidae*	N. E. Russia, C. E. Russia, S.E. Russia; Baltic countries; Belarus; Moldova; Ukraine; Transcaucasus	Not yet checked	HU, UK	*Quercus*	Trunks (under bark)	L	
3a.16	*Agrilus viridis* L.	*Buprestidae*	Russia: widespread; Baltic countries; Belarus; Moldova; Ukraine; Transcaucasus	Not known	Western Europe; IT; Northern Africa	*Populus* (including *P. tremula*), *Acer, Salix, Fagus,* other deciduous	Trunks (under bark)	L – H	
3a.17	*Chrysobothris affinis* F.	*Buprestidae*	N. E. Russia, C. E. Russia, S.E. Russia; Baltic countries; Belarus; Moldova; Ukraine; Transcaucasus; Kazakhstan; Central Asia	Not yet checked	HU	*Quercus, Fagus, Ulmus*	Trunks (under bark)	L	
3a.18	*Melanophila [= Phaenops] cyanea* F.	*Buprestidae*	Russia: widespread in pine area; Baltic countries; Belarus; Moldova; Ukraine; Transcaucasus; Kazakhstan; Central Asia	Not yet checked	DE; HU	*Pinus*	Trunks (under bark)	L	
3a.19	*Poecilonota variolosa* Payk.	*Buprestidae*	Russia: widespread except Far East; Baltic countries; Belarus; Moldova; Ukraine; Transcaucasus; Kazakhstan	Not yet checked	SE; NO; Northern Africa	*Populus*	Trunks (under bark)	L – M	
3a.20	*Trachypteris decostigma [= Melanophila decastigma* F.*]*	*Buprestidae*	S. E. Russia ; Ukraine; Transcaucasus	Absent	South of Europe; Northern Africa; Turkey; Syria	*Populus, Salix, Fraxinus*	Trunks (under bark)	L – M	
3a.21	*Trachypteris [= Melanophila] picta* Pall.	*Buprestidae*	C. E. Russia (East), S. E. Russia (East), S. Siberia (West); Kazakhstan; Central Asia	Absent	Iran; Northern China; HU	*Populus, Salix*	Trunks (under bark)	L – M	Main damage – on 1-2 year-old plantations
3a.22	*Acanthocinus aedilis* L.	*Cerambycidae*	Russia: widespread in pine area; Baltic countries; Belarus; Moldova; Ukraine	Not yet checked	Europe	*Pinus*	Trunks (under bark)	L	

Table 3a. INSECTS COLEOPTERA

3a.23	*Acanthocinus griseus* F.	*Cerambycidae*	N.E.Siberia, N.W. Siberia, S.Siberia, S. Far East	Not yet checked	Europe; Japan	*Picea*	Trunks (wood)	VL – L	
3a.24	*Arhopalus rusticus* (повтор)	*Cerambycidae*	Russia: widespread in coniferous area	Not yet checked	Western Europe, Japan	*Picea*, *Pinus*, other coniferous	Trunks (wood)	VL – L	
3a.25	*Arhopalus [= Criocephalus] rusticus* L.	*Cerambycidae*	Russia: widespread in pine area; Baltic countries; Belarus; Moldova; Ukraine	Not yet checked	Not yet checked	*Pinus*	Trunks and roots (under bark)	VL – L	
3a.26	*Callidium violaceum* L.	*Cerambycidae*	Russia: widespread; Baltic countries; Belarus; Moldova; Ukraine; Transcaucasus	Not known	Western Europe; Northern Mongolia; Northern China; Korea; Japan	Coniferous and deciduous	Wood (under bark)	L – M	The main damage – to dead trees, cut trees with bark, etc.
3a.27	*Callipogon relictus* Sem.	*Cerambycidae*	S. Far East	Not yet checked	China, Japan	*Quercus*, *Fraxinus*, *Ulmus* and other trees	Trunks (wood)	VL – L	
3a.28	*Cerambyx cerdo* L.	*Cerambycidae*	S. E. Russia ; Ukraine; Transcaucasus	Absent	Western Europe; Northern Africa	*Quercus*, other deciduous	Trunks (wood)	L – H	In the former USSR – two subspecies
3a.29	*Cerambyx scopoli ? [C. scopolii* Füssl.*]*	*Cerambycidae*	S. E. Russia; Ukraine; Transcaucasus	Absent	Western Europe; Northern Africa	*Quercus*, *Fagus*, other deciduous	Trunks (wood)	L – M	
3a.30	*Clytus arietis* L.	*Cerambycidae*	N. E. Russia, C. E. Russia, S.E. Russia; Baltic countries; Belarus; Moldova; Ukraine; Transcaucasus; Turkmenistan	Not yet checked	Europe	*Quercus*, *Vitis*, other deciduous including fruit trees	Trunks (wood and under bark)	VL – L	
3a.31	*Hylotrupes bajulus* L.	*Cerambycidae*	Russia: widespread except Far East; Baltic countries; Belarus; Moldova; Ukraine; Transcaucasus	Present	Western Europe; Northern Africa; China	Coniferous and deciduous	Wood	M – VH	Main damage – to wood in buildings, telegraph poles, sleepers, etc.
3a.32	*Lamia textor* L.	*Cerambycidae*	Russia: widespread except Far East; Baltic countries; Belarus; Moldova; Ukraine; Transcaucasus; Kazakhstan (North)	Absent	Western Europe	*Salix*, *Populus*, *Alnus*	Trunks (under bark)	L - M	
3a.33	*Mesosa curculionoides* L.	*Cerambycidae*	Russia: widespread; Baltic countries; Belarus; Moldova; Ukraine; Kazakhstan	Not yet checked	Europe	*Quercus*, *Ulmus*, *Populus*, other deciduous	Trunks (under bark)	VL – L	
3a.34	*Mesosa myops* Dalm.	*Cerambycidae*	Russia: widespread; Baltic countries; Belarus; Moldova; Ukraine; Kazakhstan	Not yet checked	Europe	*Quercus*, *Ulmus*, *Populus*, other deciduous	Trunks (under bark)	VL – L	

Table 3a. INSECTS COLEOPTERA

3a.35	*Monochamus galloprovincialis* Ol.	*Cerambycidae*	Russia: widespread in pine area; Baltic countries; Belarus; Moldova; Ukraine; Transcaucasus	Absent	Western Europe; Turkey; Northern Mongolia	*Pinus*, other coniferous	Trunks (wood)	L – H	Vector of *Bursaphelenchus mucronatus*
3a.36	*Monochamus saltuarius* Gebl.	*Cerambycidae*	Russia: widespread in coniferous area; Baltic countries; Belarus; Ukraine	Absent	Western Europe; Northern Mongolia; Northern China; Japan; Korea	*Pinus*, *Picea*, *Abies*, other coniferous	Trunks (wood)	L – M	Vector of *Bursaphelenchus mucronatus*
3a.37	*Monochamus sartor* F.	*Cerambycidae*	Ukraine (Carpathians)	Absent	Western Europe	*Picea*, *Abies*	Trunks (wood)	L – M	
3a.38	*Monochamus sutor* L.	*Cerambycidae*	Russia: widespread in spruce area; Baltic countries; Belarus; Moldova; Ukraine	Absent	Western Europe; Mongolia; Northern China; Japan; Korea	*Picea*, *Abies*, other coniferous	Trunks (wood)	M – VH	Vector of *Bursaphelenchus mucronatus*
3a.39	*Monochamus urussovii* ? *[M. urussovi* Fisch.*]*	*Cerambycidae*	Russia: widespread in spruce area; Baltic countries; Belarus; Moldova	Absent	Western Europe; Mongolia; Northern China; Japan; Korea	*Picea*, *Abies*, other coniferous	Trunks (wood)	M – VH	
3a.40	*Oberea oculata* L.	*Cerambycidae*	Russia: widespread except Far East; Baltic countries; Belarus; Moldova; Ukraine; Transcaucasus; Kazakhstan	Not known	Western Europe	*Salix*, *Populus*	Trunks (wood)	L - M	
3a.41	*Plagionotus arcuatus* L.	*Cerambycidae*	N. E. Russia, C. E. Russia, S.E. Russia; Baltic countries; Belarus; Moldova; Ukraine; Transcaucasus	Not yet checked	Europe	*Quercus*, *Carpinus*, *Pyrus*, *Castanea*, *Fagus*	Trunks (under bark)	VL – L	
3a.42	*Rhagium inquisitor* L.	*Cerambycidae*	Russia: widespread except Far East; Baltic countries; Belarus; Ukraine	Nova Scotia (CA)	Europe	*Pinus*, *Picea*, other coniferous	Trunks (under bark)	VL – L	
3a.43	*Saperda carcharias* L.	*Cerambycidae*	Russia: widespread in aspen area; Baltic countries; Belarus; Moldova; Ukraine; Transcaucasus	Not known	Western Europe	*Populus tremula*, other *Populus*, *Salix*	Trunks (wood)	L – M	The main damage – on 20-30 year-old plantations
3a.44	*Saperda populnea* L.	*Cerambycidae*	Russia: widespread except Far East; Baltic countries; Belarus; Moldova; Ukraine; Transcaucasus	West of Canada (introduced); West of USA (introduced)	Western Europe	*Populus tremula*, other *Populus*, *Salix*	Trunks and branches (wood)	L – H	The main damage - to young trees
3a.45	*Saperda punctata* L.	*Cerambycidae*	C. E. Russia, S. E. Russia ; Baltic countries; Belarus; Moldova; Ukraine; Transcaucasus	Not known	Southern Europe	*Ulmus*	Trunks (under bark)	L - M	
3a.46	*Saperda scalaris* L.	*Cerambycidae*	Russia: widespread except Far East; Baltic countries; Belarus; Moldova; Ukraine; Transcaucasus	Not yet checked	Europe	*Alnus*, *Populus*, *Betula*, *Quercus*, other deciduous	Trunks (under bark)	L	

Table 3a. INSECTS COLEOPTERA

3a.47	*Spondylis buprestoides* L.	*Cerambycidae*	Russia: widespread in pine area; Baltic countries; Belarus; Moldova; Ukraine	Not yet checked	Western Europe, Japan, China	*Pinus*	Trunks and roots (under bark)	VL – L	
3a.48	*Stromatium fulvum* Vill. *[=S. unicolor* Oliv.*]*	*Cerambycidae*	S. E. Russia (North Caucasus); Ukraine (Crimea); Transcaucasus	Present (no data on distribution); Cuba (introduced)	Southern Europe; Northern Africa; Brazil (introduced)	Deciduous and coniferous	Wood	L – H	The main damage - to wood in buildings, furniture, etc.
3a.49	*Tetropium aquilonium* ?	*Cerambycidae*	Russia: widespread except Far East; Baltic countries; Belarus; Moldova; Ukraine	Not yet checked	Europe	*Pinus*, other coniferous	Trunks (under bark)	VL – L	
3a.50	*Tetropium castaneum* L.	*Cerambycidae*	Russia: widespread in spruce area; Baltic countries; Belarus; Moldova; Ukraine	Not yet checked	Europe	*Picea*, other coniferous	Trunks (under bark)	L	
3a.51	*Tetropium fuscum* F.	*Cerambycidae*	Russia: widespread in spruce area; Baltic countries; Belarus; Moldova; Ukraine	Halifax, Nova Scotia (CA) – under eradicat.	Europe	*Picea*, other coniferous	Trunks (under bark)	L	
3a.52	*Tetropium gabrieli* Weise.	*Cerambycidae*	N. E. Russia, C. E. Russia, S.E. Russia; Baltic countries; Belarus; Moldova; Ukraine	Not yet checked	Europe	*Larix*, other coniferous	Trunks (under bark)	L	
3a.53	*Xylotrechus rusticus* L.	*Cerambycidae*	Russia: widespread; Baltic countries; Belarus; Moldova; Ukraine; Transcaucasus; Kazakhstan; Central Asia	Not yet checked	Europe	*Populus*, *Salix*, many other deciduous	Trunks (under bark)	L	
3a.54	*[Haltica saliceti* Wse.*] (*possibly - *H. quercetorum* Foudr.*)*	*Chrysomelidae*	S. E. Russia; Moldova; Ukraine; Transcaucasus	Absent	Southern and Central Europe	*Quercus*	Leaves	L – M	Main damage - to young trees
3a.55	*Chrysomela [Melasoma] populi* L.	*Chrysomelidae*	C.E. Russia, S.E. Russia, N.E. Siberia, N.W. Siberia, S. Siberia, S. Far East; Baltic countries; Belarus; Moldova; Ukraine; Transcaucasus; Central Asia	Not known	Western Europe	*Populus* (including *P. tremula*), *Salix*	Leaves	L – M	Main damage - to young trees in plantations and nurseries
3a.56	*Chrysomela tremula ? [Melasoma tremulae* F.*]*	*Chrysomelidae*	Russia: widespread except Far East; Baltic countries; Belarus; Moldova; Ukraine; Transcaucasus; Central Asia	Present	Western Europe	*Populus* (including *P. tremula*), *Salix*	Leaves	L – M	Main damage - to young trees in plantations and nurseries
3a.57	*Pyrrhalta [Galerucella] luteola* Müll.	*Chrysomelidae*	S. E. Russia ; Moldova; Ukraine; Transcaucasus; Central Asia	USA (widespread, introduced)	Western Europe; Turkey; Iran; Algeria	*Ulmus*	Leaves	L – M	Main damage - to young trees
3a.58	*Apoderus coryli*	*Curculionidae (= Attelabidae)*	Widespread except extreme North	Not yet checked	All Europe, China, Japan, Koreas, Mongolia	*Corylus*, *Alnus*, *Fagus*, *Carpinus*, *Quercus*, *Betula*	Leaves	L – M	
3a.59	*Bradybatus creutzeri* Germ.	*Curculionidae*	S. E. Russia ; Ukraine	Absent	South of Western Europe	*Acer*, *Quercus*	Fruits	L - M	

Table 3a. INSECTS COLEOPTERA

3a.60	*Bradybatus tomentosus ?*	*Curculionidae*	S. E. Russia ; Ukraine	Not yet checked	Europe	*Acer*	Fruits	L	
3a.61	*Byctiscus betulae* L. (=*B. betuleti* F.)	*Curculionidae*	Russia: widespread; Baltic countries; Belarus; Moldova; Ukraine; Transcaucasus; Turkmenistan; Kazakhstan (North)	Absent	Western Europe; Turkey; Syria	*Populus, Betula, Tilia, Fagus, Acer, Ulmus,* other deciduous	Leaves	L – M	Main damage – to young trees
3a.62	*Cryptorhynchus [Cryptorrhynchus] lapathi* L.	*Curculionidae*	Russia: widespread; Baltic countries; Belarus; Moldova; Ukraine	USA (introduced)	Western Europe; Japan	*Salix*, *Populus*, *Alnus*	Trunks (wood and under bark)	L – M	Main damage – to young trees
3a.63	*Curculio glandium* Marsh.	*Curculionidae*	Russia: widespread; Baltic countries; Belarus; Ukraine; Moldova; Transcaucasus	Not known	Western Europe	*Quercus*	Acorns	M - H	
3a.64	*Curculio nucum* L.	*Curculionidae*	Russia: widespread; Baltic countries; Belarus, Ukraine, Moldova, Transcaucasus	Not known	Western Europe; Syria; Algeria	*Corylus, Quercus*	Fruits	L - M	
3a.65	*Hylobius abietis* L.	*Curculionidae*	Russia: widespread in pine area; Baltic countries; Belarus; Moldova; Ukraine; Transcaucasus; Kazakhstan	Not known	Western Europe; Japan	*Pinus*, *Picea*, other coniferous	Trunks (under bark), buds and young sprouts	L – H	The main damage – to young trees and young plantations
3a.66	*Lignyodes enucleator* Panz.	*Curculionidae*	S. E. Russia; Ukraine; Transcaucasus	Not known	Western Europe	*Fraxinus, Quercus*	Fruits	M	
3a.67	*Magdalis armigera* Geoffr.	*Curculionidae*	S. E. Russia; Moldova; Ukraine	Not yet checked	Europe	*Ulmus*	Trunks (under bark)	VL – L	
3a.68	*Pissodes castaneus* ? *[P. notatus* F.*]*	*Curculionidae*	Russia: widespread in pine area; Baltic countries; Belarus; Moldova; Ukraine; Transcaucasus	Not known	Europe (widespread); Turkey, Algeria, Morocco	*Pinus*, other coniferous	Trunks (under bark)	L – H	Main damage - to young trees and 4 – 15 year-old plantations
3a.69	*Pissodes gyllenhali* Gyll.	*Curculionidae*	N. Far East, S. Far East	Not known	Not known; Europe	*Pinus pumila*, other coniferous	Trunks and roots (under bark)	L – M	
3a.70	*Pissodes harcyniae* Hrbst.	*Curculionidae*	Russia: widespread in spruce area; Baltic countries; Belarus; Moldova; Ukraine	Not known	Europe	*Picea*	Trunks (under bark)	L – H	
3a.71	*Pissodes piceae* Ill.	*Curculionidae*	Ukraine (the Carpathians), Transcaucasus	Not known	Western Europe	*Abies*, *Picea*, *Pinus*	Trunks (under bark)	L – M	
3a.72	*Pissodes pini* L.	*Curculionidae*	Russia: widespread in pine area; Baltic countries; Belarus; Moldova; Ukraine; Transcaucasus	Not yet checked	Europe	*Pinus*	Trunks (under bark)	L	
3a.73	*Pissodes piniphilus* Hrbst	*Curculionidae*	Russia: widespread in pine area; Baltic countries; Belarus; Moldova; Ukraine	Not known	Western Europe	*Pinus*	Trunks (under bark)	L – M	Main damage - to young pine plantations

Table 3a. INSECTS COLEOPTERA

3a.74	*Pissodes scabricollis* Mill.	*Curculionidae*	Russia: widespread in pine and larch area; Baltic countries; Belarus; Moldova; Ukraine	Not yet checked	Europe	*Pinus*, *Larix*, *Picea*	Trunks (under bark)	L	
3a.75	*Pissodes validirostris* Gyll.	*Curculionidae*	Russia: widespread in pine area; Baltic countries; Belarus, Ukraine, Kazakhstan	Not known	Widespread in Europe	*Pinus*	Cones and seeds	M - H	
3a.76	*Pselactus [= Codiosoma] spadix* Hrbst.	*Curculionidae*	N. E. Russia, C. E. Russia, S.E. Russia; Baltic countries; Belarus; Moldova; Ukraine	Present	Western Europe; Australia; New Zealand	*Pinus*, other coniferous	Wood	L – M	Main damage - to damp wood in buildings
3a.77	*Stereonychus fraxini* Deg.	*Curculionidae*	Moldova	Absent	Bulgaria; France; Romania; UK; Yugoslavia; HU; Northern Africa	*Fraxinus*	Leaves	M – H	
3a.78	*Agriotes lineatus* L.	*Elateridae*	N. E. Russia, C. E. Russia, S.E. Russia, N.W. Siberia, S. Siberia (West); Baltic countries; Belarus; Moldova; Ukraine; Transcaucasus; Kazakhstan; Turkmenistan	Canada (limited distribution – BC, NF, NS); USA (limited distribution)	Europe (widespread); Iran; Israel	Deciduous, coniferous and other plants	Roots	L	Main damage - tn young plants and in nurseries
3a.79	*Agriotes sputator* L.	*Elateridae*	S. E. Russia, S. Siberia (West); Moldova; Ukraine; Transcaucasus	Not known	Western Europe	Deciduous, coniferous and other plants	Roots	L – M	Main damage - to young plants and in nurseries
3a.80	*Agrypnus [Brachylacon] murinus ?*	*Elateridae*	Russia: widespread; Baltic countries; Belarus; Moldova; Ukraine; Transcaucasus; Kazakhstan; Central Asia	Not yet checked	Europe	Deciduous, coniferous and other plants	Roots, seeds	L	Main damage - to young plants and in nurseries
3a.81	*Lyctus linearis* Goeze.	*Lyctidae*	C. E. Russia, S. E. Russia ; Baltic countries; Belarus; Moldova; Ukraine; Transcaucasus	USA (introduced)	Western Europe; Algeria	*Quercus*, other deciduous	Wood	L – H	Main damage - to parquet, wood in buildings, furniture, etc.
3a.82	*[Elateroides flabellicornis* Schn.*]*	*Lymexylidae*	Russia: widespread in fir and spruce area; Baltic countries; Belarus	Not yet checked	Europe	*Abies*, *Picea*	Trunks (wood)	L	
3a.83	*Hylecoetus [Elateroides] dermestoides* L.	*Lymexylidae*	?	Not yet checked	Europe	*Betula*, other deciduous	Trunks (wood)	L	
3a.84	*Lytta vesicatoria* L.	*Meloidea*	C. E. Russia, S. E. Russia, S. Siberia; Belarus; Moldova; Ukraine; Transcaucasus; Central Asia	USA (introduced for cantharidin production)	Western Europe	*Fraxinus*, some other deciduous	Leaves	M – H	Main damage – to young trees
3a.85	*Amphimallon solstitiale ? [A. solstitialis* L.*]*	*Scarabaeidae*	Russia: widespread except Far East; Baltic countries; Belarus; Moldova; Ukraine; Transcaucasus; Kazakhstan; Central Asia	Absent	Western Europe; Turkey; Iran; Northern Mongolia; China	*Pinus*, other plants	Roots	L – M	Main damage – to young pine plantations

Table 3a. INSECTS COLEOPTERA

3a.86	*Anoxia pilosa* F.	*Scarabaeidae*	S. E. Russia; Moldova; Ukraine; Transcaucasus; Kazakhstan	Absent	Western Europe; Northern Iran	*Pinus*, *Vitis*, other plants	Roots	L – M	Main damage – to young plantations
3a.87	*Melolontha hippocastani* F.	*Scarabaeidae*	Russia: widespread; Baltic countries; Belarus; Moldova; Ukraine; Kazakhstan	Absent	Western Europe; Northern China	*Pinus*, other plants	Roots	L – H	Main damage – to young pine plantations
3a.88	*Melolontha melolontha* L. (=*M. vulgaris* F.)	*Scarabaeidae*	C. E. Russia, S. E. Russia ; Baltic countries; Belarus; Moldova; Ukraine	Absent	Europe (widespread); Turkey	*Quercus*, *Pinus*, other plants	Roots	L – H	Main damage – to young plantations
3a.89	*Miltotrogus [Rhizotrogus] aequinoctialis* Hrbst.	*Scarabaeidae*	S. E. Russia ; Moldova; Ukraine; Transcaucasus; Kazakhstan	Absent	Western Europe	*Quercus*, *Acer*, *Fraxinus*, other plants	Roots	L – M	Main damage – to young plantations
3a.90	*Pentodon idiota* Hrbst.	*Scarabaeidae*	S.E. Russia; Belarus; Moldova; Ukraine; Transcaucasus; Kazakhstan	Absent	Western Europe; Turkey	*Quercus*, fruit and other plants	Roots	L – M	Main damage – to young plantations and nurseries
3a.91	*Phyllopertha horticola* L.	*Scarabaeidae*	Russia: widespread; Baltic countries; Belarus; Moldova; Ukraine; Transcaucasus; Kazakhstan; Central Asia	Not yet checked	Europe	Deciduous and coniferous trees	Roots	L	Main damage – to young plants
3a.92	*Polyphylla fullo* L.	*Scarabaeidae*	S.E. Russia; Moldova; Ukraine	Not known	Western Europe; Northern Africa - ?	*Pinus*, *Vitis*, other plants	Roots	L – M	Main damage – to young plantations
3a.93	*Rhizotrogus aestivus* Ol.	*Scarabaeidae*	S. E. Russia; Moldova; Ukraine; Transcaucasus; Kazakhstan	Absent	Southern Europe; Turkey; Iran	*Pinus*, other plants	Roots	L – M	Main damage – to young plantations
3a.94	*Serica brunnea* L.	*Scarabaeidae*	C. E. Russia, S. E. Russia, S. Siberia; Baltic countries; Belarus; Moldova; Ukraine	Not yet checked	Europe	Deciduous and coniferous trees	Roots	L	Main damage – to young plants and in nurseries
3a.95	*Carphoborus cholodkovskyi* Spess.	*Scolytidae*	Russia: widespread in coniferous area; Baltic countries; Belarus; Moldova; Ukraine; Transcaucasus; Kazakhstan	Not yet checked	Europe	*Picea*, *Pinus*	Trunks (under bark)	VL – L	
3a.96	*Carphoborus minimus* Fabr.	*Scolytidae*	N. E. Russia, C. E. Russia; Baltic countries; Belarus; Moldova; Ukraine	Not yet checked	Europe	*Pinus*	Trunks (under bark)	VL – L	
3a.97	*Carphoborus rossicus* Sem.	*Scolytidae*	N. E. Russia, C. E. Russia, N.W. Siberia, S. Siberia (West)	Not yet checked	Europe	*Picea*	Trunks (under bark)	VL – L	
3a.98	*Carphoborus teplonchovi ? [C. teplouchovi* Spess.*]*	*Scolytidae*	Russia: widespread in coniferous area; Baltic countries; Belarus; Moldova; Ukraine; Transcaucasus; Kazakhstan	Not yet checked	Not yet checked	*Picea*, *Larix*	Trunks (under bark)	VL – L	

Table 3a. INSECTS COLEOPTERA

3a.99	*Cryphalus abietis* Ratz.	*Scolytidae*	N. E. Russia, C. E. Russia, S.E. Russia; Baltic countries; Belarus; Moldova; Ukraine; Transcaucasus	Not known	Western Europe	*Abies*, *Picea*, other coniferous	Trunks & branches (under bark)	L – M	The main damage – to young trees
3a.100	*Cryphalus piceae* Ratz.	*Scolytidae*	N. E. Russia, C. E. Russia ; Baltic countries; Belarus; Moldova; Ukraine	Not yet checked	Europe	*Picea*, *Abies*	Trunks (under bark)	VL – L	
3a.101	*Cryphalus saltuarius* Wse.	*Scolytidae*	Russia: widespread in coniferous area; Baltic countries; Belarus; Moldova; Ukraine; Transcaucasus; Kazakhstan	Not yet checked	Europe	*Picea*, *Pinus*, *Abies*	Trunks (under bark)	VL – L	
3a.102	*Crypturgus cinereus* Hrbst.	*Scolytidae*	Russia: widespread in coniferous area; Baltic countries; Belarus; Moldova; Ukraine; Transcaucasus; Kazakhstan	Not yet checked	Europe	*Pinus*, *Picea*, *Abies*	Trunks (under bark)	VL – L	
3a.103	*Crypturgus hispidulus* Thoms.	*Scolytidae*	Russia: widespread in coniferous area; Baltic countries; Belarus; Moldova; Ukraine; Transcaucasus; Kazakhstan	Not yet checked	Europe	*Pinus*, *Picea*, *Abies*, *Larix*	Trunks (under bark)	VL – L	
3a.104	*Crypturgus maulei* Roubal. *(*probably – *C. pusillus* Gyll.*)*	*Scolytidae*	N. W. Siberia, S. Siberia (West)	Not yet checked	Europe	*Picea*, *Abies*	Trunks (under bark)	VL – L	
3a.105	*Crypturgus pusillus* Gyll.	*Scolytidae*	Russia: widespread in coniferous area; Baltic countries; Belarus; Moldova; Ukraine; Transcaucasus; Kazakhstan	Not yet checked	Europe	*Pinus*, *Picea*, *Abies*, *Larix*	Trunks (under bark)	VL – L	
3a.106	*Crypturgus subcribrosus* Egg.	*Scolytidae*	N. E. Russia, C. E. Russia, S.E. Russia, S. Far East; Baltic countries; Belarus; Moldova; Ukraine	Not yet checked	Europe	*Pinus*	Trunks (under bark)	VL – L	
3a.107	*Dendroctonus micans* Kugel.	*Scolytidae*	Russia: widespread in pine area; Baltic countries; Belarus; Moldova; Ukraine; Georgia	Absent	Europe (widespread); China, Japan, Turkey	*Picea*, *Pinus*, other coniferous	Trunks (under bark)	M – VH	
3a.108	*Dryocoetes autographus* Ratz.	*Scolytidae*	Russia: widespread in coniferous area; Baltic countries; Belarus; Moldova; Ukraine; Transcaucasus; Kazakhstan	Not yet checked	Europe	*Pinus*, *Picea*, *Abies*, *Larix*	Trunks (under bark)	VL – L	
3a.109	*Dryocoetes hectographus* Reitt.	*Scolytidae*	Russia: widespread in coniferous area; Baltic countries; Belarus; Moldova; Ukraine; Transcaucasus; Kazakhstan	Not yet checked	Europe	*Pinus*, *Picea*, *Abies*, *Larix*	Trunks (under bark)	VL – L	

Table 3a. INSECTS COLEOPTERA

3a.110	*Hylastes angustatus* Herbst.	*Scolytidae*	C.E. Russia; Belarus; Moldova; Ukraine	Not known	Western Europe; Bulgaria	*Picea, Pinus*	Trunks (under bark)	L – M	
3a.111	*Hylastes angusticollis* Egg.	*Scolytidae*	N.E. Russia, C.E. Russia; Baltic countries; Belarus	Not known	Not known	*Pinus*	Trunks (under bark)	L – M	
3a.112	*Hylastes ater* Payk.	*Scolytidae*	C.E. Russia, S.E. Russia, N.E.Siberia, N.W. Siberia, S. Siberia; Baltic countries; Belarus; Moldova; Ukraine	Not known	Western Europe	*Picea, Pinus,* other coniferous	Trunks (under bark)	L – H	Main damage - to young trees and young plantations
3a.113	*Hylastes attenuatus* Er.	*Scolytidae*	C. E. Russia; Belarus; Ukraine; Transcaucasus	Not known	Central Europe	*Pinus*	Trunks (under bark)	L – M	
3a.114	*Hylastes brunneus* Eg.	*Scolytidae*	Russia: widespread in coniferous area; Baltic countries; Belarus	Not known	Poland; Germany; Austria	*Picea, Pinus*	Trunks (under bark)	L – M	
3a.115	*Hylastes cunicularius* Erich.	*Scolytidae*	Russia: widespread in coniferous area; Baltic countries; Belarus; Moldova; Ukraine; Transcaucasus; Kazakhstan	Not known	Western Europe	*Picea, Pinus, Larix*	Trunks (under bark)	L – H	Main damage - to young trees and young plantations
3a.116	*Hylastes opacus* Er.	*Scolytidae*	Russia: widespread in coniferous area; Baltic countries; Belarus; Ukraine	Not known	Central and Eastern Europe	*Picea, Pinus*	Trunks (under bark)	L – M	
3a.117	[*Hylastes plumbeus* Blandf.]	*Scolytidae*	Russia: widespread in coniferous area; Kazakhstan	Not known	Finland; Sweden; Japan; Korea	*Picea, Pinus, Larix*	Trunks (under bark)	L – M	
3a.118	*Hylesinus crenatus* Fabr.	*Scolytidae*	C. E. Russia, S. E. Russia ; Baltic countries; Belarus; Moldova; Ukraine; Transcaucasus; Central Asia	Not yet checked	Europe	*Fraxinus*	Trunks (under bark)	VL – L	
3a.119	*Hylesinus fraxini* Panz.	*Scolytidae*	C. E. Russia, S. E. Russia; Baltic countries; Belarus; Moldova; Ukraine	Absent	Western Europe	*Fraxinus, Quercus,* other deciduous	Trunks (under bark)	L – M	
3a.120	*Hylesinus oleiperda* Fabr.	*Scolytidae*	C. E. Russia, S. E. Russia ; Baltic countries; Belarus; Moldova; Ukraine; Transcaucasus	Not yet checked	Europe	*Fraxinus, Olea, Syringa, Fagus,* other deciduous	Trunks (under bark)	L	
3a.121	*Hylurgops glabratus* Zett.	*Scolytidae*	Russia: widespread in coniferous area; Baltic countries; Belarus; Moldova; Ukraine; Transcaucasus; Kazakhstan	Not yet checked	Europe	*Picea, Pinus, Abies*	Trunks (under bark)	VL – L	
3a.122	*Hylurgops palliatus* Gyll.	*Scolytidae*	Russia: widespread in spruce area; Baltic countries; Belarus; Moldova; Ukraine	Not yet checked	Europe	*Picea, Pinus, Abies, Larix, Juniperus*	Trunks (under bark)	VL – L	

Table 3a. INSECTS COLEOPTERA

3a.123	*Hylurgus ligniperda* Fabr.	*Scolytidae*	N. E. Russia, C. E. Russia, S.E. Russia, S. Siberia; Baltic countries; Belarus; Moldova; Ukraine	Not yet checked	Europe	*Pinus*	Trunks (under bark)	L	
3a.124	*Ips acuminatus* Gyll.	*Scolytidae*	Russia: widespread in pine area; Baltic countries; Belarus; Moldova; Ukraine; Transcaucasus	Not yet checked	Europe	*Pinus*, other coniferous	Trunks (under bark)	L	
3a.125	*Ips amitinus* Eichh.	*Scolytidae*	N. E. Russia, C. E. Russia; Baltic countries; Ukraine	Not yet checked	Europe (widespread); Tunisia	*Pinus*, *Picea*	Trunks (under bark)	L	
3a.126	*Ips duplicatus* Sahlb.	*Scolytidae*	Russia: widespread in spruce area; Baltic countries; Belarus; Moldova; Ukraine; Georgia; Kazakhstan	Not known	Europe (widespread); Japan	*Picea*, *Pinus sibirica*, other coniferous	Trunks (under bark)	L – M	
3a.127	*Ips sexdentatus* Boern.	*Scolytidae*	Russia: widespread in pine area; Baltic countries; Belarus; Moldova; Ukraine; Transcaucasus	Not known	Europe (widespread); China; Korea; Thailand; Turkey	*Pinus*, *Picea*, other coniferous	Trunks (under bark)	L – H	
3a.128	*Ips typographus* L.	*Scolytidae*	Russia: widespread in spruce area; Baltic countries; Belarus; Moldova; Ukraine; Georgia; Tadjikistan	Canada (introduced); USA (introduced)	Europe (widespread); China; Japan; Korea; Turkey	*Picea*, *Pinus sibirica*, other coniferous	Trunks (under bark)	L – VH	
3a.129	*Orthotomicus laricis* Fabr.	*Scolytidae*	Russia: widespread in pine area; Baltic countries; Belarus; Moldova; Ukraine; Transcaucasus; Kazakhstan	Not yet checked	Europe	*Pinus*, *Picea*, *Abies*, *Larix*	Trunks (under bark)	VL – L	
3a.130	*Orthotomicus longicollis* Gyll.	*Scolytidae*	N.E. Russia, C.E. Russia, S.E. Russia; Baltic countries; Belarus; Moldova; Ukraine	Not yet checked	Europe	*Pinus*	Trunks (under bark)	VL – L	
3a.131	*Orthotomicus proximus* Eichh.	*Scolytidae*	Russia: widespread in pine area; Baltic countries; Belarus; Moldova; Ukraine; Transcaucasus; Kazakhstan	Not yet checked	Europe	*Pinus*, *Picea*, *Abies*, *Larix*	Trunks (under bark)	VL – L	
3a.132	*Orthotomicus starki* Spess.	*Scolytidae*	N. E. Russia, C. E. Russia, S.E. Russia, N.E.Siberia, N.W. Siberia, S. Siberia, Transbaik.; Baltic countries; Belarus; Moldova; Ukraine	Not yet checked	Not yet checked	*Pinus*, *Picea*, *Larix*	Trunks (under bark)	VL – L	
3a.133	*Orthotomicus suturalis* Gyll.	*Scolytidae*	Russia: widespread in pine area; Baltic countries; Belarus; Moldova; Ukraine; Transcaucasus; Kazakhstan	Not yet checked	Europe	*Pinus*, *Picea*, *Abies*, *Larix*	Trunks (under bark)	VL – L	
3a.134	*Phthorophloeus* [*Phtorophloeus*] *spinulosus* Rey.	*Scolytidae*	Russia: widespread in coniferous area; Baltic countries; Belarus; Moldova; Ukraine; Transcaucasus; Kazakhstan	Not yet checked	Europe	*Picea*	Trunks (under bark)	VL – L	

Table 3a. INSECTS COLEOPTERA

3a.135	*Pityogenes bidentatus* Hrbst. (=*P. bidens* F.)	*Scolytidae*	Russia: widespread in coniferous area; Baltic countries; Belarus; Moldova; Ukraine; Transcaucasus; Kazakhstan; Central Asia	Not known	Europe	*Pinus*, *Picea*, *Abies*, *Larix*	Trunks (under bark)	L – M	
3a.136	*Pityogenes chalcographus* L.	*Scolytidae*	Russia: widespread in spruce area; Baltic countries; Belarus; Moldova; Ukraine; Transcaucasus	Not known	Western Europe; Japan	*Picea*, other coniferous	Trunks (under bark)	L – M	
3a.137	*Pityogenes conjunctus* Reitt. [*P. baikalicus* Egg.]	*Scolytidae*	N.E.Siberia, N.W. Siberia, S. Siberia, Transbaik., N. Far East, S. Far East	Not known	Alps; Bulgaria; Poland	*Pinus pumila*, *P. sibirica*, *Picea*	Trunks (under bark)	L – M	
3a.138	*Pityogenes irkutensis* Egg.	*Scolytidae*	Russia: widespread in pine area; Baltic countries; Belarus; Moldova; Ukraine	Not yet checked	Europe	*Pinus*	Trunks (under bark)	VL – L	
3a.139	*Pityogenes quadridens* Hart.	*Scolytidae*	Russia: widespread except Far East; Baltic countries; Belarus; Moldova; Ukraine	Not yet checked	Europe	*Picea*, *Pinus*, *Larix*	Trunks (under bark)	VL – L	
3a.140	*Pityogenes saalasi* Egg.	*Scolytidae*	N.E. Russia, C.E.Russia, S.E. Russia, S. Siberia (Baikal), Transbaik.; Baltic countries; Belarus; Moldova; Ukraine	Not yet checked	Europe	*Pinus*	Trunks (under bark)	VL – L	
3a.141	*Pityogenes trepanatus* Nördl.	*Scolytidae*	N. E. Russia, C. E. Russia; Baltic countries; Belarus; Moldova; Ukraine	Not yet checked	Europe	*Picea*	Trunks (under bark)	VL – L	
3a.142	*Pityokteines curvidens* Germ.	*Scolytidae*	S.E. Russia, N.E. Siberia, N.W. Siberia; Ukraine; Transcaucasus	Not known	Western Europe; Japan (?)	*Abies*, *Picea*, other coniferous	Trunks (under bark)	L – M	
3a.143	*Pityokteines spinidens* Reitt.	*Scolytidae*	Ukraine (the Carpathians), Transcaucasus	Not known	Western Europe	*Abies*, *Picea*, other coniferous	Trunks (under bark)	L – M	
3a.144	*Pityokteines vorontzowi* ? [*P. vorontzovi* Jacobs.]	*Scolytidae*	Ukraine (the Carpathians), Transcaucasus	Not known	Central and Southern Europe	*Abies*, *Picea*, other coniferous	Trunks (under bark)	L – M	
3a.145	*Pityophthorus glabratus* Eichh.	*Scolytidae*	N. E. Russia, C. E. Russia, S.E. Russia; Baltic countries; Belarus; Moldova; Ukraine	Not yet checked	Europe	*Pinus*, *Larix*	Trunks (under bark)	VL – L	
3a.146	*Pityophthorus lichtensteini* Ratz.	*Scolytidae*	Russia: widespread except Far East; Baltic countries; Belarus; Moldova; Ukraine	Not yet checked	Europe	*Pinus*, *Picea*, *Abies*	Trunks (under bark)	VL – L	
3a.147	*Pityophthorus micrographus* L.	*Scolytidae*	Russia: widespread except Far East; Baltic countries; Belarus; Moldova; Ukraine	Not yet checked	Europe	*Pinus*, *Picea*, *Abies*, *Larix*	Trunks (under bark)	VL – L	
3a.148	*Pityophthorus morosovi* Spess.	*Scolytidae*	N. E. Russia, C. E. Russia, N.E.Siberia, N.W. Siberia, S. Siberia, Transbaik.	Not yet checked	Europe	*Picea*	Trunks (under bark)	VL – L	
3a.149	*Pityophthorus traegardhi* Spess.	*Scolytidae*	N. E. Russia, C. E. Russia, N.E.Siberia, N.W. Siberia, S. Siberia	Not yet checked	Europe	*Picea*, *Pinus*	Trunks (under bark)	VL – L	

Table 3a. INSECTS COLEOPTERA

3a.150	*Polygraphus polygraphus* L.	*Scolytidae*	Russia: widespread in spruce area; Baltic countries; Belarus; Moldova; Ukraine	Absent	Central and Northern Europe; Turkey	*Picea, Pinus, Larix, Abies*	Trunks (under bark)	L – M	
3a.151	*Polygraphus punctifrons* Thoms.	*Scolytidae*	Russia: widespread in coniferous area; Baltic countries; Belarus; Moldova; Ukraine; Kazakhstan	Not yet checked	Europe	*Picea, Pinus*	Trunks (under bark)	L	
3a.152	*Polygraphus subopacus* Thoms.	*Scolytidae*	Russia: widespread in coniferous area; Baltic countries; Belarus; Moldova; Ukraine	Not yet checked	Europe	*Picea, Abies*	Trunks (under bark)	L	
3a.153	*Scolytus ensifer* Eichh.	*Scolytidae*	N. E. Russia, C. E. Russia, S.E. Russia; Baltic countries; Belarus; Moldova; Ukraine; Transcaucasus	Not yet checked	Not yet checked	*Ulmus*, other deciduous	Trunks (under bark)	L	
3a.154	*Scolytus intricatus* Ratz.	*Scolytidae*	N. E. Russia, C. E. Russia, S.E. Russia; Baltic countries; Belarus; Moldova; Ukraine; Transcaucasus	Not yet checked	Europe	*Quercus, Carpinus, Fagus, Castanea, Ulmus, Betula*	Trunks (under bark)	L	Vector of *Ophiostoma roboris* and other mycoses
3a.155	*Scolytus kirschi* Skal.	*Scolytidae*	C. E. Russia, S. E. Russia; Baltic countries; Belarus; Moldova; Ukraine; Transcaucasus	Not known	Central and Southern Europe	*Ulmus*	Trunks (under bark)	L – M	The main damage – on elm plantations in the steppes
3a.156	*Scolytus multistriatus* Marsham.	*Scolytidae*	N. E. Russia, C. E. Russia, S.E. Russia; Baltic countries; Belarus; Moldova; Ukraine	Canada, USA	Europe (widespread); Iran; Algeria; Egypt; Australia	*Ulmus, Populus tremula, Quercus*, other deciduous	Trunks (under bark)	L – M	
3a.157	*Scolytus orientalis* Egg. (possibly – *S. multistriatus* Marsh.)	*Scolytidae*	Ukraine (Crimea); Transcaucasus; Central Asia	Not known	Bulgaria; Romania; Iran (North)	*Ulmus, Zelkowa*	Trunks (under bark)	L – M	
3a.158	*Scolytus pygmaeus* F.	*Scolytidae*	N. E. Russia, C. E. Russia, S.E. Russia; Baltic countries; Belarus; Moldova; Ukraine; Transcaucasus	Not yet checked	Europe	*Ulmus*, other deciduous	Trunks (under bark)	L	
3a.159	*Scolytus ratzeburgi* Jans.	*Scolytidae*	Russia: widespread in birch area; Baltic countries; Belarus; Moldova; Ukraine; Transcaucasus; Kazakhstan	Not known	Europe (widespread)	*Betula*	Trunks (under bark)	L – M	
3a.160	*Scolytus scolytus* F.	*Scolytidae*	C. E. Russia, S. E. Russia; Baltic countries; Belarus; Moldova; Ukraine; Transcaucasus; Kazakhstan; Central Asia	Not known	Europe (widespread); India, Iran	*Ulmus*, other deciduous	Trunks (under bark)	L – H	Vector of *Graphium ulmi*

Table 3a. INSECTS COLEOPTERA

3a.161	*Scolytus sulcifrons* Rey.	*Scolytidae*	S. E. Russia; Transcaucasus	Not known	Southern Europe	*Ulmus*, other deciduous	Trunks (under bark)	L – M	
3a.162	[*Scolytus zaitzevi* But.]	*Scolytidae*	S. E. Russia; Ukraine (South); Transcaucasus	Not known	Not known	*Ulmus*	Trunks (under bark)	L – M	
3a.163	*Tomicus minor ?* [*Blastophagus minor* Hart.]	*Scolytidae*	Russia: widespread in pine area; Baltic countries; Belarus; Moldova; Ukraine	Not known	Europe (widespread)	*Pinus*	Trunks (under bark)	L – M	
3a.164	*Tomicus piniperda* [*Blastophagus piniperda* L.]	*Scolytidae*	Russia: widespread in pine area; Baltic countries; Belarus; Moldova; Ukraine; Transcaucasus	Not known	Europe (widespread); Mongolia; Northern China	*Pinus*	Trunks (under bark)	L – H	
3a.165	*Trypodendron lineatum* Oliv.	*Scolytidae*	Russia: widespread in pine area; Baltic countries; Belarus; Moldova; Ukraine; Transcaucasus; Kazakhstan	Europe	Not yet checked	*Pinus*, *Picea*, *Abies*, *Larix*	Trunks (wood)	L	
3a.166	*Trypodendron proximum* Niis.	*Scolytidae*	S. Far East	Europe	Not yet checked	*Pinus sibirica*, *Picea*	Trunks (wood)	VL – L	
3a.167	*Xyleborus* [= *Anisandrus*] *dispar* *********	*Scolytidae*	N. E. Russia, C. E. Russia, S.E. Russia, N. W. Siberia, S. Siberia (West); Baltic countries; Belarus; Moldova; Ukraine; Transcaucasus	Canada (introduced); USA (introduced)	Europe (widespread)	*Quercus*, *Castanea*, *Carpinus*, *Juglans*	Trunks (under bark)	L – M	
3a.168	*Xyleborus* [= *Anisandrus*] *saxeseni*	*Scolytidae*	Russia: widespread; Baltic countries; Belarus; Moldova; Ukraine; Transcaucasus; Kazakhstan; Central Asia	Present	Europe (widespread); Iran; India; Mongolia; China; Korea; Japan	*Quercus*, *Carpinus*, *Fagus*, *Fraxinus*, *Ulmus*, other deciduous and coniferous	Trunks (under bark)	L – M	
3a.169	*Xylechinus pilosus*	*Scolytidae*	Russia: widespread in fir and spruce area; Baltic countries; Belarus; Moldova; Ukraine	Not known	Central and Northern Europe	*Abies*, *Picea*	Trunks (under bark)	L – M	
3a.170	*Blaps halophila*	*Tenebrionidae*	S. E. Russia, S. Siberia; Baltic countries; Belarus; Moldova; Ukraine; Central Asia	Not yet checked	Not yet checked	Deciduous, coniferous and other plants	Roots	L	Main damage - on young plants and in nurseries
3a.171	*Opatrum sabulosum*	*Tenebrionidae*	C. E. Russia, S. E. Russia, S. Siberia; Baltic countries; Belarus; Moldova; Ukraine; Transcaucasus; Central Asia	Not yet checked	Europe	Deciduous, coniferous and other plants	Roots, leaves	L	Main damage - on young plants and in nurseries

Table 3a. INSECTS DIPTERA, HETEROPTERA & HOMOPTERA

				Diptera					
3a.172	*Strobilomyia [Pegohylemyia] anthracina*	*Anthomyiidae*	Russia: widespread in the *Picea* area Baltic countries, Belarus, Ukraine	Not known	Widespread in Europe, China, Japan	*Picea*	Cones and seeds	L - M	Data of Dr. Alain Roques
3a.173	*Strobilomyia [Lasiomma] laricicola*	*Anthomyiidae*	Russia: widespread in the *Larix* area; Baltic countries; Belarus, Ukraine	Not known	Widespread in Europe, China, Japan	*Larix*	Cones and seeds	M - H	Data of Dr. Alain Roques
3a.174	*Strobilomyia [Lasiomma] infrequens*	*Anthomyiidae*	Russia: widespread in the *Larix* area;.	Not known	Widespread in Europe, China	*Larix*	Cones and seeds	M – H	Data of Dr. Alain Roques
3a.175	*Kaltenbachiola [= Perresia] strobi*	*Cecidomyiidae*	Russia: widespread in *Picea* area; Baltic countries; Belarus, Ukraine; Kazakhst.	Not known	Central and Northern Europe	*Picea*	Cones and seeds	L - M	Data of Dr. Alain Roques
3a.176	*Plemeliella abietina*	*Cecidomyiidae*	N. E. Russia, C. E. Russia, S.E. Russia; Belarus, Ukraine	Not known	Widespread in *Picea* area in Europe	*Picea*	Seeds	VL - L	Data of Dr. Alain Roques
3a.177	*Resseliella piceae*	*Cecidomyiidae*	Transcaucasus	Not known	Western, Central , Southern Europe	*Abies*	Cones and seeds	M - H	Data of Dr. Alain Roques
3a.178	*Earomyia bazini*	*Lonchaeidae*	S. Siberia, N. Far East	Not known	France, Poland	*Larixs*	Seeds	L-M	Data of Dr. Alain Roques
3a.179	*Earomyia impossibile [E. impossibilis]*	*Lonchaeidae*	Transcaucasus	Not known	Austria, Italy, Romania	*Abies*	Seeds	M - H	Data of Dr. Alain Roques
3a.180	*Earomyia schystopiga*	*Lonchaeidae*	C.E. Russia, S. Siberia, Transbaik.s	Not known	Westen, Central, Northern Europe	*Picea*	Seeds	M - H	Data of Dr. Alain Roques
				Heteroptera					
3a.181	*Aradus cinnamomeus*	*Aradidae*	N. E. Russia, C. E. Russia, S.E. Russia, N.E.Siberia, N.W. Siberia, S. Siberia; Baltic countries; Belarus; Moldova; Ukraine	Canada; USA	Finland; Sweden; Norway; Denmark; Netherlands; Spain; Greece; Chechia; Slovakia; Bulgaria; Poland; Hungary; Israel; Turkey;	*Pinus sylvestris*, other *Pinus*, *Larix*	Trunks (under bark)	L – H	Main damage – to young (5 – 25 year-old) pine plantations. Vector of resin flow canker
				Homoptera					
3a.182	*Adelges laricis*	*Adelgidae*	Russia: spread in common spruce and larch area	Not yet checked	Not yet checked	*Picea* and *Larix*	Young sprouts & needles	VL – L	Main damage – to young trees
3a.183	*Adelges tardus*	*Adelgidae*	N. E. Russia, C. E. Russia; Baltic countries; Belarus	Not known	Central and Northern Europe	*Picea*	Young sprouts and needles	L – M	Main damage - to young trees in plantations and nurseries
3a.184	*Aphrastasia pectinatae [A. pectinate]*	*Adelgidae*	Russia: spread in common spruce and fir area; Baltic countries	Not yet checked	Not yet checked	*Picea* and *Abies*	Young sprouts and needles	VL – L	Main damage – to young trees

Table 3a. INSECTS HOMOPTERA

3a.185	*Chermes [Adelges] tardoides*	*Adelgidae*	Russia: spread in common spruce and larch area	Not yet checked	Scandinavia	*Picea* and *Larix*	Young sprouts & needles	VL – L	Main damage – to young trees
3a.186	*Dreyfusia nordmannianae*	*Adelgidae*	Russia: spread in common spruce and fir area	Not yet checked	Not yet checked	*Picea* and *Abies*	Young sprouts & needles	VL – L	Main damage – to young trees
3a.187	*Pineus pini*	*Adelgidae*	N. E. Russia, C. E. Russia, S.E. Russia; Baltic countries; Belarus; Moldova; Ukraine	Not known	Europe: widespread in pine area	*Pinus*	Young sprouts and needles	L – M	Main damage - to young trees in plantations and nurseries
3a.188	*Cholodkovskya viridara*	*Aphididae*	N. E. Russia, C. E. Russia, S.E. Russia; Baltic countries; Belarus; Moldova; Ukraine	Absent	Western Europe	*Larix*	Young sprouts and needles	L – M	Main damage - to young trees in plantations and nurseries
3a.189	*Dysaphis (= Yezabura) reaumuri*	*Aphididae*	S. E. Russia; Ukraine; Transcaucasus; Central Asia	Not yet checked	Not yet checked	*Pyrus, Populus*	Leaves	VL – M	
3a.190	*Sacchiphantes abietis*	*Aphididae*	Russia: widespread in spruce area; Baltic countries; Belarus; Kazakhstan	Absent	Western Europe	*Picea*	Young sprouts and needles	L – M	Main damage - to young trees in plantations and nurseries
3a.191	*Sacchiphantes viridis*	*Aphididae*	Russia: widespread in common spruce and larch area; Baltic countries; Belarus; Ukraine; Transcaucasus	Not yet checked	Not yet checked	*Picea* and *Larix*	Young sprouts and needles	VL – L	Main damage – to young trees
3a.192	*Thecabius affinis (= T. agnotus)*	*Aphididae*	C. E. Russia, S. E. Russia, N. W. Siberia, S. Siberia, Transbaikalia, S. Far East; Ukraine; Transcaucasus; Central Asia	Not yet checked	Widespread in Eurasia	*Populus*	Leaves	VL – M	
3a.193	*Parthenolecanium corni*	*Coccidae*	N. E. Russia, C. E. Russia, S.E. Russia, N. Far East, S. Far East; Baltic countries; Belarus; Moldova; Ukraine; Transcaucasus; Central Asia	Present	Western Europe	*Corylus*, *Robinia*, *Acer*, *Caragana*, *Vitis*, other deciduous	Trunks and branches (on the bark)	L – M	Main damage - to young plants in plantations and nurseries
3a.194	*Chionaspis salicis*	*Diaspididae*	N. E. Russia, C. E. Russia, S.E. Russia; Baltic countries; Belarus; Moldova; Ukraine; Transcaucasus	Not known	Western Europe	*Salix*, *Populus*, *Fraxinus*, *Acer*, other deciduous	Trunks and branches (on the bark)	L – M	Main damage - to young plants in plantations and nurseries

Table 3a. INSECTS HOMOPTERA & HYMENOPTERA

3a.195	*Lepidosaphes ulmi*	*Diaspididae*	Russia: widespread; Baltic countries; Belarus; Moldova; Ukraine; Transcaucasus; Kazakhstan; Central Asia	Widespread	Widespread in the world	*Populus*, *Salix*, fruit and other deciduous	Trunks and branches (on the bark)	L – M	Main damage - to young plants in plantations and nurseries
				Hymenoptera					
3a.196	*Arge [= Hylotoma] pullata*	*Argidae*	Russia: widespread in birch area; Baltic countries; Belarus; Moldova; Ukraine; Transcaucasus	Not yet checked	Not yet checked	*Betula*	Leaves	L	
3a.197	*Diprion [= Lophyrus] pini*	*Diprionidae*	Russia: widespread in pine area; Baltic countries; Belarus; Ukraine; Transcaucasus	Absent	Europe (widespread); Algeria	*Pinus*	Needles	M – H	
3a.198	*Neodiprion sertifer [Tenthredo rufa]*	*Diprionidae*	Russia: widespread in pine area; Baltic countries; Belarus; Ukraine; Transcaucasus	East of USA (introduced and not yet widely distributed)	Western Europe; Japan; Korea	*Pinus*	Needles	M – H	
3a.199	*Eurytoma laricis* (=*E. bouceki*)	*Eurytomidae*	S.E. Russia, C.E. Russia, S. Siberia, Transbaik	Not known	Europe: widespread in *Larix* area, Finland, China	*Larix*	seeds	VL – L	Data of Dr. Alain Roques
3a.200	*Eurytoma plotnikovi*	*Eurytomidae*	Central Asia	Not yet checked	Not yet checked	*Pistacia*	Nuts	VL – L	
3a.201	*Acantholyda [= Lyda] erythrocephala*	*Pamphiliidae*	Russia: widespread in pine area; Baltic countries; Belarus; Ukraine; Kazakhstan	East of USA (introduced and not yet widely distributed)	Western Europe; Korea	*Pinus*	Needles	M – H	Main damage – to young mono-cultures of pine
3a.202	*Acantholyda [Lyda] hieroglyphica*	*Pamphiliidae*	N. E. Russia, C. E. Russia; Baltic countries; Belarus; Moldova; Ukraine; Transcaucasus	Not known	Western Europe	*Pinus*	Needles	L – M	Main damage – to 2 – 4 year-old plantations and nurseries
3a.203	*Acantholyda posticalis [Lyda nemoralis (= Acantholyda pinivora = Tenthredo stellata)]*	*Pamphiliidae*	Russia: widespread in pine area; Baltic countries; Belarus; Ukraine; Kazakhstan	Not known	Western Europe; Japan; Mongolia	*Pinus*	Needles	M – H	
3a.204	*Sirex [Paururus] juvencus*	*Siricidae*	Russia: widespread in pine area; Baltic countries; Belarus; Moldova; Ukraine; Transcaucasus	Not yet checked	Not yet checked	*Pinus*, other coniferous	Trunks (wood)	L	

Table 3a. INSECTS HYMENOPTERA

3a.205	*Tremex fuscicornis*	*Siricidae*	Russia: widespread; Baltic countries; Belarus; Moldova; Ukraine	Absent	Western Europe; Chili, China (North – East); Japan; Korea	*Betula, Populus tremula, Salix, Fagus, Quercus*	Trunks (wood)	L – M	
3a.206	*Tremex magus*	*Siricidae*	C. E. Russia, S.E. Russia, S. Siberia (West); Baltic countries; Belarus; Moldova; Ukraine	Absent	Western Europe	*Betula, Fagus, Acer*, other deciduous	Trunks (wood)	L – M	
3a.207	*Urocerus [Sirex] gigas*	*Siricidae*	Russia: widespread in spruce area; Baltic countries; Belarus; Moldova; Ukraine; Kazakhstan	Not known	Western Europe; Japan	*Picea*, other coniferous	Trunks (wood)	L – M	
3a.208	*Croesus [= Nematus] septentrionalis*	*Tenthredinidae*	Russia: widespread except Far East; Baltic countries; Belarus; Moldova; Ukraine	Not yet checked	Not yet checked	*Betula, Alnus, Populus, Salix, Corylus*	Leaves	L	
3a.209	*Macrophya punctumalbum*	*Tenthredinidae*	N. E. Russia, C. E. Russia, S.E. Russia; Baltic countries; Belarus; Moldova; Ukraine; Transcaucasus	East USA	Europe to the Caucasus	*Fraxinus, Ligustrum, Crataegus*	Leaves	L	
3a.210	*Mesoneura opaca*	*Tenthredinidae*	N. E. Russia, C. E. Russia, S.E. Russia; Baltic countries; Belarus; Moldova; Ukraine	Not yet checked	Not yet checked	*Quercus*	Leaves	L	
3a.211	*Pristiphora abietina [Lygaeonematus (Nematus) abietinus]*	*Tenthredinidae*	N. E. Russia, C. E. Russia, S.E. Russia; Baltic countries; Belarus; Ukraine	Not known	Western Europe	*Picea*	Needles	L – M	
3a.212	*Pristiphora [= Lygaeonematus = Nematus] erichsonii*	*Tenthredinidae*	Russia: widespread in larch area; Baltic countries; Belarus; Ukraine	Present	Western Europe	*Larix*	Needles	L – M	
3a.213	*Pristiphora [= Lygaeonematus] wesmaeli*	*Tenthredinidae*	Russia: widespread in larch area; Baltic countries; Belarus; Ukraine	Not known	Western Europe	*Larix*	Needles and young sprouts	L – M	
3a.214	*Tomostethus nigritus*	*Tenthredinidae*	N.E. Russia, C.E.Russia, S.E. Russia, S. Far East; Baltic countries; Belarus; Moldova; Ukraine; Transcaucasus	Not yet checked	Europe (HR, IT); from ES, N. Africa to the Caucasus	*Fraxinus*	Leaves	L	
3a.215	*Trichiocampus [= Cladius] ulmi (= Cladius uncinatus)*	*Tenthredinidae*	N. E. Russia, C. E. Russia, S.E. Russia; Baltic countries; Belarus; Moldova; Ukraine; Transcaucasus	Not yet checked	Not yet checked	*Ulmus*	Leaves	L	

Table 3a. INSECTS HYMENOPTERA, ISOPTERA & LEPIDOPTERA

3a.216	*Megastigmus pistaciae*	*Torymidae*	Ukraine; Transcaucasus; Central Asia	California	Southern Europe; North Africa, Iran, China	*Pistacia*	Nuts (seeds)	L – M	Data of Dr. Alain Roques
3a.217	*Megastigmus pictus*	*Torymidae*	Russia: widespread in larch area; Baltic countries; Belarus, Ukraine	Not known	Europe: widespread in *Larix* area, China	*Larix*	Seeds	L – M	Data of Dr. Alain Roques
3a.218	*Megastigmus specularis*	*Torymidae*	C.E. Russia, S. Siberia, Baltic countries	Not known	Finland, Denmark, Sweden, France	*Abies*	Seeds	L-M	Data of Dr. Alain Roques
3a.219	*Megastigmus strobilobius*	*Torymidae*	Russia: widespread in *Picea* area; Baltic countries; Belarus, Ukraine, Transcaucasus	Not known	Europe: widespread in *Picea* area	*Picea*	Seeds	M – H	Data of Dr. Alain Roques
3a.220	*Megastigmus suspectus*	*Torymidae*	C.E. Russia, S.E. Russia, Transcaucasus, Baltic countries; Belarus, Ukraine	Not known	Europe: widespread in *Abies* area	*Abies*	Seeds	M - H	Data of Dr. Alain Roques
3a.221	*Konowia [= Pseudoxiphydria] betulae*	*Xiphydriidae*	Russia: widespread except Far East; Baltic countries; Belarus; Moldova; Ukraine	Absent	Western Europe	*Betula*	Trunks (wood)	L – M	
3a.222	*Xiphydria camelus*	*Xiphydriidae*	Russia: widespread; Baltic countries; Belarus; Moldova; Ukraine	Not known	Western Europe	*Alnus, Betula*	Trunks (wood)	L – M	
3a.223	*Xiphydria prolongata*	*Xiphydriidae*	Russia: widespread except Far East; Baltic countries; Belarus; Moldova; Ukraine; Transcaucasus; Kazakhstan	Not known	Western Europe	*Salix, Populus, Betula, Quercus, Ulmus*	Trunks (wood)	L – M	
				Isoptera					
3a.224	*Reticulitermes lucifugus*	*Rhinotermitidae*	Ukraine (South)	Not known	Not known	Coniferous and deciduous	Wood	M – H	Main damage - to telegraph-poles, wood in buildings, etc.
				Lepidoptera					
3a.225	*Hyphantria cunea*	*Arctiidae*	S. E. Russia; Azerbaijan; Georgia; Moldova; Ukraine; Uzbekistan	Canada, Mexico, USA	Europe (widespread); China; Japan; Korea; Turkey	*Morus, Acer negunda*, fruit trees, *Ulmus, Juglans, Salix*	Leaves	L – M	
3a.226	*Coleophora [= Eupista] laricella*	*Coleophoridae*	N. E. Russia, C. E. Russia, S.E. Russia, N.E. Siberia, S. Siberia (West); Baltic countries; Belarus; Ukraine	Canada (introduced); USA (introduced)	Central & Northern Europe; Japan;	*Larix*	Needles	L – M	
3a.227	*Cossus cossus*	*Cossidae*	Russia: widespread; Baltic countries; Belarus; Moldova; Ukraine; Kazakhstan; Central Asia	Absent	Europe; Mediterranean region; Western and Northern China	*Fraxinus*, fruit trees and other deciduous	Trunks (wood)	L – M	

Table 3a. INSECTS LEPIDOPTERA

3a.228	*Lamellocossus [Cossus] terebra*	*Cossidae*	N. E. Russia, C. E. Russia, S.E. Russia, S. Siberia, S. Far East, Transbaik.; Baltic countries; Belarus; Moldova; Ukraine; Transcaucasus	Not yet checked	Not yet checked	*Populus tremula*, other *Populus*	Trunks (wood)	VL – L	
3a.229	*Zeuzera pyrina*	*Cossidae*	C. E. Russia, S. E. Russia, S. Far East; Baltic countries; Belarus; Moldova; Ukraine; Transcaucasus	Present	Central & Southern Europe; Mediter-ranean region; Southern Africa; South–East Asia	*Fraxinus, Quercus, Ulmus, Malus, Pyrus*, other deciduous	Trunks and branches (wood)	L – M	
3a.230	*Endromis versicolora*	*Endromidae*	Russia: widespread; Baltic countries; Belarus; Moldova; Ukraine; Kazakhstan	Absent	Central and Northern Europe	*Betula, Salix, Tilia, Carpinus*	Leaves	L – M	
3a.231	*Schneidereria [Recurvaria] pistaciicola*	*Gelechiidae*	Central Asia	Not known	Not known	*Pistacia*	Nuts	L - M	
3a.232	*Abraxas sylvata*	*Geometridae*	N. E. Russia, C. E. Russia, S.E. Russia, S. Siberia, S. Far East; Baltic countries; Belarus; Moldova; Ukraine; Transcaucasus; Kazakhstan; Central Asia	Absent	Central and Northern Europe	*Ulmus, Betula, Prunus padus, Fraxinus, Ribes, Grossularia*	Leaves	L – M	
3a.233	*Agriopis [Erannis (= Hybernia)] aurantiaria*	*Geometridae*	C. E. Russia, S. E. Russia, S. Far East; Baltic countries; Belarus; Moldova; Ukraine; Transcaucasus	Not known	Central Europe; Turkey	*Quercus, Fagus, Ulmus, Betula, Tilia, Fraxinus*, fruit trees	Leaves	L – M	
3a.234	*Agriopis [Erannis (= Hybernia)] leucophaearia*	*Geometridae*	C. E. Russia, S. E. Russia, S. Far East; Baltic countries; Belarus; Moldova; Ukraine; Transcaucasus	Not known	Central and Southern Europe; Syria; Japan	*Quercus, Populus tremula, Fagus*, other deciduous	Leaves	L – M	
3a.235	*Agriopis [Erannis (= Hybernia)] marginaria*	*Geometridae*	C. E. Russia, S. E. Russia, S. Far East; Baltic countries; Belarus; Moldova; Ukraine; Transcaucasus	Not known	Europe (widespread); Turkey	*Quercus, Fagus, Ulmus, Betula, Tilia, Fraxinus*, fruit trees	Leaves	L – M	
3a.236	*Alsophila [= Anisopterix] aescularia*	*Geometridae*	N.E. Russia, C.E.Russia, S.E. Russia, S. Far East; Baltic countries; Belarus; Moldova; Ukraine; Transcaucasus	Absent	Central and Southern Europe	*Ulmus, Quercus, Betula, Alnus*	Leaves	L – M	
3a.237	*Apocheima [= Biston] hispidaria*	*Geometridae*	C. E. Russia, S. E. Russia, S. Siberia; Ukraine	Not known	Central and Southern Europe	*Quercus, Ulmus*, fruit trees, *Betula*	Leaves	L – M	
3a.238	*Apocheima pilosaria [Phigalia pedaria]*	*Geometridae*	N. E. Russia, C. E. Russia, S.E. Russia, S. Far East; Baltic countries; Belarus; Moldova; Ukraine	Absent	Central Europe	*Ulmus, Quercus*, fruit trees, *Betula*	Leaves	L – M	

Table 3a. INSECTS LEPIDOPTERA

3a.239	*Biston [= Amphidasis] betularia*	*Geometridae*	N. E. Russia, C. E. Russia, S.E. Russia, S. Siberia, S. Far East; Baltic countries; Belarus; Moldova; Ukraine; Transcaucasus; Kazakhstan	Not known	Western Europe; Japan	*Betula, Populus, Tilia, Ulmus, Quercus, Fraxinus*	Leaves	L – M	
3a.240	*Biston strataria*	*Geometridae*	C. E. Russia, S. E. Russia ; Baltic countries; Belarus; Moldova; Ukraine; Transcaucasus; Kazakhstan	Not known	Europe; Turkey	*Quercus, Populus, Tilia, Betula*	Leaves	L – M	
3a.241	*Bupalus [= Fidonia] piniarius*	*Geometridae*	Russia: widespread in pine area; Baltic countries; Belarus; Ukraine; Transcaucasus	Absent	Central and Northern Europe	*Pinus*	Needles	M – H	
3a.242	*Colotis [= Himera] pennaria*	*Geometridae*	N.E. Russia, C.E.Russia, S.E. Russia, S. Far East; Baltic countries; Belarus; Moldova; Ukraine; Transcaucasus	Absent	Central Europe; Turkey	*Quercus, Carpinus, Fagus, Betula, Populus, Salix*	Leaves	L – M	
3a.243	*Ectropis [Boarmia] bistortata*	*Geometridae*	Russia: widespread; Baltic countries; Belarus; Ukraine; Transcaucasus	Absent	Europe (widespread)	*Abies, Larix, Ribes*	Needles	L – H	Extremely polyphagous
3a.244	*Ectropis extersaria [Parectropis luridata (= Boarmia extersaria = B. luridata)]*	*Geometridae*	Russia: widespread except North regions; Baltic countries; Belarus; Ukraine	Absent	Central Europe; Japan	*Betula, Alnus, Quercus, Corylus*	Leaves	L – M	
3a.245	*Ennomos quercinaria*	*Geometridae*	C. E. Russia, S. E. Russia, S. Far East; Baltic countries; Belarus; Moldova; Ukraine; Transcaucasus	Absent	Central Europe; Turkey	*Quercus, Betula, Tilia, Fagus, Carpinus*	Leaves	L – M	
3a.246	*Erannis [= Hybernia] defoliaria*	*Geometridae*	N.E. Russia, C.E.Russia, S.E. Russia, S. Far East; Baltic countries; Belarus; Moldova; Ukraine; Transcaucasus	Not known	Europe (widespread)	*Quercus, Fagus, Ulmus, Betula, Tilia, Fraxinus*, fruit trees	Leaves	L – M	
3a.247	*Eupithecia abietaria*	*Geometridae*	Russia: widespread in spruce area	Not known	Northern, western and central Europe	*Picea*, *Pinus*,	Cones and seeds	M - H	Data of Dr. Alain Roques
3a.248	*Eupithecia bilunulata [E. analoga] [E. strobilata]*	*Geometridae*	C. E. Russia, S. E. Russia, N.E.Siberia, N.W. Siberia, S. Siberia, Transbaik.; Baltic countries; Belarus, Ukraine	Not known	Northern western and central Europe	*Picea*,	Cones and seeds	M - H	Data of Dr. Alain Roques
3a.249	*Hylaea [Ellopia] fasciaria [= E. prosapiaria]*	*Geometridae*	Russia: widespread; Baltic countries; Belarus; Ukraine; Transcaucasus; Kazakhstan	Absent	Central and Northern Europe	*Pinus*, *Picea*, *Abies*	Needles	L – M	
3a.250	*Lycia [= Biston] hirtaria*	*Geometridae*	N. E. Russia, C. E. Russia, S.E. Russia, S. Siberia, S. Far East; Baltic countries; Belarus; Moldova; Ukraine; Kazakhstan	Not known	Western Europe; Turkey	*Ulmus*, fruit trees, *Salix*, *Populus*, *Betula, Tilia, Acer, Quercus*	Leaves	L – M	

Table 3a. INSECTS LEPIDOPTERA

3a.251	*Operophtera [= Cheimatobia] brumata*	*Geometridae*	N.E. Russia, C.E.Russia, S.E. Russia, S. Far East; Baltic countries; Belarus; Moldova; Ukraine; Transcaucasus; Kazakhstan; Turkmenistan	Western USA (introduced); Eastern Canada (introduced)	Europe (widespread); Iran; Japan; Algeria; Tunisia	*Quercus*, fruit trees, *Ulmus, Fagus, Tilia, Carpinus, Acer, Salix*	Leaves	M – H	
3a.252	*Poecilopsis [= Biston] pomonaria*	*Geometridae*	N. E. Russia, C. E. Russia, S.E. Russia; Baltic countries; Belarus; Moldova; Ukraine	Not known	Northern – Western Europe	Deciduous fruit and forest trees & shrubs	Leaves	L – M	
3a.253	*Semiothisa [= Macaria] liturata*	*Geometridae*	Russia: widespread; Baltic countries; Belarus; Ukraine; Transcaucasus	Not known	Western Europe	*Pinus, Picea, Abies*	Needles	L – M	
3a.254	*Semiothisa [= Macaria] signaria*	*Geometridae*	Russia: widespread in coniferous area; Baltic countries; Belarus; Ukraine; Transcaucasus	Not known	Central and Northern Europe	*Picea, Abies, Pinus*	Needles	L – M	
3a.255	*Dendrolimus pini*	*Lasiocampidae*	Russia: widespread in pine area; Baltic countries; Belarus; Ukraine; Kazakhstan	Absent	Europe (generally); Asia (generally); Morocco	*Pinus sylvestris*	Needles	H – VH	
3a.256	*Eriogaster [= Lasiocampa = Gastropacha] lanestris*	*Lasiocampidae*	Russia: widespread in forest area; Baltic countries; Belarus; Moldova; Ukraine	Absent	Western Europe	*Quercus, Betula, Tilia, Populus Salix*	Leaves	L – M	
3a.257	*Malacosoma [= Gastropacha] neustria*	*Lasiocampidae*	C. E. Russia, S. E. Russia, S. Siberia, S. Far East; Baltic countries; Belarus; Moldova; Ukraine; Transcaucasus	Absent	Western Europe; Northern China; Korea; Japan	*Rosaceae, Quercus, Populus, Salix*	Leaves	L – M	
3a.258	*Cosmotriche [= Selenephera = Selenophora] lunigera*	*Lasiocampidae*	Russia: widespread; Baltic countries; Belarus; Moldova; Ukraine	Absent	Central Europe	*Abies,Larix, Picea, Pinus*	Needles	L – H	
3a.259	*Calliteara [Dasychira] abietis*	*Lymantriidae*	Russia: widespread in coniferous area; Baltic countries; Belarus; Ukraine	Not known	Central and Northern Europe; Japan	*Picea, Abies Pinus, Larix,*	Needles	L – M	
3a.260	*Calliteara [Dasychira] pudibunda*	*Lymantriidae*	Russia: widespread; Baltic countries; Belarus; Moldova; Ukraine; Transcaucasus; Kazakhstan; Central Asia	Not known	Western Europe; Japan	*Quercus, Fagus, Carpinus, Betula, Salix*	Leaves	L – M	
3a.261	*Euproctis [= Nygmia] chrysorrhoea*	*Lymantriidae*	C. E. Russia, S. E. Russia ; Baltic countries; Belarus; Moldova; Ukraine; Transcaucasus	Canada, USA	Europe (widely); Iran; Syria; Turkey; Algeria; Morocco; Mauritania; Tunisia	*Quercus*, fruit trees, *Ulmus, Populus*, other deciduous	Leaves	M – H	
3a.262	*Leucoma [= Stilpnotia] salicis*	*Lymantriidae*	Russia: widespread; Baltic countries; Belarus; Moldova; Ukraine; Transcaucasus; Kazakhstan; Central Asia	Canada (West); USA (East)	Europe (widely); Mediterranean region; Northern Mongolia; China; Korea; Japan; Northern Africa	*Salix, Populus*	Leaves	M – H	The most dangerous for plantations of *Salix* and *Populus*

Table 3a. INSECTS LEPIDOPTERA

3a.263	*Lymantria [= Ocneria = Porthetria] dispar*	*Lymantriidae*	Russia: widespread; Baltic countries; Belarus; Moldova; Ukraine; Transcaucasus; Kazakhstan; Central Asia	Canada and USA (introduced)	Europe (widely); Mediterranean region; India; Afghanistan; Iran; Iraq; China; Japan; Korea; Taiwan	*Quercus*, fruit trees, *Populus, Betula, Larix*, etc.	Leaves	M – VH	Extremely polyphagous
3a.264	*Lymantria [= Ocneria] monacha*	*Lymantriidae*	Russia: widespread in coniferous area; Baltic countries; Belarus; Ukraine; Transcaucasus	Absent	Europe (widely); China; Japan; Korea; Turkey; Mediterranean region (generally)	*Pinus, Picea, Abies, Larix*	Needles, young sprouts and buds	H - VH	
3a.265	*Orgyia antiqua*	*Lymantriidae*	Russia: widespread; Baltic countries; Belarus; Ukraine; Transcaucasus	Present	Western Europe; Eastern Asia; Northern China; Japan	*Quercus, Populus, Betula*, other deciduous, *Picea, Larix*	Leaves and needles	M - H	
3a.266	*Sphrageidus [= Euproctis = Porthesia] similis*	*Lymantriidae*	Russia: widespread; Baltic countries; Belarus; Moldova; Ukraine; Transcaucasus; Kazakhstan; Central Asia	Absent	Europe (widespread); China; Japan	*Quercus, Betula*, fruit trees	Leaves	L – M	
3a.267	*Acronicta aceris*	*Noctuidae*	N. E. Russia, C. E. Russia, S.E. Russia; Baltic countries; Belarus; Moldova; Ukraine; Transcaucasus; Central Asia	Not known	Central and Western Europe; Mediterranean region	*Quercus, Acer, Ulmus, Fagus, Aesculus, Populus, Salix*	Leaves	L – M	
3a.268	*Agrotis segetum*	*Noctuidae*	Russia: widespread; Baltic countries; Belarus; Moldova; Ukraine; Transcaucasus; Kazakhstan; Central Asia	Not known	Europe (widespread); Asia (widespread); Africa (widespread)	Deciduous, coniferous and other plants	Roots	L – M	Main damage - to young plantations and in nurseries
3a.269	*Colocasia [= Demas] coryli*	*Noctuidae*	N.E. Russia, C E.Russia, S.E. Russia, N.E.Siberia, N.W. Siberia, S. Siberia; Baltic countries; Belarus; Moldova; Ukraine; Transcaucasus	Not known	Central and Northern Europe	*Quercus, Betula, Fagus, Carpinus, Corylus, Populus, Salix*	Leaves	L – M	
3a.270	*Moma [= Daseochaeta = Diphtera] alpium*	*Noctuidae*	Russia: widespread; Baltic countries; Belarus; Moldova; Ukraine	Absent	Central & Northern Europe; China; Korea; Japan	*Quercus, Fagus, Betula, Carpinus*	Leaves	L – M	
3a.271	*Orthosia cruda [Monima (= Taeniocampa) pulverulenta]*	*Noctuidae*	N. E. Russia, C. E. Russia, S.E. Russia; Baltic countries; Belarus; Moldova; Ukraine; Transcaucasus	Not known	Central and Northern Europe; Mediterranean region	*Quercus, Acer, Tilia, Betula, Ulmus, Populus tremula*	Leaves	L – M	
3a.272	*Orthosia [Monima (= Taeniocampa] incerta*	*Noctuidae*	N.E.Russia, C.E. Russia, S.E. Russia, S.Siberia, S.Far East; Baltic countries; Belarus; Moldova; Ukraine; Transcaucasus; Kazakhstan; Central Asia	Present	Central and Northern Europe; Mediterranean region	*Quercus, Betula, Populus, Ulmus, Tilia*	Leaves	L – M	

Table 3a. INSECTS LEPIDOPTERA

3a.273	*Orthosia [Monima = Taeniocampa] stabilis*	*Noctuidae*	N. E. Russia, C. E. Russia, S.E. Russia; Baltic countries; Belarus; Moldova; Ukraine	Not known	Central Europe; Mediterranean region; Japan	*Quercus, Fagus*	Leaves	L – M	
3a.274	*Panolis flammea*	*Noctuidae*	Russia: widespread in pine area; Baltic countries; Belarus; Ukraine	Absent	Central Europe; Northern Mongolia; Northern China; Korea; Japan	*Pinus*	Needles	M – H	
3a.275	*Cerura [= Dicranura = Harpia] vinula*	*Notodontidae*	Russia: widespread; Baltic countries; Belarus; Moldova; Ukraine; Transcaucasus	Not known	Europe (widely); Turkey; Northern China; Japan	*Populus, Salix*	Leaves	L – M	
3a.276	*Clostera [*possibly *Pygaera] anastomosis*	*Notodontidae*	Russia: widespread; Baltic countries; Belarus; Moldova; Ukraine; Transcaucasus; Central Asia	Not known	Western Europe	*Populus tremula, Salix,* other *Populus*	Leaves	L – M	
3a.277	*Exaereta [= Uropus] ulmi*	*Notodontidae*	S. E. Russia, S. Far East; Moldova; Ukraine; Transcaucasus	Absent	Central and Southern Europe; Turkey	*Ulmus*	Leaves	L – M	
3a.278	*Leucodonta bicoloria*	*Notodontidae*	Russia: widespread; Baltic countries; Belarus; Moldova; Ukraine	Absent	Central and Northern Europe; Japan	*Betula*	Leaves	L – M	
3a.279	*Peridea [Notodonta] anceps*	*Notodontidae*	C. E. Russia, S. E. Russia, S. Far East; Baltic countries; Belarus; Moldova; Ukraine; Transcaucasus	Not known	Western Europe	*Quercus*	Leaves	L – M	
3a.280	*Phalera bucephala*	*Notodontidae*	Russia: widespread; Baltic countries; Belarus; Moldova; Ukraine; Transcaucasus; Kazakhstan	Absent	Western Europe; Mediterranean region	*Quercus, Tilia, Betula, Populus, Salix*	Leaves	L – M	Main damage – to city plantations
3a.281	*Thaumetopoea [= Cnethocampa] pinivora*	*Notodontidae*	C. E. Russia (Kaliningrad region); Lithuania	Absent	Central Europe	*Pinus sylvestris*	Needles	M	Main damage – to pines on sand dunes
3a.282	*Thaumetopoea [= Cnethocampa] processionea [T. prozessionea]*	*Notodontidae*	Moldova; Ukraine	Absent	Central and Southern Europe	*Quercus*	Leaves	L – M	
3a.283	*Nymphalis [= Vanessa] polychloros*	*Nymphalidae*	C. E. Russia, S. E. Russia, S. Siberia, Baltic countries; Belarus; Moldova; Ukraine; Transcaucasus	Not yet checked	Not yet checked	*Ulmus,* wild fruit trees	Leaves	L	
3a.284	*Aporia crataegi*	*Pieridae*	Russia: widespread; Baltic countries; Belarus; Moldova; Ukraine; Transcaucasus; Kazakhstan; Central Asia	Absent	Europe (widely); Mediterranean region; Korea; China; Japan	fruit trees, *Quercus, Ulmus*	Leaves	L – M	
3a.285	*Dioryctria abietella*	*Pyralidae*	Russia: widespread in spruce area; Baltic countries; Belarus, Ukraine, Kazakhstan, Transcaucasus	Not known	Europe; Korea; Northern China;	*Picea, Abies, Larix,*	Cones and seeds	M - H	Data of Dr. Alain Roques

Table 3a. INSECTS LEPIDOPTERA

3a.286	*Etiella zinckenella*	*Pyralidae*	Russia: widespread; Baltic countries; Belarus, Moldova, Ukraine	Canada; USA	Western Europe; Mediterranean region; tropical and subtropical regions	*Pseudoacacia, Caragana*	Seeds	L - M	
3a.287	*Paranthrene [Sciapteron] tabaniformis*	*Sesiidae*	Russia: widespread; Baltic countries; Belarus; Moldova; Ukraine; Transcaucasus; Kazakhstan; Central Asia	Not known	Western Europe; Northern Mongolia	*Populus* (including *P. tremula*), *Salix*	Trunks and branches (wood)	L - H	Main damage - to young trees in plantations and nurseries
3a.288	*Sesia [Aegeria] apiformis*	*Sesiidae*	C. E. Russia, S. E. Russia, N.E.Siberia, N.W. Siberia, S. Siberia; Baltic countries; Belarus; Moldova; Ukraine; Transcaucasus; Central Asia	Present	Western Europe; Turkey; North America	*Populus* (including *P. tremula*), *Salix*, *Betula*, *Tilia*, *Fraxinus*	Trunks and roots (wood and under bark)	L – M	Main damage - to young trees in South regions
3a.289	*Sphinx pinastri*	*Sphingidae*	Russia: widespread except Far East; Baltic countries; Belarus; Ukraine; Transcaucasus	Not known	Central and Northern Europe; Japan	*Pinus*	Needles	L – M	
3a.290	*Aleimma [Tortrix] loeflingiana*	*Tortricidae*	C. E. Russia, S.E. Russia; Baltic countries; Belarus; Moldova; Ukraine; Transcaucasus	Not known	Central and Southern Europe; Turkey	*Quercus*	Leaves	L – M	
3a.291	*Archips crataeganus [Cacoecia (= Archips = Tortrix) crataegana]*	*Tortricidae*	C. E. Russia, S. E. Russia ; Baltic countries; Belarus; Moldova; Ukraine; Transcaucasus	Not known	Western Europe; Turkey; China; Japan	Fruit trees, *Quercus*, *Fraxinus*, *Populus*, *Tilia*, *Ulmus*	Leaves	L – M	
2.292	*Archips oporanus (= Cacoecia (= Tortrix) piceana)*	*Tortricidae*	C. E. Russia, N. E. Russia, S. Siberia, S. Far East	Not yet checked	All Europe, China, Japan, Koreas	*Pinus*, *Abies*, *Picea*, *Larix*, *Juniperus*	Needles	L – H	
3a.293	*Archips rosanus [Cacoecia (= Archips = Tortrix) rosana]*	*Tortricidae*	Russia: widespread except Far East; Baltic countries; Belarus; Moldova; Ukraine; Transcaucasus; Kazakhstan; Central Asia	Present (introduced)	Europe (widespread); Turkey; Northern Africa	*Quercus*, *Ulmus*, *Betula*, *Fraxinus*, *Acer*, *Populus*, fruit trees	Leaves	L – M	
3a.294	*Archips xylosteanus [Cacoecia (= Archips = Tortrix) xylosteana]*	*Tortricidae*	N.E. Russia, C.E.Russia, S.E. Russia, S. Far East; Baltic countries; Belarus; Moldova; Ukraine; Transcaucasus; Turkmenistan	Not known	Western Europe; Near East; China; Korea; Japan	*Quercus*, *Fraxinus*, *Betula*, *Ulmus*, *Acer*, *Populus*, fruit trees	Leaves	L – M	
3a.295	*Blastesthia turionella [Evetria turionana]*	*Tortricidae*	C. E. Russia, S. E. Russia, S. Siberia; Baltic countries; Belarus; Moldova; Ukraine	Not yet checked	Not yet checked	*Pinus*	Buds	L	Main damage - to 6 – 16 year-old plantations
3a.296	*Choristoneura [= Cacoecia = Archips = Tortrix] murinana*	*Tortricidae*	Russia: widespread in coniferous area; Baltic countries; Belarus; Ukraine; Transcaucasus	Not known	Central and Northern Europe	*Abies*, *Picea*	Needles	L – M	

Table 3a. INSECTS LEPIDOPTERA

3a.297	*Cydia [= Carpocapsa] amplana*	*Tortricidae*	Russia: widespread; Baltic countries; Belarus; Ukraine; Moldova; Transcaucasus	Not known	Central and Southern Europe; Turkey	*Quercus*, *Corylus*, *Fagus*, *Castanea*	Fruits	L - M	
3a.298	*Cydia [= Carpocapsa] grossana [= Laspeyresia fagiglandana]*	*Tortricidae*	S. E. Russia; Ukraine; Moldova; Transcaucasus; Central Asia	Not known	Western Europe; Turkey	*Fagus*	Fruits	L - M	
3a.299	*Cydia illutana [Laspeyresia (= Grapholitha) illutana illutana]*	*Tortricidae*	C. E. Russia	Not known	Central and Northern Europe	*Larix*, *Picea*	Cones and seeds	L – M	
3a.300	*Cydia [= Laspeyresia] pomonella*	*Tortricidae*	Russia; Baltic countries; Belarus; Ukraine; Moldova; Transcaucasus; Kazakhstan; Central Asia	Mexico; Canada; USA	Europe (widely); Asia (widely); S. America (widely); Africa; New Zealand; Australia	*Juglans*, fruit trees	Nuts, fruits	L – M	
3a.301	*Cydia [= Carpocapsa] splendana*	*Tortricidae*	Russia: widespread in oak area; Baltic countries; Belarus; Ukraine; Moldova; Transcaucasus	Not known	Italy	*Quercus*, *Castanea*	Acorns, fruits	L – M	
3a.302	*Cydia [= Laspeyresia = Grapholitha] strobilella*	*Tortricidae*	Russia: widespread in spruce area; Baltic countries; Belarus; Ukraine	Widespread in North America	Western, Central and Northern Europe	*Picea*	Cones and seeds	M	
3a.303	*Gravitarmata [= Evetria] margarotana*	*Tortricidae*	C. E. Russia, S. E. Russia, S. Far East	Not known	Western and Central Europe	*Pinus*	Cones and seeds	L-M	Data of Dr. Alain Roques
3a.304	*Petrova [= Evetria] resinella*	*Tortricidae*	Russia: widespread in pine area; Baltic countries; Belarus; Moldova; Ukraine; Transcaucasus; Kazakhstan	Not yet checked	Not yet checked	*Pinus*	Young sprouts, buds and needles	VL – L	Main damage - to young pine trees
3a.305	*Rhyacionia [= Evetria] buoliana*	*Tortricidae*	Russia: widespread in pine area; Baltic countries; Belarus; Moldova; Ukraine; Transcaucasus; Kazakhstan	Canada; USA	Europe (widely); Cyprus; Israel; Japan; Syria; Turkey; Argentina; Chile; Uruguay	*Pinus*	Needles, buds and young sprouts	L – M	Main damage - to 3 - 12 year-old pine plantations
3a.306	*Rhyacionia [= Evetria] duplana*	*Tortricidae*	Russia: widespread in pine area; Baltic countries; Belarus; Moldova; Ukraine	Present (introduced)	Europe (widespread); Japan	*Pinus*	Needles, buds and young sprouts	L – M	Main damage – to 3 – 6 year-old plantations
3a.307	*Tortrix viridana*	*Tortricidae*	C. E. Russia, S. E. Russia; Baltic countries; Belarus; Moldova; Ukraine; Transcaucasus	Not known	Western Europe; Turkey	*Quercus*	Leaves	M – H	

Table 3a. INSECTS & NEMATODES LEPIDOPTERA , ORTHOPTERA & APHELENCHOIDEA

3a.308	*Zeiraphera [= Semasia = Grapholitha] diniana [= Z. griseana]*	*Tortricidae*	Russia: widespread in coniferous area; Baltic countries; Belarus; Ukraine; Kazakhstan	Present	Southern, Central and Northern Europe	*Larix, Picea, Pinus, Abies*	Needles	M – H	
3a.309	*Zeiraphera [= Semasia] ratzeburgiana*	*Tortricidae*	N. E. Russia	Not known	Western, Central and Northern Europe	*Picea*	Cones and seeds	L	
3a.310	*Zeiraphera [= Semasia = Epinotia = Grapholitha = Tortrix] rufimitrana*	*Tortricidae*	N.E. Russia, C.E.Russia, S.E. Russia, N.E.Siberia, N.W. Siberia, S. Siberia; Baltic countries; Belarus; Ukraine	Not known	Western Europe	*Abies, Picea*	Female flowers, needles	M – H	
3a.311	*Zeiraphera [= Semasia] rufimitrana*	*Tortricidae*	N. E. Russia	Not known	Europe	*Abies*	Cones and seeds	L	Data of Dr. Alain Roques
3a.312	*Ocnerostoma friesei*	*Yponomeutidae*	Transbaik.	Not known	Western Europe	*Pinus sylvestris*	Needles	L – M	
3a.313	*Yponomeuta rorellus [Hyponomeuta rorella (= H. rorellus)]*	*Yponomeutidae*	C. E. Russia, S. E. Russia; Baltic countries; Belarus; Moldova; Ukraine	Not known	Western Europe	*Salix, Sorbus*	Leaves	L – M	
				Orthoptera					
3a.314	*Gryllotalpa gryllotalpa*	*Gryllotalpidae*	C. E. Russia, S. E. Russia; Baltic countries; Belarus; Moldova; Ukraine; Transcaucasus; Kazakhstan; Central Asia	Eastern USA (introduced)	Western Europe; Northern Africa; Near East	Deciduous, coniferous and other plants	Roots	L - H	Main damage – to young plantations and in nurseries
3a.315	*Gryllotalpa orientalis [G. fossor]*	*Gryllotalpidae*	S. Far East	Absent	Not known	Deciduous, coniferous and other plants	Roots	L - H	Main damage – to young plantations and in nurseries
3a.316	*Gryllotalpa unispina*	*Gryllotalpidae*	S.E.Russia, S.Siberia (West); Ukraine; Georgia; Azerbaijan; Kazakhstan; Central Asia	Absent	Iran; China	Deciduous, coniferous and other plants	Roots	L - H	Main damage – to young plantations and in nurseries
				Nematodes					
3a.317	*Bursaphelenchus mucronatus*	*Aphelenchoidae*	Russia: widespread; Baltic countries; Belarus; Moldova; Ukraine; Transcaucasus; Kazakhstan; Central Asia	Not yet checked	Not yet checked	*Pinus*, other coniferous	Trunks and branches (wood)	VL – L	

Table 3b. Forest pests causing significant damage on the territory of the former USSR, which may present risk only or mainly to plants, which are not considered as forest trees and shrubs in most of the non-Asian part of the EPPO region

N°	Pest	Group of organisms	Distribution			Main host plants in the former USSR	Damaged parts of plants	Economic significance in area of origin	Remarks
			In the former USSR	In North America	In other countries				
Acari (Arachnida)									
3b.1	*Eriophyes (= Phytoptus) padi*	*Eriophyidae*	C. E. Russia, S. E. Russia; Belarus; Transcaucasus; Ukraine; Kazakhstan	Not yet checked	Not yet checked	*Padus*	Leaves	VL - L	
3b.2	*Tenuipalpus zhizhilashvilliae*	*Tenuipalpidae (= Trichadenidae)*	Transcaucasus	Not yet checked	Not yet checked	*Diospyros kaki*	Leaves	VL - M	
3b.3	*[Schizotetranychus coryli]*	*Tetranychidae*	Transcaucasus	Not yet checked	Not yet checked	*Corylus*	Leaves	VL - M	
Insecta									
Coleoptera									
3b.4	*[Rhynchites faldermanni]*	*Attelabidae*	S. Far East	Not yet checked	China	*Prunus*	Fruits & seeds	VL – L	
3b.5	*[Rhynchites zaitzevi]*	*Attelabidae*	Armenia, Tadjikistan, Uzbekistan	Not yet checked	Iran	*Prunus amygdalus*	Seeds	L – H	
3b.6	*Rhynchites heros*	*Attelabidae*	S. Far East	Not yet checked	Koreas, Japan	*Malus, Pyrus, Prunus*	Fruits & seeds	VL – M	
3b.7	*[Phonapate deserti]*	*Bostrychidae*	Turkmenistan	Not yet checked	Not yet checked	*Haloxylon*	Trunks (wood)	L – M	
3b.8	*Xylogenes dilatatus*	*Bostrychidae*	Tadjikistan; Turkmenistan	Not yet checked	Syria, Iran	*Tamarix*	Trunks (wood)	L – M	
3b.9	*[Agrilus nivosus]*	*Buprestidae*	Uzbekistan	Not yet checked	Not yet checked	*Pistacea*	Trunks (under bark)	L – M	
3b.10	*[Anthaxia (= Euanthaxia) tractata]*	*Buprestidae*	Armenia; Georgia (East)	Not yet checked	Not yet checked	*Cydonia, Prunus*	Trunks (under bark)	L – M	
3b.11	*[Capnodis excisa]*	*Buprestidae*	Georgia; Central Asia	Not yet checked	India, Iran	*Calligonum, Haloxylon*	Trunks (under bark)	VL – L	
3b.12	*[Chrysobothris deserticola]*	*Buprestidae*	Kazakhstan; Central Asia	Not yet checked	Not yet checked	*Elaeagnus*	Trunks (under bark)	VL – L	
3b.13	*[Cratomerus mirabilis]*	*Buprestidae*	Armenia; Azerbaijan	Not yet checked	Not yet checked	*Prunus, Cydonia*	Trunks (under bark)	L – M	

Table 3b. INSECTS COLEOPTERA

3b.14	*[Cyphosoma tataricum]*	*Buprestidae*	S. E. Russia; Transcaucasus; Central Asia	Not yet checked	Iran	*Tamarix*	Trunks (under bark)	VL – L	
3b.15	*[Dicerca obtuse]*	*Buprestidae*	Uzbekistan; Kazakhstan; Kyrgyzstan	Not yet checked	Not yet checked	*Juglans*	Trunks (under bark)	VL – L	
3b.16	*[Sphenoptera (= Tropeopeltis) anthaxoides]*	*Buprestidae*	Armenia	Not yet checked	Not yet checked	*Prunus*	Trunks (under bark)	L – M	
3b.17	*[Sphenoptera parfentjevi]*	*Buprestidae*	Kazakhstan; Central Asia	Not yet checked	Not yet checked	*Haloxylon*	Trunks and roots (under bark)	L	
3b.18	*Cratomerus (= Cryptocratomerus) turanus*	*Buprestidae*	Tadjikistan; southern Turkmenistan	Not yet checked	Not yet checked	*Pistacea*	Trunks (under bark)	L – M	
3b.19	*Sphenoptera kaznakovi (= S. kaznakowi)*	*Buprestidae*	Tadjikistan	Not yet checked	Not yet checked	*Prunus amygdalis*, other *Prunus*	Trunks (under bark)	L – H	
3b.20	*[Cleroclytus collaris (= C. manifestus)]*	*Cerambycidae*	Central Asia	Not yet checked	China	*Malus, Juglans*	Trunks (wood)	VL – L	
3b.21	*[Oberea vittata]*	*Cerambycidae*	S. Far East	Not yet checked	Japan	*Corylus*	Trunks (wood)	VL – M	
3b.22	*[Phymatodes maacki]*	*Cerambycidae*	S. Far East	Not yet checked	China, Japan, Koreas	*Vitis*	Trunks (wood)	VL – L	
3b.23	*[Turanium johannis]*	*Cerambycidae*	Central Asia (mountains); Kazakhstan (mountains)	Not yet checked	Not yet checked	*Juglans*, *Sorbus*, *Prunus*, *Cotoneaster*	Trunks (wood)	VL – L	
3b.24	*[Turanium juglandis]*	*Cerambycidae*	Central Asia	Not yet checked	Not yet checked	*Juglans*	Trunks (wood)	VL – L	
3b.25	*Xylotrechus grumi*	*Cerambycidae*	Central Asia	Not yet checked	Not yet checked	*Elaeagnus*	Trunks (wood)	L – M	
3b.26	*[Cyaniris discolor]*	*Chrysomelidae*	Central Asia	Not yet checked	Not yet checked	*Prunus*	Leaves	VL – L	
3b.27	*[Labidostomis stenostoma]*	*Chrysomelidae*	Central Asia	Not yet checked	Not yet checked	*Pistacea*	Leaves	L – M	
3b.28	*Epilachna 28-maculata*	*Coccinellidae*	S. Far East	Not yet checked	China; Japan; Koreas	*Solanum*, *Juglans*, *Crataegus*, *Aralia*, other trees and herbs	Leaves	L – H	
3b.29	*[Catapionus semiglabratus]*	*Curculionidae*	Kyrgyzstan	Not yet checked	Not yet checked	*Juglans*	Leaves	VL – L	
3b.30	*[Phyllobius solskyi]*	*Curculionidae*	Tadjikistan, Uzbekistan	Not yet checked	Not yet checked	*Juglans*	Leaves	VL – L	
3b.31	*[Lytta coccinea]*	*Meloidae*	Central Asia	Not yet checked	Not yet checked	Sand-protecting plants	Leaves	L – M	

Table 3b. INSECTS COLEOPTERA

3b.32	*[Mylabris javeti]*	*Meloidae*	Uzbekistan; Turkmenistan	Not yet checked	Northern Iran	Sand-protecting plants	Leaves	L – M	
3b.33	*[Mylabris sedecimpunctata]*	*Meloidae*	Southern Kazakhstan; Central Asia	Not yet checked	Iran	Sand-protecting plants	Leaves	L – M	
3b.34	*[Teratolytta eylandti]*	*Meloidae*	Turkmenistan	Not yet checked	Not yet checked	Sand-protecting plants	Leaves & flowers	L – H	
3b.35	*Mylabris elegantissima (= M. elegantissimus)*	*Meloidae*	Central Asia	Not yet checked	Not yet checked	Sand-protecting plants	Leaves	L – M	
3b.36	*[Pseudoadoretus dilutellus]*	*Scarabaeidae*	Kazakhstan; Central Asia	Not yet checked	Not yet checked	Sand-protecting plants	Roots	VL – L	
3b.37	*[Pseudoadoretus validus]*	*Scarabaeidae*	Central Asia	Not yet checked	Not yet checked	Sand-protecting plants	Roots	VL – L	
3b.38	*Adoretus nigrifrons*	*Scarabaeidae*	S. E. Russia; Transcaucasus; Kazakhstan; Central Asia	Not yet checked	Iran, Afghanistan	Sand-protecting plants	Roots	VL – M	
3b.39	*Adoretus pruinosus*	*Scarabaeidae*	Central Asia	Not yet checked	Not yet checked	Sand-protecting plants	Roots	VL – M	
3b.40	*Chioneosoma komarovi*	*Scarabaeidae*	Central Asia (deserts)	Not yet checked	Not yet checked	Sand-protecting plants	Roots	VL – M	
3b.41	*[Dryocoetes padi]*	*Scolytidae*	S. Far East	Not yet checked	Not yet checked	*Padus maacki*	Trunks (under bark)	VL – M	
3b.42	*[Xyleborus orientalis]*	*Scolytidae*	S. Far East	Not yet checked	Not yet checked	*Padus maacki*	Trunks (under bark)	VL – L	
3b.43	*Cryphalus pruni*	*Scolytidae*	S. Far East	Not yet checked	Not yet checked	*Prunus, Malus*	Trunks (under bark)	VL – M	
3b.44	*Cryphalus scopiger*	*Scolytidae*	S. Far East	Not yet checked	Not yet checked	*Juglans*	Trunks (under bark)	VL – M	
3b.45	*[Argyrophana deserti]*	*Tenebrionidae*	Uzbekistan, Turkmenistan	Not yet checked	Not yet checked	Sand-protecting plants	Roots	VL – L	
3b.46	*[Blaps pruinosa]*	*Tenebrionidae*	Kazakhstan; Central Asia	Not yet checked	Not yet checked	Sand-protecting plants	Leaves	VL – M	

Table 3b. INSECTS COLEOPTERA & HOMOPTERA

3b.47	*[Blaps scutellata]*	*Tenebrionidae*	Central Asia	Not yet checked	Not yet checked	Sand-protecting plants	Stems & leaves	VL – M	
3b.48	*[Diesia sexdentata]*	*Tenebrionidae*	Central Asia	Not yet checked	Not yet checked	Sand-protecting plants	Leaves	VL – L	
3b.49	*[Sarothropus depressus]*	*Tenebrionidae*	Kazakhstan; Central Asia	Not yet checked	Not yet checked	Sand-protecting plants	Roots	VL – L	
3b.50	*[Sympiezocnemis gigantea]*	*Tenebrionidae*	Kazakhstan; Central Asia	Not yet checked	Not yet checked	Sand-protecting plants	Root crowns	L – M	
3b.51	*[Sympiezocnemis kessleri]*	*Tenebrionidae*	Central Asia	Not yet checked	Not yet checked	Sand-protecting plants	Root crowns	L – M	
3b.52	*[Tagona macrophthalma]*	*Tenebrionidae*	Kazakhstan; Central Asia	Not yet checked	Not yet checked	*Haloxylon (саксаул)*	Leaves	VL – L	
3b.53	*[Trigonoscelis sublaevicollis]*	*Tenebrionidae*	Central Asia	Not yet checked	Not yet checked	Sand-protecting plants	Leaves	VL – L	
3b.54	*[Trigonoscelis zoufali]*	*Tenebrionidae*	Central Asia	Not yet checked	Not yet checked	Sand-protecting plants	Leaves	VL – L	
3b.55	*[Zophosis scabriuscula]*	*Tenebrionidae*	Central Asia	Not yet checked	Not yet checked	Sand-protecting plants	Leaves	L – M	
3b.56	*Adesmia gebleri*	*Tenebrionidae*	Southern Kazakhstan; Central Asia	Not yet checked	Not yet checked	Sand-protecting plants	Leaves	L – M	
3b.57	*Blaps fausti*	*Tenebrionidae*	Central Asia	Not yet checked	Not yet checked	Sand-protecting plants	Stems	VL – L	
3b.58	*Sternodes caspicus*	*Tenebrionidae*	Uzbekistan, Turkmenistan	Not yet checked	Not yet checked	Sand-protecting plants	Root crowns, stems	VL – M	
3b.59	*Trigonoscelis grandis*	*Tenebrionidae*	Kazakhstan; Central Asia	Not yet checked	Not yet checked	Sand-protecting plants	Leaves	VL – L	
				Homoptera					
3b.60	*[Aphis catalpae]*	*Aphididae*	Ukraine; Central Asia	Not yet checked	Not yet checked	*Catalpa*	Leaves	VL – L	
3b.61	*[Brachycaudus pruni-domesticae]*	*Aphididae*	Transcaucasus; Central Asia	Not yet checked	Not yet checked	*Prunus*	Leaves	VL – L	
3b.62	*[Echinaphis ussuriensis]*	*Aphididae*	S. Far East	Not yet checked	Not yet checked	*Juglans*	Leaves	VL – L	

Table 3b. INSECTS HOMOPTERA

3b.63	*[Macrosiphum fallacies]*	*Aphididae*	Transcaucasus; Kazakhstan	Not yet checked	Not yet checked	*Juglans*	Leaves	VL – L	
3b.64	*[Mordvilkomemor pilosus]*	*Aphididae*	Central Asia	Not yet checked	Not yet checked	*Prunus*	Leaves	VL – L	
3b.65	*Anuraphis pyri-laseri*	*Aphididae*	S. E. Russia; Ukraine (Crimea); Transcaucasus	Not yet checked	Not yet checked	*Pyrus*	Leaves	VL – M	
3b.66	*Prociphilus kuwanae (= P. kuwanai = P. orientalis)*	*Aphididae*	S. Far East	Not yet checked	Japan	*Pyrus*	Leaves	VL – L	
3b.67	*Sappaphis piri (= S. pyri = Anuraphis piricola)*	*Aphididae*	S. Far East	Not yet checked	China, Japan, Koreas	*Pyrus*, *Artemisia*	Leaves	VL – L	
3b.68	*Schizaphis pyri*	*Aphididae*	S. Far East	Not yet checked	Not yet checked	*Pyrus*	Leaves	VL – L	
3b.69	*[Tibicina zevara]*	*Cicadidae*	Central Asia (mountains)	Not yet checked	Not yet checked	*Prunus*, *Crataegus*, other trees	Roots & trunks (bark)	VL – M	
3b.70	*Didesmococcus (= Eulecanium) unifasciatus*	*Coccidae*	Central Asia	Not yet checked	Not yet checked	*Prunus*	Trunks & branches	L – M	
3b.71	*Eulecanium (= Lecanium) rugulosum*	*Coccidae*	Transcaucasus; Central Asia; Kazakhstan	Not yet checked	Not yet checked	*Cotoneaster*, *Prunus*, *Pyrus*, other trees	Trunks & branches	L – M	
3b.72	*Rhodococcus (= Lecanium) turanicus*	*Coccidae*	Transcaucasus; Central Asia; Kazakhstan	Not yet checked	Iran	*Prunus*, *Pyrus*, *Malus*, other trees	Trunks & branches	L – M	
3b.73	*Tecaspis (= Noechionaspis) asiatica*	*Coccidae (= Diaspididae)*	Armenia, Central Asia	Not yet checked	Iran	*Prunus*, *Malus*, other trees	Lreaves & branches	VL – M	
3b.74	*[Aulacaspis mali]*	*Diaspididae*	S. Far East	Not yet checked	Not yet checked	*Malus*, *Crataegus*, *Humulus*, other trees	Trunks & branches	VL – M	
3b.75	*Diaspidiotus (= Aspidiotus) prunorum*	*Diaspididae*	Transcaucasus; Central Asia	Not yet checked	Not yet checked	*Prunus*, *Malus*, *Crataegus*, other trees	Trunks & branches	L – H	
3b.76	*Lepidosaphes malicola*	*Diaspididae*	Armenia	Not yet checked	Not yet checked	*Malus*, *Prunus*, *Juglans*, other trees	Trunks, leaves & branches	VL – M	
3b.77	*Lepidosaphes yanagicola*	*Diaspididae*	S. Far East	Not yet checked	Japan	*Maackia*, *Syringa*, other trees	Trunks & branches	VL – L	

Table 3b. INSECTS HOMOPTERA, HYMENOPTERA & LEPIDOPTERA

3b.78	*Lopholeucaspis japonica*	*Diaspididae*	S. E. Russia, S. Far East; Ukraine; Transcaucasus	USA	Brazil, China, India, Iran, Japan, Koreas, Pakistan, Turkey	*Citrus, Prunus, Diospiros, Acer, Pyrus,* many other trees	Trunks, leaves & branches	M – VH	
3b.79	*Phenacaspis (= Chlidaspis) prunorum*	*Diaspididae*	Armenia, Central Asia	Not yet checked	Irak	*Prunus*	Lreaves & branches	VL – M	
3b.80	*Salicicola (= Suturaspis = Leucaspis) archangelskajae (= S. archangelskyae)*	*Diaspididae*	Central Asia; Transcaucasus	Not yet checked	Iran	*Pyrus, Prunus, Malus,* other trees	Trunks, leaves & branches	L – M	
3b.81	*[Coccura (= Phenacoccus) ussuriensis]*	*Pseudococcidae*	S. Far East	Not yet checked	Koreas	*Syringa, Crataegus, Malus,* other trees	Trunks & branches	L – M	
				Hymenoptera					
3b.82	*Ceratina cyanea (= C. laevifrons)*	*Anthophoridae (= Ceratinidae)*	Kazakhstan; Central Asia	Not yet checked	Not yet checked	*Catalpa, Ailanthus*	Leaves	VL – L	
3b.83	*Arge (= Hylotoma) mali*	*Argidae*	S. Far East	Not yet checked	Japan	*Malus*	Leaves	L – H	
3b.84	*Megastigmus aculeatus*	*Torymidae*	Russia: widespread; Transcaucasus, Central Asia, Baltic countries; Belarus, Ukraine	USA, Canada	Europe: Widespread; Japan, North Africa, South Africa, Australia	*Rosa*	Seeds	L – M	Data of Dr. Alain Roques
3b.85	*Megastigmus cotoneastri*	*Torymidae*	Central Asia, S. Siberia	Not known	Japan	*Cotoneaster*	Seeds	L – M	Data of Dr. Alain Roques
3b.86	*Megastigmus brevicaudis*	*Torymidae*	S.E. Russia, C.E. Russia, N.E. Russia, S. Siberia, Central Asia, Baltic countries; Belarus, Ukraine	Not known	Europe: widespread	*Sorbus, Amelanchier*	Seeds	L – M	Data of Dr. Alain Roques
3b.87	*Megastigmus mali*	*Torymidae*	S. Siberia, Transbaik	Not known	Japan	*Pyrus*	Seeds	L – M	Data of Dr. Alain Roques
3b.88	*Megastigmus rosae*	*Torymidae*	S. Siberia	Not known	Western and Central Europe:	*Rosa*	Seeds	L – M	Data of Dr. Alain Roques
3b.89	*Megastigmus rosae kondaricus*	*Torymidae*	Central Asia	Not known	Not known	*Rosa*	Seeds	L – M	Data of Dr. Alain Roques
				Lepidoptera					
3b.90	*Coleophora (= Eupista) hemerobiola*	*Coleophoridae*	Central Asia	Not yet checked	Not yet checked	*Rosaceae*	Leaves and buds	VL – M	
3b.91	*[Holcocerus campiola]*	*Cossidae*	Kazakhstan; Central Asia	Absent	Absent	*Haloxylon, Arthrophytum ammodendron*	Trunks (wood)	L – H	

Table 3b. INSECTS LEPIDOPTERA

3b.92	*[Biston cognataria]*	*Geometridae*	Central Asia	North America	India, Japan	*Juglans*	Leaves	VL – L	
3b.93	*[Ephoria arenosa]*	*Geometridae*	S. Far East	Not yet checked	Japan, Koreas	*Juglans manshurica*	Leaves	VL – L	
3b.94	*[Gelasma grandificaria]*	*Geometridae*	S. Far East	Not yet checked	China, Japan, Koreas	*Juglans manshurica*	Leaves	VL – L	
3b.95	*[Hypomecis (= Boarmia = Jankowskia) athleta]*	*Geometridae*	S. Far East	Not yet checked	China, Japan, Koreas	*Malus*	Leaves	VL – L	
3b.96	*[Jotaphora admirabilis]*	*Geometridae*	S. Far East	Not yet checked	China, India (North)	*Juglans manshurica*	Leaves	VL – M	
3b.97	*Apocheima (= Biston) cinerarius (= A. cinerarium)*	*Geometridae*	Kazakhstan; Central Asia	Not yet checked	Not yet checked	*Morus*, fruit trees	Leaves	VL – H	Main damage – on *Morus*
3b.98	*Cystidia couaggaria*	*Geometridae*	S. Far East	Not yet checked	China, Japan, Koreas	*Rosaceae*	Leaves	VL – M	
3b.99	*Zamacra juglansiaria*	*Geometridae*	S. Far East	Not yet checked	Japan	*Juglans manshurica*	Leaves	VL – L	
3b.100	*[Lasiocampa eversmanni]*	*Lasiocampidae*	S. E. Russia, S. Siberia; Kazakhstan	Not yet checked	Not yet checked	*Caragana*, other trees	Leaves	VL – L	
3b.101	*[Metanastra (= Metanastria) subpurpurea]*	*Lasiocampidae*	Transbaikalia, S. Far East	Not yet checked	Japan	*Sorbus, Padus,* other trees	Leaves	VL – L	
3b.102	*[Phrixolepia serica]*	*Limacodidae (= Heterogeneidae)*	S. Far East	Not yet checked	Japan	*Juglans mandshurica*	Leaves	VL – M	
3b.103	*[Thecla (= Zephyrus) betulina]*	*Lycaenidae*	S. Far East	Not yet checked	China	*Malus manshurica*	Leaves	VL – L	
3b.104	*[Thecla (= Zephyrus) enthea]*	*Lycaenidae*	S. Far East	Not yet checked	China, Japan, Koreas	*Juglans manshurica*	Leaves	VL – L	
3b.105	*[Thecla herzi]*	*Lycaenidae*	S. Far East	Not yet checked	China, Koreas	*Malus manshurica*	Leaves	VL – L	
3b.106	*Orgyia prisca*	*Lymantriidae*	Central Asia	Not yet checked	Not yet checked	Fruit trees	Leaves	VL – L	
3b.107	*[Catocala (= Marmonia) bella]*	*Noctuidae*	S. Far East	Not yet checked	Japan	*Malus*	Leaves	VL – L	
3b.108	*[Cosmia (= Calymnia) unicolor]*	*Noctuidae*	S. Far East	Not yet checked	Japan	*Juglans, Corylus*	Leaves	VL – L	
3b.109	*[Sinna extrema (= S. ornatissima)]*	*Noctuidae*	S. Far East	Not yet checked	China, Japan	*Juglans manshurica*	Leaves	VL – L	
3b.110	*[Uropyia meticulodina]*	*Notodontidae*	S. Far East	Not yet checked	Japan, Koreas	*Juglans manshurica*	Leaves	VL – L	
3b.111	*Papilio bianor*	*Papilionidae*	S. Far East	Not yet checked	China, Japan, Koreas	*Phellodendron amurense*	Leaves	VL – L	

Table 3b. INSECTS LEPIDOPTERA & ORTHOPTERA

3b.112	*Papilio xuthus*	*Papilionidae*	S. Far East	Not yet checked	China, Japan, Koreas	*Phellodendron amurense*	Leaves	VL – L	
3b.113	*[Rhodinia jankowskii]*	*Saturniidae*	S. Far East	Not yet checked	Not known	*Phellodendron amurense*	Leaves	VL – L	
3b.114	*Synanthedon (= Aegeria) hector*	*Sesiidae (=Aegeriidae)*	S. Far East	Not yet checked	Japan	*Rosacea* ssp.	Trunks (wood)	VL – M	
3b.115	*[Smerinthus (= Phyllosphingia) dissimilis]*	*Sphingidae*	S. Far East	Not yet checked	China, Japan	*Juglans manshurica*	Leaves	VL – L	
3b.116	*Marumba (= Smerinthus) gaschkewitschii*	*Sphingidae*	S. Far East	Not yet checked	China, Japan	*Rosaceae*	Leaves	VL – M	
3b.117	*[Tischeria Rosella]*	*Tischeriidae*	Uzbekistan	Not yet checked	Not yet checked	*Rosa*	Leaves	VL – M	
3b.118	*[Tortrix praeclarana]*	*Tortricidae*	S. E. Russia, S. Siberia; Kazakhstan	Not yet checked	Not yet checked	*Caragana frutex*, *Caragana arborescens*	Leaves	VL – M	
3b.119	*Ancylis selenana*	*Tortricidae*	C. E. Russia, S. E. Russia, S. Far East; Ukraine	Not yet checked	Not yet checked	Fruit trees	Leaves	VL – M	
3b.120	*Cydia (= Carpocapsa) pyrivora*	*Tortricidae*	S. E. Russia; Ukraine; Transcaucasus	Not yet checked	Not yet checked	*Pyrus*	Fruits	L – H	
3b.121	*Eucosma (= Semasia) funesta*	*Tortricidae*	S. Far East	Not yet checked	Not yet checked	*Malus*, *Pyrus*, other trees	Buds & ovaries	L – H	
3b.122	*Spilonota (= Tmetocera) prognathana*	*Tortricidae*	S. Far East	Not yet checked	China, Koreas	*Malus*, *Pyrus*, other trees	Leaves & fruits	L – H	
3b.123	*Carposina sasakii*	*Tortricidae (=Carposinidae)*	S. Far East	Not yet checked	China, Japan, Koreas	*Malus*, *Pyrus*, other trees	Fruits	L – H	
3b.124	*[Ypsolopha (= Cerostoma) sasakii]*	*Yponomeutidae (=Plutellidae)*	S. Far East	Not yet checked	Koreas	*Rosaceae*	Leaves	VL – L	
3b.125	*Illiberis sinensis*	*Zygaenidae*	S. Far East	Not yet checked	China, Japan, Koreas	*Malus mandshurica*, *Salix*, other deciduous	Leaves	L – H	
				Orthoptera					
3b.126	*[Zubovskia parvula]*	*Acrididae*	S. Far East	Not yet checked	China, Koreas	*Juglans*, other trees	Leaves	VL - M	Main damage – to young plantations and in nurseries

Table 4. Forest pests causing significant damage on the territory of the former USSR added to the data base and not yet prioritized

N°	Pest	Group of organisms	Distribution			Main host plants in the former USSR	Damaged parts of plants	Economic significance in area of origin	Remarks
			In the former USSR	In North America	In other countries				
Acari (Arachnida)									
4.1	*[Bryobia ulmophila]*	*Bryobiidae*	Transcaucasus	Not yet checked	Not yet checked	*Ulmus*	Leaves	VL - M	
4.2	*[Paratetranychus (= Oligonychus) kobachidzei]*	*Tetranychidae*	Transcaucasus	Not yet checked	Not yet checked	*Platanus, Corylus, Juglans, Quercus*	Leaves	VL - M	
4.3	*[Paratetranychus (= Oligonychus) longiclavatus]*	*Tetranychidae*	Transcaucasus	Not yet checked	Not yet checked	*Quercus, Carpinus*	Leaves	VL - L	
4.4	*[Paratetranychus (= Oligonychus) piceae]*	*Tetranychidae*	Transcaucasus	Not yet checked	Not yet checked	*Picea, Pinus*	Leaves	VL - M	
4.5	*[Schizotetranychus aceri]*	*Tetranychidae*	Transcaucasus	Not yet checked	Not yet checked	*Acer, Aesculus*	Leaves	VL - M	
4.6	*[Schizotetranychus carpinula]*	*Tetranychidae*	Transcaucasus	Not yet checked	Not yet checked	*Carpinus*	Leaves	VL - L	
4.7	*[Schizotetranychus fraxini]*	*Tetranychidae*	Transcaucasus	Not yet checked	Not yet checked	*Fraxinus*	Leaves	VL - M	
4.8	*[Schizotetranychus ibericus]*	*Tetranychidae*	Transcaucasus	Not yet checked	Not yet checked	*Quercus*	Leaves	VL - L	
4.9	*[Schizotetranychus ulmicola]*	*Tetranychidae*	Transcaucasus	Not yet checked	Not yet checked	*Ulmus*	Leaves	VL - M	
Gastropoda									
4.10	*[Helicella candaharica (= Helix derbentina)]*	*Helicidae*	Central Asia	Not yet checked	Afghanistan	*Robinia, Salix*	Leaves	VL – L	Main damage – to nurseries
4.11	*[Helicella (= Xerophila) derbentina]*	*Helicidae*	S. E. Russia; Ukraine (Crimea); Transcaucasus	Not yet checked	Afghanistan	*Robinia, Prunus*, other trees	Leaves	VL – M	Main damage – to young plantations and in nurseries

Table 4. INSECTS COLEOPTERA

Insecta									
Coleoptera									
4.12	*[Tropiderinus interruptus]*	*Anthribidae*	S. Siberia, Transbaikalia, S. Far East	Not yet checked	Japan	*Prunus*, *Populus*, other trees	Trunks (wood)	VL – M	
4.13	*Apion pachyrrhynchum*	*Apionidae (= Curculionidae)*	S. Far East	Not yet checked	Japan	*Acer*	Leaves	VL – L	
4.14	*[Apoderus erythropterus]*	*Attelabidae*	N. E. Russia, N. W. Siberia, N. E. Siberia, S. Siberia, Transbaikalia,N. Far East, S. Far East	Not yet checked	China, Japan, Koreas	*Salix*, *Quercus*, *Corylus*, *Ulmus*, etc.	Leaves	L – M	
4.15	*[Apoderus jekeli]*	*Attelabidae*	S. Far East	Not yet checked	Japan, Koreas	*Alnus*, *Corylus*, *Juglans*, etc.	Leaves	VL – L	
4.16	*[Attelabus (= Henicolabus) giganteus]*	*Attelabidae*	S. Far East	Not yet checked	China, Koreas	*Tilia*	Leaves	VL – L	
4.17	*Tomapoderus ruficollis*	*Attelabidae*	Transbaikalia, S. Far East	Not yet checked	China, Koreas	*Ulmus*	Leaves	VL – L	
4.18	*[Acmaeodera glazunovi]*	*Buprestidae*	Central Asia	Not yet checked	Not yet checked	Different forest trees	Trunks (under bark)	VL – L	
4.19	*[Agrilus smaragdinus]*	*Buprestidae*	S. Far East	Not yet checked	Not yet checked	*Quercus*, *Betula*	Trunks (under bark)	VL – M	
4.20	*[Ancylocheira (= Ancylochira - ?) (= Buprestis) sibirica]*	*Buprestidae*	N. W. Siberia, N. E. Siberia, S. Siberia, Transbaikalia, S. Far East, N. Far East; Kazakhstan; Kyrgyzstan	Not yet checked	Mongolia, Northern China, Koreas	*Pinus*, *Picea*, other coniferous	Trunks (under bark)	L – M	
4.21	*[Ancylocheira (= Ancylochira - ?) rustica nickerli]*	*Buprestidae*	Georgia	Not yet checked	Not yet checked	*Pinus*, *Picea*	Trunks (under bark)	VL – L	
4.22	*[Ancylocheira (= Ancylochira - ?) salomonii]*	*Buprestidae*	Azerbaijan; Armenia; Central Asia	Not yet checked	Turkey, Iran, China	*Populus*	Trunks (under bark)	VL – L	
4.23	*[Ancylocheira (= Ancylochira - ?) strigosa]*	*Buprestidae*	N. W. Siberia, N. E. Siberia, S. Siberia, Transbaikalia, S. Far East, N. Far East; Kazakhstan	Not yet checked	Mongolia, Northern China	*Pinus*, *Picea*, other coniferous	Trunks (under bark)	L – M	
4.24	*[Anthaxia (= Chrysanthaxia) polychloros]*	*Buprestidae*	S. E. Russia; Ukraine; Transcaucasus	Not yet checked	Turkey, Syria	*Quercus*, *Prunus amygdalis*	Trunks (under bark)	L – M	
4.25	*[Anthaxia (= Melanthaxia) auriventris]*	*Buprestidae*	Kyrgyzstan	Not yet checked	Not yet checked	*Juniperus*	Trunks (under bark)	VL – L	

Table 4. INSECTS COLEOPTERA

4.26	*[Anthaxia (= Melanthaxia) baicalensis]*	*Buprestidae*	S. Siberia	Not yet checked	Not yet checked	Coniferous	Trunks (under bark)	VL – L	
4.27	*[Anthaxia (= Melanthaxia) turkestanica]*	*Buprestidae*	Kyrgyzstan (mountains)	Not yet checked	Not yet checked	*Juniperus*	Trunks (under bark)	VL – L	
4.28	*[Anthaxia (= Melanthaxia) zarudniana]*	*Buprestidae*	Southern Kazakhstan	Not yet checked	Not yet checked	*Juniperus*	Trunks (under bark)	VL – L	
4.29	*[Buprestis proscheki]*	*Buprestidae*	S. E. Russia; Ukraine (Crimea)	Not yet checked	Not yet checked	*Pinus*	Trunks (under bark)	VL – L	
4.30	*[Chrysobothris amurensis]*	*Buprestidae*	S. Far East	Not yet checked	Not yet checked	*Quercus mongolica*	Trunks (under bark)	VL – L	
4.31	*[Chrysobothris pulchripes]*	*Buprestidae*	S. Far East	Not yet checked	Northern China	*Quercus mongolica*	Trunks (under bark)	VL – L	
4.32	*[Eurythyrea eoa]*	*Buprestidae*	S. Far East	Not yet checked	China	*Populus*	Trunks (under bark)	VL – L	
4.33	*[Poecilonota dicercoides]*	*Buprestidae*	S. Far East	Not yet checked	Northern China	*Populus*	Trunks (under bark)	VL – L	
4.34	*[Scintillatrix (= Lampra) amurensis]*	*Buprestidae*	S. Far East	Not yet checked	Not yet checked	*Tilia*	Trunks (under bark)	VL – L	
4.35	*[Scintillatrix (= Lampra) suvorovi]*	*Buprestidae*	S. Far East	Not yet checked	Northern China	*Ulmus*, *Quercus*	Trunks (under bark)	VL – L	
4.36	*[Scintillatrix (= Lampra) virgata]*	*Buprestidae*	S. Far East	Not yet checked	Northern China	*Quercus*	Trunks (under bark)	VL – L	
4.37	*Acmaeodera chotanica*	*Buprestidae*	Uzbekistan	Not yet checked	China	*Populus*, *Morus*, *Pistacea*	Trunks (under bark)	VL – M	
4.38	*Anthaxia (= Melanthaxia) conradti*	*Buprestidae*	Central Asia (mountains)	Not yet checked	Not yet checked	*Juniperus*	Trunks (under bark)	VL – L	
4.39	*Anthaxia aurulenta (= Cratomerus (= Trichocratomerus) intermedius)*	*Buprestidae*	S. E. Russia; Transcaucasus; Central Asia	Not yet checked	Northern Iran	*Ulmus*, *Pyrus*	Trunks (under bark)	VL – L	
4.40	*Capnodis cariosa*	*Buprestidae*	S. E. Russia; Transcaucasus	Not yet checked	Syria, Iran	*Pistacea*, *Prunus*, *Salix*, *Populus*	Roots (under bark)	L – M	
4.41	*Capnodis miliaris*	*Buprestidae*	Transcaucasus, Central Asia	Not yet checked	DE, Syria, Turkey, Iran, Irak, Afghanistan	*Populus*, *Salix*	Trunks (under bark)	L – M	

Table 4. INSECTS COLEOPTERA

4.42	*Chrysobothris (= Abothris) nana*	*Buprestidae*	Central Asia	Not yet checked	Not yet checked	*Populus*	Trunks (under bark)	VL – L	
4.43	*Chrysobothris affinis tetragramma*	*Buprestidae*	Transcaucasus; Central Asia	Not yet checked	Iran	*Ulmus, Salix, Juglans*	Trunks (under bark)	L – M	
4.44	*Cratomerus (= Anthaxia) fariniger*	*Buprestidae*	Central Asia	Not yet checked	Not yet checked	*Populus*	Trunks (under bark)	L – M	
4.45	*Cratomerus (= Trichocratomerus) aurulentus seniculus*	*Buprestidae*	S. E. Russia; Ukraine; Uzbekistan	Not yet checked	Turkey, Syria	*Ulmus, Malus*	Trunks (under bark)	VL – L	
4.46	*[Acanthocinus elegans]*	*Cerambycidae*	Transcaucasus	Not yet checked	Iran	*Quercus*, other trees	Trunks (wood)	VL – L	
4.47	*[Acanthocinus stillatus]*	*Cerambycidae*	S. Far East	Not yet checked	Japan, Koreas	*Acer mono*	Trunks (wood)	VL – L	
4.48	*[Acmaeops brachyptera]*	*Cerambycidae*	Kazakhstan (mountains)	Not yet checked	China	*Picea schrenkiana*	Trunks (under bark)	VL – L	
4.49	*[Anaesthetis flavipilis]*	*Cerambycidae*	S. Far East	Not yet checked	China, Koreas	*Quercus*, other trees	Trunks (wood)	VL – L	
4.50	*[Anaglyptus arabicus]*	*Cerambycidae*	S.E.Russia; Transcaucasus	Not yet checked	Iran, Turkey	*Quercus*	Trunks (wood)	VL – L	
4.51	*[Anaglyptus simplicicornis]*	*Cerambycidae*	S.E.Russia; Transcaucasus	Not yet checked	Iran, Turkey	*Quercus, Castanea*	Trunks (wood)	VL – L	
4.52	*[Asemum amurense]*	*Cerambycidae*	S. Far East	Not yet checked	China, Japan, Koreas	*Pinus, Picea*	Trunks (wood)	VL – M	
4.53	*[Callidium chlorizans]*	*Cerambycidae*	N.W. Siberia, N.E. Siberia, S. Siberia, Transbaikalia, S. Far East	Not yet checked	China, Japan, Koreas, Mongolia	*Picea*	Trunks (wood)	VL – L	
4.54	*[Cerambyx multiplicatus]*	*Cerambycidae*	Transcaucasus	Not yet checked	Iran	*Quercus, Fagus, Ulmus*	Trunks (wood)	VL – L	
4.55	*[Chlorophorus faldermanni]*	*Cerambycidae*	S.E.Russia; Transcaucasus; Central Asia	Not yet checked	Afghanistan, China, Iran	*Populus, Elaeagnus*, deciduous wood	Dry wood, Trunks (wood)	L – H	Main damage – to dry wood
4.56	*[Distenia gracilis]*	*Cerambycidae*	S. Far East	Not yet checked	China, Japan, Koreas	*Picea, Pinus* and other trees	Trunks (wood)	VL – L	
4.57	*[Isotomus comptus]*	*Cerambycidae*	S.E.Russia; Transcaucasus; Ukraine	Not yet checked	India, Iran, Turkey	*Carpinus, Quercus, Fagus, Castanea*, deciduous wood	Dry wood, Trunks (wood)	L – M	Main damage – to dry wood
4.58	*[Megasemum quadricostulatum]*	*Cerambycidae*	Transbaikalia, S. Far East	Not yet checked	China, Japan, Koreas	*Pinus sibirica*	Trunks (wood)	VL – M	
4.59	*[Mesosa hirsute]*	*Cerambycidae*	S. Far East	Not yet checked	Japan, Koreas	*Tilia*	Trunks (wood)	VL – L	

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4.60	*[Mesosa obscuricornis]*	*Cerambycidae*	Transcaucasus	Not yet checked	Iran	*Quercus*, other trees	Trunks (wood)	VL – L	
4.61	*[Molorchus pallidipennis]*	*Cerambycidae*	Kyrgyzstan; Kazakhstan	Not yet checked	China	*Picea schrenkiana*	Trunks (wood)	VL – L	
4.62	*[Pachyta bicuneata]*	*Cerambycidae*	S. Far East	Not yet checked	China, Koreas	*Pinus sibiricus, Larix dahurica, Picea koraiensis*	Trunks (wood)	VL – L	
4.63	*[Paraclytus raddei]*	*Cerambycidae*	Azerbaijan	Not yet checked	Iran	*Quercus*	Trunks (wood)	VL – L	
4.64	*[Paraclytus reitteri]*	*Cerambycidae*	Azerbaijan	Not yet checked	Iran	*Quercus*	Trunks (wood)	VL – L	
4.65	*[Paraclytus sexguttatus]*	*Cerambycidae*	S.E.Russia; Transcaucasus	Not yet checked	Iran, Turkey	*Quercus*	Trunks (wood)	VL – L	
4.66	*[Patimna liturata]*	*Cerambycidae*	S. Far East	Not yet checked	Japan	*Acer*	Trunks (wood)	VL – L	
4.67	*[Plagionotus bartolomei]*	*Cerambycidae*	Transcaucasus	Not yet checked	Iran	*Quercus*	Trunks (wood)	VL – L	
4.68	*[Plagionotus christophi]*	*Cerambycidae*	S. Far East	Not yet checked	China	*Quercus*	Trunks (wood)	VL – L	
4.69	*[Plagionotus lugubris]*	*Cerambycidae*	Transcaucasus	Not yet checked	Iran	*Quercus*	Trunks (wood)	L – M	
4.70	*[Plagionotus pulcher]*	*Cerambycidae*	S. Far East	Not yet checked	China, Japan, Koreas	*Quercus, Betula*	Trunks (wood)	VL – L	
4.71	*[Pogonocherus caucasicus]*	*Cerambycidae*	Transcaucasus	Not yet checked	Not yet checked	*Picea*	Trunks (wood)	VL – L	
4.72	*[Pogonocherus kuksha]*	*Cerambycidae*	Transcaucasus	Not yet checked	Not yet checked	*Picea*	Trunks (wood)	VL – L	
4.73	*[Prionus angustatus]*	*Cerambycidae*	Central Asia	Not yet checked	Not yet checked	*Populus* and other trees	Trunks (wood)	VL – L	
4.74	*[Rhagium fasciculatum]*	*Cerambycidae*	S. E. Russia; Transcaucasus	Not yet checked	Iran, Turkey	*Quercus, Fagus, Tilia, Platanus, Castanea* and other trees	Trunks (under bark)	VL – L	
4.75	*[Rhagium inquisitor rugipenne]*	*Cerambycidae*	Transbaikalia, S. Far East	Not yet checked	China, Koreas	*Pinus, Picea* and other trees	Trunks (under bark)	VL – L	
4.76	*[Rhagium pygmaeum]*	*Cerambycidae*	Azerbaijan	Not yet checked	Iran	*Quercus, Fagus, Tilia, Castanea* and other trees	Trunks (under bark)	VL – L	
4.77	*[Sachalinobia koltzei]*	*Cerambycidae*	S. Far East	Not yet checked	China, Japan, Koreas	*Abies holophylla, Abies nephrolepis*	Trunks (wood)	VL – L	

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4.78	*[Saperda alberti (= S. decempunctata)]*	*Cerambycidae*	N.W. Siberia, N.E. Siberia, S. Siberia, Transbaikalia, S. Far East	Not yet checked	Not yet checked	*Populus tremula, Ulmus*	Trunks (wood)	VL – L	
4.79	*[Saperda interrupta]*	*Cerambycidae*	N.W. Siberia, N.E. Siberia, S. Siberia, Transbaikalia, S. Far East	Not yet checked	China, Koreas	*Picea ajanensis, Pinus sibirica*	Trunks (wood)	VL – L	
4.80	*[Stenocorus insitivus]*	*Cerambycidae*	S. E. Russia; Ukraine; Transcaucasus	Not yet checked	Turkey	*Quercus, Castanea* and other trees	Trunks (under bark)	VL – L	
4.81	*[Stenygrinum quadrinotatum]*	*Cerambycidae*	S. Far East	Not yet checked	Assam, Birma, China, Japan, Koreas, Manipur	*Castanea, Quercus, Salix*	Trunks (wood)	VL – L	
4.82	*[Turanium pilosum]*	*Cerambycidae*	Central Asia	Not yet checked	Not yet checked	*Betula, Salix, Populus, Ulmus*	Trunks (wood)	VL – L	
4.83	*[Turanium scabrum]*	*Cerambycidae*	Central Asia	Not yet checked	Not yet checked	*Populus, Ulmus, Salix, Malus, Prunus*	Trunks (wood)	VL – L	
4.84	*[Xylotrechus cuneipennis]*	*Cerambycidae*	Transbaikalia, S. Far East	Not yet checked	China, Japan, Koreas	*Quercus, Betula, Ulmus*	Trunks (wood)	VL – L	
4.85	*[Xylotrechus rufilius]*	*Cerambycidae*	S. Far East	Not yet checked	China, Japan, Koreas	*Acer*	Trunks (wood)	VL – L	
4.86	*Acalolepta cervina (= Dihammus cervinus)*	*Cerambycidae*	S. Far East	Not yet checked	Birma, China, India, Japan, Koreas, Nepal	*Alnus*, other trees	Trunks (wood)	VL – L	
4.87	*Chlorophorus motschulskyi*	*Cerambycidae*	Transbaikalia, S. Far East	Not yet checked	China, Japan, Koreas, Mongolia	*Betula*	Trunks (wood)	VL – L	
4.88	*Compsidia (= Saperda) balsamifera*	*Cerambycidae*	N.W. Siberia, N.E. Siberia, S. Siberia, Transbaikalia, S. Far East	Not yet checked	Mongolia	*Populus balsamifera*	Trunks (wood)	VL – L	
4.89	*Dokhturovia (= Dokhtouroffia) nebulosa*	*Cerambycidae*	Kyrgyzstan; Kazakhstan	Absent	China	*Picea schrenkiana*	Trunks (wood)	VL – M	
4.90	*Eutetrapha metallescens*	*Cerambycidae*	S. Far East	Not yet checked	China, Koreas	*Tilia*	Trunks (wood)	VL – L	
4.91	*Hesperophanus (= Trichoferus) campestris*	*Cerambycidae*	S. Far East; Central Asia (mountains)	Not yet checked	China, Koreas, Mongolia	Fruit and other deciduous trees	Trunks (wood)	VL – L	
4.92	*Leptura sequenci (= L. sequensi)*	*Cerambycidae*	N.W. Siberia, N.E. Siberia, S. Siberia, Transbaikalia, S. Far East	Not yet checked	China, Japan, Koreas, Mongolia	*Pinus, Picea*	Trunks (wood)	VL – L	
4.93	*Mallambyx raddei*	*Cerambycidae*	S. Far East	Not yet checked	China, Japan, Koreas	*Quercus, Castanea, Fraxinus*	Trunks (wood)	L – M	
4.94	*Mesosa japonica*	*Cerambycidae*	S. Far East	Not yet checked	China, Japan	*Castanea, Acer, Malus, Prunus*	Trunks (wood)	VL – L	
4.95	*Moechotipa diphysis*	*Cerambycidae*	S. Far East	Not yet checked	China, Koreas	*Quercus*, other trees	Trunks (wood)	VL – L	

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4.96	*Monochamus guttatus*	*Cerambycidae*	S. Far East	Not yet checked	China, Koreas	*Fraxinus*, other trees	Trunks (wood)	VL – L	
4.97	*Morimus verecundus*	*Cerambycidae*	S.E.Russia; Transcaucasus; Turkmenistan	Not yet checked	Caucasus, Iran, Turkey	*Quercus*, *Fagus*, *Castanea*, *Juglans*, other trees	Trunks (wood)	VL – L	
4.98	*Parandra caspia*	*Cerambycidae*	Azerbaijan	Not yet checked	Iran	*Populus*, *Salix*, *Alnus*, *Quercus* and other deciduous	Trunks (wood)	VL – M	
4.99	*Prionus insularis*	*Cerambycidae*	S. Far East	Not yet checked	China, Japan, Koreas	*Pinus*, *Abies*, *Cryptomeria*, *Picea*, *Cha-maecyparis*, and other trees	Trunks (wood)	VL – L	
4.100	*Rhesus serricollis*	*Cerambycidae*	Transcaucasus	Not yet checked	East Maditerranean, Iran, Syria, Turkey	*Quercus*, *Fagus*, *Platanus*, *Juglans*, *Salix*, *Tilia*, *Ulmus* and other deciduous	Trunks (wood)	VL – M	
4.101	*Rhopaloscelis bifasciatus*	*Cerambycidae*	S. Far East	Not yet checked	China, Japan, Koreas	*Quercus*, other trees	Trunks (wood)	VL – L	
4.102	*Rhopaloscelis unifasciatus*	*Cerambycidae*	S. Far East	Not yet checked	China, Japan, Koreas	*Quercus*, other trees	Trunks (wood)	VL – L	
4.103									
4.104	*[Altica (= Haltica) bisulcata]*	*Chrysomelidae*	S. Far East	Not yet checked	Not yet checked	*Salix*, *Populus tremula*	Leaves	VL – L	
4.105	*[Bedelia angustata]*	*Chrysomelidae*	Armenia, Turkmenistan	Not yet checked	Iran	*Populus*	Leaves	VL – L	
4.106	*[Bedelia kokandica]*	*Chrysomelidae*	Tadjikistan, Turkmenistan, Uzbekistan	Not yet checked	Not yet checked	*Populus*, *Salix*	Leaves	VL – L	
4.107	*[Bedelia viridicoerulea]*	*Chrysomelidae*	Tadjikistan, Turkmenistan, Uzbekistan	Not yet checked	Not yet checked	*Populus*, *Salix*	Leaves	VL – L	
4.108	*[Colasposoma dahuricum]*	*Chrysomelidae*	S. Siberia, Transbaikalia, S. Far East	Not yet checked	Japan	*Fraxinus*	Leaves	VL – L	
4.109	*[Cryptocephalus koltzei]*	*Chrysomelidae*	S. Far East	Not yet checked	China	*Corylus*	Leaves	VL – L	
4.110	*[Cryptocephalus kulibini]*	*Chrysomelidae*	Transbaikalia, S. Far East	Not yet checked	Not yet checked	*Corylus*	Leaves	VL – L	
4.112	*[Cryptocephalus mannerheimi]*	*Chrysomelidae*	N.E. Siberia, S. Siberia, Transbaikalia, S. Far East	Not yet checked	Japan	*Corylus*	Leaves	VL – L	
4.113	*[Cryptocephalus pallescens]*	*Chrysomelidae*	S. Far East	Not yet checked	Not yet checked	*Corylus*	Leaves	VL – L	
4.114	*[Cryptocephalus peliopterus]*	*Chrysomelidae*	N.E. Siberia, S. Siberia, Transbaikalia, S. Far East	Not yet checked	Not yet checked	*Populus*, *Ulmus*,*Corylus*	Leaves	VL – L	

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4.115	*[Cryptocephalus polymorphus]*	*Chrysomelidae*	Central Asia (mountains)	Not yet checked	Not yet checked	*Populus*	Leaves	VL – L	
4.116	*[Cryptocephalus regalis]*	*Chrysomelidae*	N.E. Siberia, S. Siberia, Transbaikalia, S. Far East	Not yet checked	China, Japan, Koreas	*Populus tremula*	Leaves	VL – L	
4.117	*[Cyaniris golda]*	*Chrysomelidae*	N.E. Siberia, Transbaikalia, S. Far East	Not yet checked	Not yet checked	*Corylus*	Leaves	VL – L	
4.118	*[Cyaniris hypocrita]*	*Chrysomelidae*	Ukraine (Crimea)	Not yet checked	Not yet checked	*Quercus*	Leaves	VL – L	
4.119	*[Euliroetis ornate]*	*Chrysomelidae*	S. Far East	Not yet checked	China, Japan, Koreas	*Populus tremula*	Leaves	VL – L	
4.120	*[Galerucida jacobsoni]*	*Chrysomelidae*	S. Far East	Not yet checked	China, Koreas	*Ulmus*	Leaves	VL – L	
4.121	*[Gastrolina peltoidea]*	*Chrysomelidae*	S. Siberia, Transbaikalia, S. Far East	Not yet checked	China	*Juglans, Alnus, Fraxinus*	Leaves	VL – L	
4.122	*[Gonioctena (= Phytodecta) gracilicornis]*	*Chrysomelidae*	S. Siberia, Transbaikalia, S. Far East	Not yet checked	Japan	*Salix*	Leaves	VL – L	
4.123	*[Labidostomis asiatica]*	*Chrysomelidae*	Transcaucasus	Not yet checked	Iran, Syria	*Salix*	Leaves	VL – L	
4.124	*[Labidostomis sibirica (= L. amurensis)]*	*Chrysomelidae*	N.W. Siberia, N.E. Siberia, S. Siberia, Transbaikalia, S. Far East	Not yet checked	Not yet checked	*Corylus*	Leaves	VL – L	
4.125	*[Luperus qussakovskii*	*Chrysomelidae*	Tadjikistan	Not yet checked	Not yet checked	*Populus, Fraxinus*	Leaves	VL – L	
4.126	*[Rhadinosa nigrocyanea]*	*Chrysomelidae*	S. Siberia, Transbaikalia, S. Far East	Not yet checked	Japan	*Populus tremula*	Leaves	VL – L	
4.127	*Agelastica coerulea*	*Chrysomelidae*	S. Far East	North America	China, Japan, Koreas	*Alnus, Malus*	Leaves	VL – M	
4.128	*Galerucella maculicollis*	*Chrysomelidae*	S. Far East	Not yet checked	China, Japan	*Ulmus*	Leaves	VL – M	
4.129	*Labidostomis beckeri*	*Chrysomelidae*	S.E.Russia; Kazakhstan; Ukraine	Not yet checked	Not yet checked	*Quercus*	Leaves	VL – L	
4.130	*Labidostomis bipunctata*	*Chrysomelidae*	N.W. Siberia, N.E. Siberia, S. Siberia, Transbaikalia, S. Far East	Not yet checked	Mongolia	*Betula*	Leaves	VL – L	
4.131	*Labidostomis chinensis*	*Chrysomelidae*	S. Far East	Not yet checked	China	Deciduous trees	Leaves	VL – L	
4.132	*[Acicnemis (= Oplocnemis) palliatus]*	*Curculionidae*	S. Far East	Not yet checked	Japan	*Pinus koraiensis*	Trunks (under bark) - ?	VL – L	
4.133	*[Chlorophanus micans]*	*Curculionidae*	S. E. Russia; Ukraine	Not yet checked	Not yet checked	*Salix, Populus*	Leaves	L – M	
4.134	*[Chlorophanus rufomarginatus]*	*Curculionidae*	Kazakhstan	Not yet checked	Not yet checked	*Populus*	Leaves	VL – L	
4.135	*[Chlorophanus sibiricus]*	*Curculionidae*	N. E. Siberia, S. Siberia, Transbaikalia, S. Far East	Not yet checked	China, Koreas	*Salix, Fraxinus*	Leaves	L – M	
4.136	*[Corygetes marmoratus]*	*Curculionidae*	Transbaikalia	Not yet checked	Not yet checked	*Ulmus*	Leaves	VL – L	

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4.137	*[Curculio dickmanni]*	*Curculionidae*	S. Far East	Not yet checked	Not yet checked	*Quercus, Corylus*	Acorns & nuts	VL – L	
4.138	*[Curculio distinguendus]*	*Curculionidae*	S. Far East	Not yet checked	Japan	*Corylus*	Nuts	VL – L	
4.139	*[Cyphycerus tessellates]*	*Curculionidae*	S. Far East	Not yet checked	Japan	*Juglans, Prunus, Quercus*	Leaves & buds	VL – L	
4.140	*[Hylobius haroldi]*	*Curculionidae*	S. Far East	Not yet checked	Japan	*Picea, Pinus, Larix*	Roots, bark	L – H	Main damage – to young trees
4.141	*[Larinus subvariolosus]*	*Curculionidae*	S. Far East	Not yet checked	Not yet checked	*Fraxinus*	Leaves	VL – L	
4.142	*[Magdalis koltzei]*	*Curculionidae*	S. Far East	Not yet checked	Not yet checked	*Pinus*	Trunks (under bark) - ?	VL – L	
4.143	*[Megamecus albilaterus]*	*Curculionidae*	Central Asia	Not yet checked	Not yet checked	*Populus, Malus, Pyrus, Tamarix*	Leaves	VL – L	
4.144	*[Mylloceropsfilicornis]*	*Curculionidae*	S. Far East	Not yet checked	Not yet checked	*Ulmus*	Leaves	VL – L	
4.145	*[Phyllobius dorsalis]*	*Curculionidae*	S. Siberia	Not yet checked	Not yet checked	*Populus*	Leaves	VL – L	
4.146	*[Phyllobius fulvago]*	*Curculionidae*	Ukraine (Crimea)	Not yet checked	Not yet checked	*Quercus*	Leaves	VL – L	
4.147	*[Phyllobius pallidipennis]*	*Curculionidae*	Azerbaijan	Not yet checked	Iran	*Quercus*	Leaves	VL – L	
4.148	*[Phyllobius pictus]*	*Curculionidae*	Ukraine (Crimea); Transcaucasus	Not yet checked	Not yet checked	*Quercus*	Leaves	VL – L	
4.149	*[Polydrosus (= Polydrusus) obesulus]*	*Curculionidae*	S. Far East	Not yet checked	Not yet checked	*Salix, Juglans*	Leaves	VL – L	
4.150	*[Polydrosus (= Polydrusus) obliquatus]*	*Curculionidae*	Central Asia	Not yet checked	Not yet checked	*Prunus, Pyrus, Malus, Robinia, Pistacea*	Leaves	VL – M	
4.151	*[Polydrosus (= Polydrusus) ponticus]*	*Curculionidae*	S. E. Russia; Ukraine (Crimea); Transcaucasus	Not yet checked	Turkey	*Quercus*	Leaves	VL – L	
4.152	*[Polydrosus (= Polydrusus) rufulus]*	*Curculionidae*	S. E. Russia; Transcaucasus; Turkmenistan	Not yet checked	Turkey	*Alnus, Parrotia*	Leaves	VL – L	
4.153	*[Pseudocneorrhinus obesus*	*Curculionidae*	S. Far East	Not yet checked	Japan, Koreas	*Corylus, Juglans, Quercus*	Buds	L – M	
4.154	*[Rhynchaenus mutabilis]*	*Curculionidae*	Transbaikalia, S. Far East	Not yet checked	Japan	*Ulmus pumila*	Leaves	VL – L	
4.155	*[Trachodes hystrix]*	*Curculionidae*	S. E. Russia; Transcaucasus	Not yet checked	Not yet checked	*Fagus, Juglans*	Trunks (wood)	VL – L	

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4.156	*Cleonus (= Stephanophorus) strabus*	*Curculionidae*	S. E. Russia; Ukraine; Transcaucasus	Not yet checked	Not yet checked	*Quercus*	Leaves	VL – L	
4.157	*Cossonus rotundicollis*	*Curculionidae*	S. Far East	Not yet checked	Not yet checked	*Populus*	Trunks (under bark)	VL – L	
4.158	*Pissodes obscurus*	*Curculionidae*	S. Far East	Not yet checked	Japan	*Pinus, Picea, Abies*	Trunks (under bark) - ?	VL – L	
4.159	*[Byctiscus congener] (= B. congenor - ?) [(= B. puberulus)]*	*Curculionidae (= Attelabidae)*	S. Siberia, Transbaikalia, S. Far East	Not yet checked	China, Japan	*Acer, Tilia, Betula, Ulmus, Populus, Fraxinus*, etc.	Leaves	VL – M	
4.160	*[Byctiscus princeps]*	*Curculionidae (= Attelabidae)*	S. Far East	Not yet checked	Japan	*Ulmus, Tilia, Malus, Betula, Populus*, etc.	Leaves	VL – L	
4.161	*[Byctiscus rugosus]*	*Curculionidae (= Attelabidae)*	S. Siberia, Transbaikalia, S. Far East	Not yet checked	Koreas	*Populus, Malus, Pyrus*, etc.	Leaves	VL – L	
4.162	*[Deporaus unicolor]*	*Curculionidae (= Attelabidae)*	S. Far East	Not yet checked	Japan	*Quercus, Corylus, Syringa*, etc.	Leaves	VL – L	
4.163	*[Paracycnotrachelus longiceps (= Apoderus longiceps)]*	*Curculionidae (= Attelabidae)*	S. Far East	Not yet checked	China, Japan, Koreas	*Quercus, Corylus*	Leaves	L – M	
4.164	*[Lyctus suturalis]*	*Lyctidae*	S. E. Russia; Transcaucasus	Not yet checked	Not yet checked	*Quercus*	Trunks (wood)	L – M	
4.165	*[Lytta caraganae]*	*Meloidae*	Transbaikalia, S. Far East	Not yet checked	Not yet checked	*Fraxinus, Lonicera, Syringa*	Leaves	VL – M	
4.166	*[Lytta menetriesi]*	*Meloidae*	South-eastern Kazakhstan; Central Asia	Not yet checked	Not yet checked	*Fraxinus, Ulmus*	Leaves	L – H	
4.167	*Crossotarsus koryoensis (= C. koreyoensis)*	*Platypodidae*	S. Far East	Not yet checked	Japan, Koreas	*Quercus, Acer*	Trunks (wood)	VL – L	
4.168	*[Amphimallon volgensis]*	*Scarabaeidae*	S. E. Russia; Kazakhstan	Not yet checked	Not yet checked	Different plants	Roots	VL – M	Main damage – to seedlings in nurseries
4.169	*[Anisoplia alazanica]*	*Scarabaeidae*	Georgia	Not yet checked	Not yet checked	*Quercus*, other plants	Roots	VL – L	Main damage – to seedlings in nurseries
4.170	*[Chioneosoma porosum]*	*Scarabaeidae*	Azerbaijan; Central Asia	Not yet checked	Not yet checked	Different plants	Roots	VL – M	
4.171	*[Hoplia golovjankoi]*	*Scarabaeidae*	Ukraine	Not yet checked	Not yet checked	Different plants	Roots and leaves	VL – L	
4.172	*[Hoplia pollinosa]*	*Scarabaeidae*	S. E. Russia; Transcaucasus	Not yet checked	Turkey	Different plants	Roots and leaves	VL – L	

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4.173	*[Melolontha gussakovskii]*	*Scarabaeidae*	Tadjikistan	Not yet checked	Not yet checked	Different deciduous	Roots and leaves	VL – M	
4.174	*[Melolontha kraatzi]*	*Scarabaeidae*	Azerbaijan	Not yet checked	Iran	Different deciduous	Roots and leaves	VL – M	
4.175	*[Melolontha permira]*	*Scarabaeidae*	S. E. Russia; Georgia	Not yet checked	Not yet checked	Different deciduous	Roots and leaves	VL – M	
4.176	*[Monotropus fausti]*	*Scarabaeidae*	S. E. Russia; Azerbaijan	Not yet checked	Not yet checked	Different plants	Roots	VL – L	Main damage – to seedlings in nurseries
4.177	*[Oxythyrea albopicta]*	*Scarabaeidae*	S. E. Russia; Transcaucasus; Kazakhstan; Central Asia	Not yet checked	Not yet checked	*Malus* and other trees	Flowers	VL – M	
4.178	*[Proagopertha lucidula (= P. acutisterna)]*	*Scarabaeidae*	S. Far East	Not yet checked	China	*Malus, Ulmus, Crataegus, Rosa*	Flowers & leaves	L – M	
4.179	*Adoretus discolor*	*Scarabaeidae*	S. E. Russia; Transcaucasus	Not yet checked	Not yet checked	*Quercus*, other plants	Roots	VL – L	Main damage – to seedlings in nurseries
4.180	*Anisoplia farraria*	*Scarabaeidae*	Transcaucasus	Not yet checked	Not yet checked	*Quercus*, other plants	Roots	VL – L	Main damage – to seedlings in nurseries
4.181	*Anomala (= A. aenea) abchasica*	*Scarabaeidae*	S. E. Russia; Transcaucasus	Not yet checked	Turkey	*Salix, Vitis, Castanea*	Leaves of *Salix* and *Vitis*, roots of *Vitis* and *Castanea*	VL – L	
4.182	*Brahmina intermedia*	*Scarabaeidae*	Transbaikalia, S. Far East	Not yet checked	Mongolia, China	Different deciduous	Leaves	VL – L	
4.183	*Ectinohoplia rufipes*	*Scarabaeidae*	S. Far East	Not yet checked	China, Koreas	*Malus, Prunus, Betula, Corylus*	Roots and leaves	L – H	
4.184	*Epicometis (= Tropinota) suturalis*	*Scarabaeidae*	Transcaucasus	Not yet checked	Turkey, Iran	*Malus* and other trees	Flowers	VL – M	
4.185	*Epicometis senicula*	*Scarabaeidae*	Transcaucasus	Not yet checked	Turkey, Iran	*Malus* and other trees	Flowers	VL – M	
4.186	*Epicometis turanica*	*Scarabaeidae*	Kazakhstan; Central Asia	Not yet checked	Not yet checked	*Malus* and other trees	Flowers	L – H	
4.187	*Holotrichia (= Lachnosterna) diomphalia*	*Scarabaeidae*	Transbaikalia, S. Far East	Not yet checked	China, Japan, Koreas	Different deciduous	Roots and leaves	VL – L	
4.188	*Hoplia aureola*	*Scarabaeidae*	N. E. Siberia, S. Siberia, Transbaikalia, S. Far East	Not yet checked	Mongolia, Koreas	*Betula* and other plants	Roots and leaves	VL – M	
4.189	*Lachnosterna (= Brahmina) sedakovi*	*Scarabaeidae*	N. E. Siberia, S. Siberia, Transbaikalia, S. Far East	Not yet checked	Mongolia	Different deciduous	Leaves	VL – L	
4.190	*Lachnosterna (= Holotrichia) sichotana*	*Scarabaeidae*	S. Far East	Not yet checked	Not yet checked	Different deciduous	Roots and leaves	VL – L	

Table 4. INSECTS COLEOPTERA

4.191	*Maladera (= Aserica) orientalis (= Serica salebrosa)*	*Scarabaeidae*	S. Far East	Not yet checked	China, Japan, Koreas	Different plants	Roots and leaves	L – H	
4.192	*Maladera japonica (= Aserica castanea = Autoserica castanea)*	*Scarabaeidae*	Georgia; S. Far East	USA	China, Japan, Koreas	Different plants	Roots and leaves	L – H	
4.193	*Melolontha aceris*	*Scarabaeidae*	Transcaucasus	Not yet checked	Not yet checked	Different plants	Roots and leaves	VL – M	
4.194	*Melolontha afflicta*	*Scarabaeidae*	Uzbekistan	Not yet checked	Not yet checked	Different deciduous	Roots and leaves	VL – M	
4.195	*Monotropus nordmanni*	*Scarabaeidae*	S. E. Russia; Ukraine	Not yet checked	Not yet checked	Different plants	Roots	VL – L	Main damage – to seedlings in nurseries
4.196	*Polyphylla adspersa*	*Scarabaeidae*	S. E. Russia; Transcaucasus; Kazakhstan; Central Asia	Not yet checked	Iran, Turkey	Different plants	Roots	L – H	
4.197	*Polyphylla irrorata*	*Scarabaeidae*	Kazakhstan; Kyrgyzstan	Not yet checked	China	Different plants	Roots	L – H	
4.198	*Polyphylla tridentata*	*Scarabaeidae*	Central Asia	Not yet checked	Not yet checked	Different plants	Roots	L – H	
4.199	*[Carphoborus abachidsei]*	*Scolytidae*	Georgia	Not yet checked	Not yet checked	*Pinus eldarica*	Trunks (under bark)	VL – L	
4.200	*[Cryphalus (= Trypophloeus) berezinae]*	*Scolytidae*	N. E. Russia	Not yet checked	Not yet checked	*Populus tremula*	Trunks (under bark)	VL – L	
4.201	*[Cryphalus (= Trypophloeus) dejevi]*	*Scolytidae*	S. Siberia, Transbaikalia	Not yet checked	Not yet checked	*Alnus, Salix*	Trunks (under bark)	VL – L	
4.202	*[Cryphalus (= Trypophloeus) klimeschi]*	*Scolytidae*	Central Asia	Not yet checked	Not yet checked	*Populus*	Trunks (under bark)	VL – L	
4.203	*[Cryphalus (= Trypophloeus) niger]*	*Scolytidae*	S. Far East	Not yet checked	Not yet checked	*Salix, Chosenia*	Trunks (under bark)	VL – L	
4.204	*[Cryphalus (= Trypophloeus) tremulae]*	*Scolytidae*	Ukraine (Crimea)	Not yet checked	BG	*Populus tremula*	Trunks (under bark)	VL – L	
4.205	*[Cryphalus coryli]*	*Scolytidae*	S. Far East	Not yet checked	Not yet checked	*Corylus*	Trunks (under bark)	VL – L	
4.206	*[Dryocoetes carpini]*	*Scolytidae*	S. Far East	Not yet checked	Not yet checked	*Carpinus*	Trunks (under bark)	VL – L	
4.207	*[Dryocoetes pusillus]*	*Scolytidae*	S. E. Russia; Georgia	Not yet checked	Not yet checked	*Fagus, Quercus*	Trunks (under bark)	VL – L	

Table 4. INSECTS COLEOPTERA

4.208	*[Dryocoetes ussuriensis]*	*Scolytidae*	S. Far East	Not yet checked	Not yet checked	*Alnus, Acer*	Trunks (under bark)	VL – L	
4.209	*[Ernoporus eggersi]*	*Scolytidae*	S. Far East	Not yet checked	N. Korea	*Tilia*	Trunks (under bark)	VL – L	
4.210	*[Ernoporus longus]*	*Scolytidae*	S. Far East	Not yet checked	Japan	*Alnus*	Trunks (under bark)	VL – L	
4.211	*[Hylastes aterrimus]*	*Scolytidae*	C.E. Russia, S. E. Russia, N. W. Siberia, N. E. Siberia, S. Siberia, Transbaikalia, S. Far East; Transcaucasus	Not yet checked	Not yet checked	*Pinus, Picea*	Trunks (under bark)	VL – M	
4.212	*[Hylastes substriatus]*	*Scolytidae*	Kazakhstan; Kyrgyzstan	Not yet checked	Not yet checked	*Picea*	Trunks (under bark)	VL – L	
4.213	*[Hylesinus costatus]*	*Scolytidae*	S. Far East	Not yet checked	Japan	*Fraxinus*	Trunks (under bark)	VL – L	
4.214	*[Hylesinus laticollis]*	*Scolytidae*	S. Far East	Not yet checked	Japan	*Fraxinus*	Trunks (under bark)	VL – L	
4.215	*[Hylesinus nobilis]*	*Scolytidae*	S. Far East	Not yet checked	Japan	*Fraxinus*	Trunks (under bark)	VL – L	
4.216	*[Hylesinus shabliovskii]*	*Scolytidae*	S. Far East	Not yet checked	Not yet checked	*Fraxinus*	Trunks (under bark)	VL – L	
4.217	*[Hylesinus striatus]*	*Scolytidae*	S. Far East	Not yet checked	Not yet checked	*Fraxinus*	Trunks (under bark)	VL – M	
4.218	*[Hylurgus longulus]*	*Scolytidae*	Transcaucasus	Not yet checked	Not yet checked	*Pinus*	Trunks (under bark)	VL – L	
4.219	*[Orthotomicus bachmaroensis]*	*Scolytidae*	Georgia	Not yet checked	Not yet checked	*Picea*	Trunks (under bark)	VL – L	
4.220	*[Phloeosinus krimaeus]*	*Scolytidae*	Ukraine (Crimea)	Not yet checked	Not yet checked	*Cupressus, Thuja, Juniperus*	Trunks (under bark)	VL – L	
4.221	*[Phloeosinus transcaspicus]*	*Scolytidae*	Transcaucasus; Turkmenistan	Not yet checked	Not yet checked	*Juniperus*	Trunks (under bark)	VL – L	
4.222	*[Pityophthorus jucundus]*	*Scolytidae*	S. Far East (Sakhalin)	Not yet checked	Japan, Koreas	*Picea*	Trunks (under bark)	VL – L	
4.223	*[Scolytus belocani]*	*Scolytidae*	Transcaucasus	Not yet checked	Not yet checked	*Acer*	Trunks (under bark)	VL – L	

Table 4. INSECTS COLEOPTERA

4.224	*[Scolytus brevipennis]*	*Scolytidae*	S. Far East	Not yet checked	Not yet checked	*Ulmus*	Trunks (under bark)	VL – L	
4.225	*[Scolytus butovitschi]*	*Scolytidae*	S. Far East	Not yet checked	Not yet checked	*Ulmus*	Trunks (under bark)	VL – L	
4.226	*[Scolytus chikisanii]*	*Scolytidae*	S. Far East	Not yet checked	Japan	*Ulmus*	Trunks (under bark)	VL – L	
4.227	*[Scolytus curviventralis]*	*Scolytidae*	S. Far East	Not yet checked	China, Japan	*Ulmus*	Trunks (under bark)	VL – L	
4.228	*[Scolytus dahuricus]*	*Scolytidae*	Transbaikalia, S. Far East	Not yet checked	Not yet checked	*Betula*	Trunks (under bark)	VL – L	
4.229	*[Scolytus ecksteini]*	*Scolytidae*	Transcaucasus	Not yet checked	Not yet checked	*Ulmus*	Trunks (under bark)	VL – L	
4.230	*[Scolytus eichhoffi]*	*Scolytidae*	Transcaucasus	Not yet checked	Not yet checked	*Ulmus*	Trunks (under bark)	VL – L	
4.231	*[Scolytus esuriens]*	*Scolytidae*	S. Far East	Not yet checked	Japan	*Ulmus*	Trunks (under bark)	VL – L	
4.232	*[Scolytus grandis]*	*Scolytidae*	S. Far East	Not yet checked	Not yet checked	*Ulmus*	Trunks (under bark)	VL – L	
4.233	*[Scolytus granulifer]*	*Scolytidae*	Transcaucasus	Not yet checked	Not yet checked	*Ulmus*	Trunks (under bark)	VL – L	
4.234	*[Scolytus koltzei]*	*Scolytidae*	S. Far East	Not yet checked	Not yet checked	*Tilia*	Trunks (under bark)	VL – L	
4.235	*[Scolytus lencoranus]*	*Scolytidae*	Transcaucasus	Not yet checked	Not yet checked	*Quercus*	Trunks (under bark)	VL – L	
4.236	*[Scolytus lineatus]*	*Scolytidae*	S. Far East	Not yet checked	Not yet checked	*Ulmus*	Trunks (under bark)	VL – L	
4.237	*[Scolytus possyeti]*	*Scolytidae*	S. Far East	Not yet checked	Not yet checked	*Betula*	Trunks (under bark)	VL – L	
4.238	*[Scolytus pubescens]*	*Scolytidae*	S. Far East	Not yet checked	Not yet checked	*Ulmus*	Trunks (under bark)	VL – L	
4.239	*[Scolytus starki]*	*Scolytidae*	S. Far East	Not yet checked	Not yet checked	*Ulmus*	Trunks (under bark)	VL – L	

Table 4. INSECTS COLEOPTERA

4.240	*[Scolytus tadzhikistanicus]*	*Scolytidae*	Tadjikistan	Not yet checked	Not yet checked	*Acer*	Trunks (under bark)	VL – L	
4.241	*[Scolytus tauricus]*	*Scolytidae*	Ukraine (Crimea)	Not yet checked	Not yet checked	*Ulmus*	Trunks (under bark)	VL – L	
4.242	*[Scolytus taxicola]*	*Scolytidae*	S. E. Russia; Transcaucasus	Not yet checked	Not yet checked	*Taxus*	Trunks (under bark)	VL – L	
4.243	*[Scolytus trispinosus]*	*Scolytidae*	S. Far East	Not yet checked	Japan	*Ulmus*	Trunks (under bark)	L – M	
4.244	*[Scolytus ussuriensis]*	*Scolytidae*	S. Far East	Not yet checked	Not yet checked	*Ulmus*	Trunks (under bark)	VL – L	
4.245	*[Scolytus ventrosus]*	*Scolytidae*	S. Far East	Not yet checked	Not yet checked	*Ulmus*	Trunks (under bark)	VL – L	
4.246	*[Taphrorychus lenkoranus]*	*Scolytidae*	Transcaucasus	Not yet checked	Not yet checked	*Fagus, Quercus*	Trunks (under bark)	VL – L	
4.247	*[Trypodendron aceris]*	*Scolytidae*	S. Far East	Not yet checked	Japan	*Acer*	Trunks (wood)	VL – L	
4.248	*[Trypodendron suturale]*	*Scolytidae*	S. Far East	Not yet checked	Not yet checked	*Betula, Alnus*	Trunks (wood)	VL – L	
4.249	*[Xyleborus maiche]*	*Scolytidae*	S. Far East	Not yet checked	Not yet checked	*Juglans, Alnus, Acer, Betula,* other trees	Trunks (under bark)	VL – L	
4.250	*[Xyleborus punctulatus]*	*Scolytidae*	S. Far East	Not yet checked	Not yet checked	*Quercus mongolica*	Trunks (under bark)	VL – L	
4.251	*[Xyleborus quercus]*	*Scolytidae*	S. Far East	Not yet checked	Not yet checked	*Quercus mongolica*	Trunks (under bark)	VL – L	
4.252	*Cryphalus (= Trypophloeus) populi*	*Scolytidae*	S. Far East	Not yet checked	Not yet checked	*Populus tremula*	Trunks (under bark)	VL – L	
4.253	*Cryphalus carpini*	*Scolytidae*	S. Far East	Not yet checked	Not yet checked	*Carpinus*	Trunks (under bark)	VL – L	
4.254	*Cryphalus mandschuricus (= C. mandshuricus)*	*Scolytidae*	S. Far East	Not yet checked	China	*Corylus*	Trunks (under bark)	VL – L	
4.255	*Ernoporicus spessivtzevi*	*Scolytidae*	S. Far East	Not yet checked	Not yet checked	*Fraxinus*	Trunks (under bark)	VL – L	
4.256	*Ernoporus fraxini*	*Scolytidae*	S. Far East	Not yet checked	Not yet checked	*Fraxinus*	Trunks (under bark)	VL – M	

Table 4. INSECTS COLEOPTERA

4.257	*Hylastinus tiliae*	*Scolytidae*	S. E. Russia; Transcaucasus	Not yet checked	Not yet checked	*Tilia*	Trunks (under bark)	VL – L	
4.258	*Hylesinus botscharnikovi*	*Scolytidae*	Transcaucasus	Not yet checked	Not yet checked	*Fraxinus*	Trunks (under bark)	VL – L	
4.259	*Hylesinus cholodkovskii (= H. cholodkovskyi)*	*Scolytidae*	Transcaucasus	Not yet checked	Not yet checked	*Fraxinus*	Trunks (under bark)	VL – L	
4.260	*Hylesinus cingulatus*	*Scolytidae*	S. Far East	Not yet checked	Japan	*Fraxinus*	Trunks (under bark)	VL – L	
4.261	*Hylesinus eos*	*Scolytidae*	S. Far East	Not yet checked	China	*Fraxinus*	Trunks (under bark)	VL – L	
4.262	*Hylesinus lubarskii (= H. lubarski)*	*Scolytidae*	S. Far East	Not yet checked	Japan	*Fraxinus*	Trunks (under bark)	VL – L	
4.263	*Hylesinus pravdini*	*Scolytidae*	S. Far East	Not yet checked	Not yet checked	*Fraxinus*	Trunks (under bark)	VL – L	
4.264	*Hylesinus tupolevi*	*Scolytidae*	Transcaucasus; Kyrgyzstan	Not yet checked	Not yet checked	*Fraxinus*	Trunks (under bark)	VL – L	
4.265	*Hypothenemus eruditus (= H. lezhavai, = H. lezjavai, = H. citri, = H. juglandis, = H. pusillus)*	*Scolytidae*	S. E. Russia; Transcaucasus	Not yet checked	IT, ES, FR (Corsica)	*Morus, Citrus, Tilia, Pinus, Carpinus, Alnus*, many other trees	Trunks (under bark)	VL – M	Vector of *Deuterophoma tracheiphila*
4.266	*Phloeophthorus brevicollis*	*Scolytidae*	Ukraine (Crimea); Transcaucasus	Not yet checked	Not yet checked	*Fagus*	Trunks (under bark)	VL – L	
4.267	*Pityophthorus kirgisicus*	*Scolytidae*	Kyrgyzstan	Not yet checked	Not yet checked	*Picea*	Trunks (under bark)	VL – L	
4.268	*Pityophthorus parfentjevi*	*Scolytidae*	Kyrgyzstan	Not yet checked	Not yet checked	*Picea*	Trunks (under bark)	VL – L	
4.269	*Pityophthorus schrenkianus (= P. schrenkianae)*	*Scolytidae*	Kyrgyzstan	Not yet checked	Not yet checked	*Picea*	Trunks (under bark)	VL – L	
4.270	*Polygraphus seriatus*	*Scolytidae*	S. Siberia, Transbaikalia, S. Far East	Not yet checked	Not yet checked	Coniferous trees	Trunks (under bark)	VL – L	
4.271	*Scolytoplatypus daimio*	*Scolytidae*	S. Far East (Sakhalin)	Not yet checked	Japan	*Quercus, Cornus, Abies*	Trunks (under bark)	VL – L	

Table 4. INSECTS COLEOPTERA

4.272	*Scolytoplatypus tycon*	*Scolytidae*	S. Far East	Not yet checked	China, Japan, Koreas	*Alnus*, *Acer*, *Juglans*, *Pinus*, *Picea*, *Abies*, other trees	Trunks (under bark)	VL – L	
4.273	*Scolytus aratus*	*Scolytidae*	S. Far East	Not yet checked	Japan, Koreas	*Ulmus*, *Prunus*	Trunks (under bark)	VL – L	
4.274	*Scolytus claviger*	*Scolytidae*	S. Far East	Not yet checked	Japan, Koreas	*Carpinus*	Trunks (under bark)	L – M	
4.275	*Scolytus fasciatus*	*Scolytidae*	S. E. Russia; Transcaucasus; Central Asia	Not yet checked	Irak, Turkey	*Prunus*, *Ulmus*	Trunks (under bark)	VL – L	
4.276	*Scolytus jacobsoni*	*Scolytidae*	S. Far East	Not yet checked	Japan	*Ulmus*	Trunks (under bark)	L – M	
4.277	*Scolytus japonicus (= S. confusus)*	*Scolytidae*	S. Far East	Not yet checked	Not yet checked	*Ulmus*	Trunks (under bark)	VL – L	
4.278	*Scolytus jaroschevskyi (= S. jaroshevskii)*	*Scolytidae*	S. E. Russia; Transcaucasus	Not yet checked	Not yet checked	*Ulmus*	Trunks (under bark)	VL – L	
4.279	*Scolytus mandli*	*Scolytidae*	Transbaikalia, S. Far East	Not yet checked	Not yet checked	*Fraxinus*	Trunks (under bark)	VL – L	
4.280	*Scolytus schevyrevi*	*Scolytidae*	Central Asia	Not yet checked	Not yet checked	*Ulmus*	Trunks (under bark)	VL – L	

Table 4. INSECTS COLEOPTERA, DIPTERA & HEMIPTERA

4.281	*Scolytus semenovi*	*Scolytidae*	Transbaikalia, S. Far East	Not yet checked	Not yet checked	*Ulmus*	Trunks (under bark)	L – M	
4.282	*Scolytus sibiricus*	*Scolytidae*	Transbaikalia, S. Far East	Not yet checked	Not yet checked	*Betula*	Trunks (under bark)	VL – L	
4.283	*Trypophloeus asperatus (= Cryphalus alni)*	*Scolytidae*	S. Far East (Sakhalin)	Not yet checked	Not yet checked	*Alnus*	Trunks (under bark)	VL – L	
4.284	*Xyleborus alni*	*Scolytidae*	S. Far East	Not yet checked	Japan	*Alnus, Betula, Tilia*	Trunks (under bark)	VL – L	
4.285	*Xylechinus bergeri*	*Scolytidae*	S. Far East	Not yet checked	Not yet checked	*Eleutherococcus, Akanthopanax, Phellodendron*	Trunks (under bark)	VL – L	
4.286	*[Zophosis deflexa]*	*Tenebrionidae*	Kyrgyzstan	Not yet checked	Not yet checked	Young plants	Leaves	L – M	
4.287	*Tentyria nomas*	*Tenebrionidae*	Central Asia	Not yet checked	Not yet checked	Seedlings	Roots, root crowns, leaves	L – M	
				Diptera					
4.288	*Agromyza salicifolii*	*Agromyzidae (= Cecidomyidae)*	S. E. Russia; Kazakhstan	Not yet checked	Egypt, Syria, Israel	*Populus, Salix*	Leaves	VL – L	
4.289	*Dasyneura] (= Dasineura) inchbaldiana*	*Cecidomyidae*	C. E. Russia, S. E. Russia; Belarus; Ukraine; Central Asia	Not yet checked	Not yet checked	*Salix*	Leaves	VL – L	
4.290	*Rhagoletis turanica*	*Tephritidae (= Trypetidae)*	Uzbekistan	Not yet checked	Not yet checked	*Juniperus*	Fruits	VL – M	
				Hemiptera					
4.291	*[Acanthosoma forcipatum]*	*Acanthosomatidae (= Pentatomidae)*	Central Asia (mountains)	Not yet checked	Not yet checked	*Salix, Malus, Pyrus, Betula,*, other trees	Leaves	VL – L	
4.292	*Elasmostethus interstinctus*	*Acanthosomatidae (= Pentatomidae)*	C. E. Russia, S. E. Russia, S. Far East; Ukraine (Crimea); Transcaucasus	Not yet checked	China, Japan	*Betula, Alnus, Tilia, Picea,* other trees	Leaves	VL – L	
4.293	*[Arocatus fasciatus]*	*Lygaeidae*	Transbaikalia, S. Far East	Not yet checked	Japan	*Quercus*, other deciduous trees	Trunks (under bark)	VL – L	
4.294	*[Cyllocoris equestris]*	*Miridae*	Transbaikalia	Not yet checked	Not yet checked	*Ulmus*	Leaves	VL – L	
4.295	*[Deraeocoris (= Camptobrochis) pilipes]*	*Miridae*	Central Asia	Not yet checked	China	*Ulmus, Malus, Pyrus*	Leaves	VL – L	
4.296	*[Dichrooscytus consobrinus]*	*Miridae*	Kazakhstan	Not yet checked	Not yet checked	Coniferous trees	Needles	VL – L	
4.297	*[Dichrooscytus pseudosabinae]*	*Miridae*	Azerbaijan; Central Asia	Not yet checked	Not yet checked	*Juniperus*	Needles	VL – L	

Table 4. INSECTS HEMIPTERA

4.298	*[Phylus limbatellus]*	*Miridae*	Transcaucasus	Not yet checked	Not yet checked	Deciduous trees	Leaves	VL – L	
4.299	*[Psallus cognatus]*	*Miridae*	S. E. Russia; Ukraine (Crimea)	Not yet checked	Not yet checked	*Quercus*	Leaves	VL – L	
4.300	*Ephippiocoris lunatus*	*Miridae*	Azerbaijan; Central Asia	Not yet checked	Not yet checked	*Betula*	Leaves	VL – L	
4.301	*[Acrocorisellus serraticollis]*	*Pentatomidae*	S. Far East	Not yet checked	Japan	Deciduous trees	Leaves & trunks	VL – L	
4.302	*[Alloeoglypta pretiosa]*	*Pentatomidae*	Central Asia	Not yet checked	Not yet checked	*Acer*	Leaves	VL – L	
4.303	*[Dalpada pavlovskii]*	*Pentatomidae*	Tadjikistan	Not yet checked	Afghanistan	*Platanus*, *Populus*, other trees	Leaves	VL – L	
4.304	*[Holcostethus manifestus]*	*Pentatomidae*	Central Asia	Not yet checked	Not yet checked	Deciduous trees	Leaves	VL – L	
4.305	*[Lelia decempunctata]*	*Pentatomidae*	S. Far East	Not yet checked	Japan	Deciduous trees	Leaves & trunks	VL – L	
4.306	*[Mesopriassus vetustus]*	*Pentatomidae*	Central Asia	Not yet checked	Not yet checked	*Acer*, *Sorbus*	Seeds	VL – L	
4.307	*[Palomena amurensis]*	*Pentatomidae*	S. Far East	Not yet checked	Not yet checked	*Quercus*, *Corylus*, *Acer*, other trees	Leaves	VL – L	
4.308	*[Pentatoma metallifer]*	*Pentatomidae*	Transbaikalia, S. Far East	Not yet checked	Mongolia	*Juglans*, other trees	Leaves & trunks	VL – L	
4.309	*[Pentatoma semiannulatum]*	*Pentatomidae*	S. Far East	Not yet checked	Koreas	Deciduous trees	Leaves & trunks	VL – L	
4.310	*[Rhaphigaster brevispinus]*	*Pentatomidae*	Azerbaijan; Central Asia	Not yet checked	Not yet checked	*Populus*, *Ulmus*, *Platanus*, other trees	Leaves	VL – L	
4.311	*[Urochela quadrinotata]*	*Pentatomidae (= Urostylidae)*	S. Far East	Not yet checked	China, Japan, Koreas	*Ulmus*	Leaves & branches	VL – L	
4.312	*Apodiphus integriceps*	*Pentatomidae*	Central Asia	Not yet checked	India	*Populus*, other trees	Leaves	VL – L	
4.313	*Cellobius abdominalis*	*Pentatomidae*	Central Asia	Not yet checked	Not yet checked	*Populus*	Leaves	VL – L	
4.314	*[Coptosoma biguttulum]*	*Plataspidae (= Urostylidae)*	S. Far East	Not yet checked	China, Japan, Koreas	*Ulmus*	Leaves & branches	VL – L	
4.315	*Monosteira discoidalis*	*Tingidae] (= Tingitidae)*	Central Asia	Not yet checked	Not yet checked	*Populus*	Leaves	VL – L	

Table 4. INSECTS HOMOPTERA

				Homoptera					
4.316	*Adelges (= Chermes) japonicus*	*Adelgidae*	S. Far East (Sakhalin)	Not known	Japan	*Picea*	Needles & shoots	VL – L	
4.317	*Adelges (= Chermes) karafutonis*	*Adelgidae*	S. Far East (Sakhalin)	Not known	Japan	*Picea*	Needles & shoots	VL – L	
4.318	*[Aphis sogdiana]*	*Aphididae*	Transcaucasus; Central Asia	Not yet checked	Not yet checked	*Ulmus*	Leaves	VL – L	
4.319	*[Callipterinella betularia]*	*Aphididae*	S. E. Russia; Ukraine; Transcaucasus; Kazakhstan	Not yet checked	Not yet checked	*Betula*	Leaves & shoots	VL – L	
4.320	*[Eriosoma antennatum]*	*Aphididae*	S. Far East	Not yet checked	Not yet checked	*Ulmus*	Leaves	VL – L	
4.321	*[Eriosoma ussuriense]*	*Aphididae*	S. Far East	Not yet checked	Not yet checked	*Ulmus*	Leaves	VL – L	
4.322	*[Euceraphis pilosa]*	*Aphididae*	Central Asia (mountains)	Not yet checked	Not yet checked	*Betula*	Leaves	VL – L	
4.323	*[Pachypappella orientalis]*	*Aphididae*	S. Far East	Not yet checked	China	*Populus*	Leaves	VL – L	
4.324	*[Pemphigus saccosus]*	*Aphididae*	S. Far East	Not yet checked	Not yet checked	*Populus*	Shoots	VL – L	
4.325	*[Pemphigus semenovi]*	*Aphididae*	S. Far East	Not yet checked	Not yet checked	*Populus*	Leaves	VL – L	
4.326	*[Prociphilus (= Paraprociphilus) ucrainensis]*	*Aphididae*	Ukraine	Not yet checked	Not yet checked	*Acer*	Leaves & shoots	VL – M	
4.327	*[Prociphilus bumeliaeformis]*	*Aphididae*	S. Far East	Not yet checked	Not yet checked	*Abies*	Roots	VL – L	
4.328	*[Stegophylla mordvilkoi]*	*Aphididae*	S. E. Russia; Ukraine (Crimea); Transcaucasus	Not yet checked	Not yet checked	*Quercus*	Leaves	VL – L	
4.329	*[Thecabius latisensoria]*	*Aphididae*	S. Far East	Not yet checked	Japan	*Populus*	Leaves	VL – L	
4.330	*[Tuberculatus flavus]*	*Aphididae*	S. Far East	Not yet checked	Not yet checked	*Quercus*	Leaves	VL – L	
4.331	*[Tuberculatus macrotuberculatus]*	*Aphididae*	S. Far East	Not yet checked	Japan	*Quercus*	Leaves	VL – L	
4.332	*[Tuberculatus multituberculatus]*	*Aphididae*	S. Far East	Not yet checked	Not yet checked	*Quercus*	Leaves	VL – L	
4.333	*Cinara confines (= C. abieticola)*	*Aphididae*	N. W. Siberia, N. E. Siberia, S. Siberia, Transbaikalia, N. Far East, S. Far East	Not yet checked	Not yet checked	*Abies*	Needles & shoots	VL – L	
4.334	*Cinara pseudosabinae*	*Aphididae*	Central Asia	Not yet checked	Not yet checked	*Juniperus*	Needles & shoots	VL – M	
4.335	*Eriosoma japonicum (= Schizoneura japonica)*	*Aphididae*	S. Far East	Not yet checked	Japan	*Ulmus*	Leaves	VL – L	

Table 4. INSECTS HOMOPTERA

4.336	*Eriosoma phoenax (= E. phaenax)*	*Aphididae*	Transcaucasus; Central Asia	Not yet checked	Not yet checked	*Ulmus*	Leaves & shoots	VL – L	
4.337	*Gootiella alba*	*Aphididae*	Kazakhstan	Not yet checked	Not yet checked	*Populus*	Leaves	VL – L	
4.338	*Greenidea kuwanai*	*Aphididae*	S. Far East	Not yet checked	China, Japan, Koreas	*Quercus*	Leaves & shoots	VL – L	
4.339	*Kaltenbachiella (= Gobaishia) japonica*	*Aphididae*	S. Far East	Not yet checked	Japan	*Ulmus*	Leaves	VL – L	
4.340	*Lachnus (= Pterochlorus) tropicalis*	*Aphididae*	S. Far East	Not yet checked	China, India, Japan, Koreas	*Quercus, Castanea*	Leaves & shoots	VL – L	
4.341	*Paraprociphilus baicalensis*	*Aphididae*	N. W. Siberia, N. E. Siberia, S. Siberia, Transbaikalia, N. Far East, S. Far East	Not yet checked	Not yet checked	*Alnus*	Leaves	VL – L	
4.342	*Pemphigus niishimae (= P. niisimae)*	*Aphididae*	S. Far East	Not yet checked	Japan	*Populus*	Leaves	VL – L	
4.343	*Periphyllus (= Neothomasia) populicola*	*Aphididae*	Transcaucasus; Central Asia	North America	Not yet checked	*Populus, Salix*	Leaves & shoots	VL – L	
4.344	*Prociphilus oriens*	*Aphididae*	S. Far East	Not yet checked	China, Japan	*Fraxinus, Syringa, Abies* (roots)	Leaves, Roots	VL – M	
4.345	*Tetraneura nigriabdominalis (= Byrsocrypta hirsute)*	*Aphididae*	S. Far East	Not yet checked	China, Japan, Koreas	*Ulmus*	Leaves	VL – L	
4.346	*Tinocallis saltans*	*Aphididae*	S. E. Russia; Ukraine; Transcaucasus; Central Asia	Not yet checked	West Asia, not known in Europe	*Ulmus*	Leaves	VL – L	
4.347	*[Asterodiaspis (= Asterolecanium) japonicus]*	*Asterolecaniidae*	S. Far East	Not yet checked	Japan, Taiwan	*Quercus*	Trunks & branches	L – M	Main damage – to young trees
4.348	*[Chaitophorus jaxarti]*	*Chaitophoridae (= Aphididae)*	Transcaucasus; Central Asia	Not yet checked	Not yet checked	*Populus*	Leaves	VL – L	
4.349	*[Batrachomorphus (=Batracomorphus) ulmi]*	*Cicadellidae*	Transbaikalia, S. Far East	Not yet checked	Not yet checked	*Ulmus*	Leaves & branches	VL – L	
4.350	*[Edwardsiana menzbieri]*	*Cicadellidae (= Eupterygidae)*	C. E. Russia	Not yet checked	Not yet checked	*Salix*	Leaves & branches	VL – L	
4.351	*[Edwardsiana ruthenica]*	*Cicadellidae (= Eupterygidae)*	C. E. Russia	Not yet checked	Not yet checked	*Acer*	Leaves & branches	VL – L	
4.352	*[Edwardsiana solearis rossica]*	*Cicadellidae (= Eupterygidae)*	C. E. Russia, S. E. Russia	Not yet checked	Not yet checked	*Tilia, Corylus, Quercus*, other trees, *Prunus*	Leaves & branches	VL – L	
4.353	*[Edwardsiana tshinari]*	*Cicadellidae (= Eupterygidae)*	Central Asia	Not yet checked	Not yet checked	*Platanus*	Leaves & branches	VL – L	
4.354	*[Eurhadina oshanini]*	*Cicadellidae (= Eupterygidae)*	C. E. Russia	Not yet checked	Not yet checked	*Ulmus*	Leaves & branches	VL – L	

Table 4. INSECTS HOMOPTERA

4.355	*[Kybos bipunctata ulmicola]*	*Cicadellidae (= Eupterygidae)*	C. E. Russia, S. E. Russia; Ukraine; Transcaucasus; Central Asia	Not yet checked	Not yet checked	*Ulmus*	Leaves & branches	VL – L	
4.356	*[Kybos mesasiatica]*	*Cicadellidae (= Eupterygidae)*	Central Asia	Not yet checked	Not yet checked	*Salix*	Leaves & branches	VL – L	
4.357	*[Kybos niveicolor]*	*Cicadellidae (= Eupterygidae)*	Central Asia	Not yet checked	Not yet checked	*Populus*	Leaves & branches	VL – L	
4.358	*[Typhlocyba ognevi (= Ribautiana ognevi)]*	*Cicadellidae (= Eupterygidae)*	S. E. Russia	Not yet checked	Not yet checked	*Ulmus*	Leaves & branches	VL – L	
4.359	*[Typhlocyba roseipennis]*	*Cicadellidae (= Eupterygidae)*	Central Asia	Not yet checked	Not yet checked	*Salix*	Leaves & branches	VL – L	
4.360	*Hyalesthes mlokosiewiczi*	*Cixiidae*	Transcaucasus	Not yet checked	Iran, Turkey	*Populus, Salix, Syringa*, other plants	Leaves & branches	VL – L	Vector of potato stolbur phytoplasma
4.361	*[Pulvinaria costata]*	*Coccidae*	S. Far East	Not yet checked	Not yet checked	*Alnus, Salix*	Branches	VL – L	
4.362	*[Pulvinaria kirgisica]*	*Coccidae*	Kyrgyzstan	Not yet checked	Not yet checked	*Betula*	Branches	VL – L	
4.363	*[Pulvinaria populeti]*	*Coccidae*	Kazakhstan	Not yet checked	Not yet checked	*Populus*	Branches	VL – L	
4.364	*[Pulvinaria salicicola]*	*Coccidae*	Central Asia; Kazakhstan	Not yet checked	Not yet checked	*Populus, Salix*	Leaves & branches	L – M	
4.365	*[Pulvinaria terrestris]*	*Coccidae*	Armenia; Georgia	Not yet checked	Not yet checked	*Crataegus, Carpinus*	Roots	L – M	
4.366	*Physokermes jezoensis*	*Coccidae*	S. Far East (Sakhalin)	Not yet checked	Not yet checked	*Picea*	Branches	VL – L	
4.367	*[Kuwania corpulenta]*	*Coccidae (= Margarodidae)*	S. Far East	Not yet checked	Japan	*Quercus, Castanea*, other trees	Trunks, leaves & branches	VL – L	
4.368	*[Kuwania minuta]*	*Coccidae (= Margarodidae)*	Ukraine (Crimea); Transcaucasus	Not yet checked	Not yet checked	*Quercus*	Trunks (bark)	VL – L	
4.369	*Kuwania betulae*	*Coccidae (= Margarodidae)*	S. Far East	Not yet checked	Not yet checked	*Betula*	Trunks (bark)	VL – L	
4.370	*[Chionaspis micropori]*	*Diaspididae*	S. Far East	Not yet checked	China	*Alnus*	Trunks & branches	VL – L	
4.371	*[Chionaspis Montana]*	*Diaspididae*	Kazakhstan, Kyrgyzstan	Not yet checked	Not yet checked	*Salix*	Trunks & branches	VL – L	
4.372	*[Chionaspis polypora]*	*Diaspididae*	Armenia, Central Asia	Not yet checked	Not yet checked	*Salix, Populus, Sorbus*, other trees	Trunks & branches	VL – M	
4.373	*[Diaspidiotus alma-atensis]*	*Diaspididae*	Kazakhstan, Kyrgyzstan	Not yet checked	Not yet checked	*Crataegus, Malus, Betula*	Trunks & branches	VL – L	
4.374	*[Diaspidiotus armenicus]*	*Diaspididae*	Armenia	Not yet checked	Iran	*Populus*	Trunks & branches	VL – L	
4.375	*[Diaspidiotus turanicus]*	*Diaspididae*	Armenia; Central Asia	Not yet checked	Not yet checked	*Salix*	Branches	VL – L	

Table 4. INSECTS HOMOPTERA

4.376	*[Epidiaspis salicis]*	*Diaspididae*	Armenia	Not yet checked	Iran	*Salix*	Trunks & branches	VL – L	
4.377	*[Lepidosaphes atunicola]*	*Diaspididae*	S. Far East (Sakhalin)	Not yet checked	Not yet checked	*Ulmus*	Trunks & branches	VL – L	
4.378	*[Lineaspis junipericola]*	*Diaspididae*	Armenia	Not yet checked	Not yet checked	*Juniperus*	Needles	VL – L	
4.379	*[Salicicola (= Leucaspis) kermanensis]*	*Diaspididae*	Central Asia; Transcaucasus	Not yet checked	Iran	*Populus, Salix*	Trunks, leaves & branches	L – M	
4.380	*Aspidiotus cryptomeriae*	*Diaspididae*	S. Far East (Sakhalin)	Not yet checked	Japan	*Taxus, Pinus,, Cryptomeria, Chamaecyparis, Abies*, other trees	Needles	VL – M	
4.381	*Chionaspis lepineyi*	*Diaspididae*	Armenia, Georgia	Not yet checked	MA, CH, HU, CZ, Algeria	*Quercus*	Trunks & branches	VL – L	
4.382	*Chionaspis salicis-nigrae*	*Diaspididae*	S. Far East (Sakhalin)	North America	Not yet checked	*Salix, Populus, Alnus*, other trees	Trunks & branches	VL – L	
4.383	*Diaspidiotus (= Aspidiotus) caucasicus*	*Diaspididae*	S.E. Russia; Ukraine (Crimea); Transcaucasus	Not yet checked	Not yet checked	*Populus, Juglans*	Trunks & branches	VL – M	
4.384	*Diaspidiotus (= Aspidiotus) transcaspiensis*	*Diaspididae*	Turkmenistan	Not yet checked	Not yet checked	*Populus*	Branches	VL – L	
4.385	*Lepidosaphes pallida (= L. maskelli*	*Diaspididae*	Georgia	Not yet checked	Japan, India, Hawaii	*Juniperus, Criptomeria, Taxus*, other trees	Needles	VL – M	
4.386	*Lepidosaphes tubulorum*	*Diaspididae*	S. Far East	Not yet checked	Japan, Taiwan	*Populus, Syringa*, other trees, *Malus*	Trunks & branches	VL – M	
4.387	*Noechionaspis kirgisica*	*Diaspididae*	Kazakhstan, Kyrgyzstan	Not yet checked	Not yet checked	*Acer, Ribes*, other trees	Trunks & branches	VL – L	
4.388	*Quadraspidiotus (= Diaspidiotus) slavonicus*	*Diaspididae*	S.E. Russia; Armenia; Central Asia	Not yet checked	Not yet checked	*Populus, Salix*, other trees	Trunks & branches	L – H	
4.389	*[Acanthococcus (= Eriococcus) salicis]*	*Eriococcidae (= Pseudococcidae)*	S. Far East	Not yet checked	Not yet checked	*Salix*	Trunks & branches	VL – L	
4.390	*Cryptococcus aceris*	*Eriococcidae (= Pseudococcidae)*	Transcaucasus	Not yet checked	DE	*Acer, Tilia*	Trunks & branches	VL – L	
4.391	*Gossyparia salicicola*	*Eriococcidae (= Pseudococcidae)*	Central Asia; Kazakhstan	Not yet checked	Not yet checked	*Salix*	Trunks & branches	L – M	
4.392	*[Mycterodus intricatus]*	*Issidae*	S. E. Russia; Ukraine (Crimea); Transcaucasus	Not yet checked	Not yet checked	*Quercus*	Leaves & branches	VL – L	

Table 4. INSECTS HOMOPTERA

4.393	*[Kermes (= Kermococcus = Chermes) corticalis] (probably = Eopineus strobus)*	*Kermesidae (= Kermococcidae)*	S. E. Russia; Ukraine	Not yet checked	Not yet checked	*Quercus*	Trunks & branches	L – M	
4.394	*[Kermes (= Kermococcus) nahalali]*	*Kermesidae (= Kermococcidae)*	Azerbaijan	Not yet checked	Syria, Liban, Israel	*Quercus*	Branches	VL – L	
4.395	*[Kermes (= Kermococcus) nakagawae]*	*Kermesidae (= Kermococcidae)*	S. Far East	Not yet checked	Japan, N. Korea	*Quercus*	Trunks & branches	VL – L	
4.396	*[Drosicha media]*	*Margarodidae*	Kazakhstan	Not yet checked	Not yet checked	*Salix*	Trunks & branches (bark)	VL – L	
4.397	*[Steingelia orientalis]*	*Margarodidae*	S. Far East	Not yet checked	China, Koreas	*Betula*	Trunks (bark)	VL – L	
4.398	*[Xylococcus betulicola]*	*Margarodidae*	S. Far East	Not yet checked	Not yet checked	*Betula*	Trunks & branches (bark)	VL – L	
4.399	*Drosicha turkestanica*	*Margarodidae*	Central Asia; Kazakhstan	Not yet checked	Not yet checked	*Salix, Populus, Cydonia,* other trees	Trunks, leaves & branches	VL – L	
4.400	*Xylococcus japonicus (= X. alni)*	*Margarodidae*	S. Far East	Not yet checked	Japan	*Alnus*	Trunks & branches (bark)	VL – L	
4.401	*[Phenacoccus (= Paroudablis) querculus]*	*Pseudococcidae*	Azerbaijan	Not yet checked	Not yet checked	*Quercus*	Trunks, leaves & branches	VL – L	
4.402	*[Pseudococcus junipericola]*	*Pseudococcidae*	Tajikistan	Not yet checked	Not yet checked	*Juniperus*	Trunks & branches	VL – L	
4.403	*[Spinococcus (= Phenacoccus) morrisoni]*	*Pseudococcidae*	S. E. Russia; Ukraine (Crimea); Transcaucasus	Not yet checked	Not yet checked	*Carpinus, Platanus,* other trees	Trunks & branches	VL – L	
4.404	*[Spinococcus tuberculus]*	*Pseudococcidae*	S. Far East	Not yet checked	Not yet checked	*Populus, Ribes*	Trunks & branches	VL – L	
4.405	*Phenacoccus polyphagus*	*Pseudococcidae*	S. Far East	Not yet checked	Not yet checked	*Malus, Betula, Fraxinus*	Trunks & branches	VL – L	
4.406	*Polystomophora (= Phenacoccus) ostiaplurima*	*Pseudococcidae*	Ukraine	Not yet checked	HU	*Acer, Aesculus*	Trunks & branches	VL – L	
4.407	*[Psylla moscovita]*	*Psyllidae*	C. E. Russia	Not yet checked	Not yet checked	*Salix*	Leaves & branches	VL – L	
4.408	*[Psylla subnigrita]*	*Psyllidae*	C. E. Russia	Not yet checked	Not yet checked	*Salix*	Leaves & branches	VL – L	

Table 4. INSECTS HYMENOPTERA

				Hymenoptera					
4.409	*[Cimbex japonica]*	*Cimbicidae*	S. Far East	Not yet checked	Japan	*Salix*, *Populus*	Leaves	VL – L	
4.410	*Gilpinia (= Diprion) verticalis*	*Diprionidae*	N. E. Russia, C. E. Russia, S. E. Russia; Belarus; Ukraine; Baltic countries	Not yet checked	FI, SE	*Pinus*	Needles	VL – L	
4.411	*[Camponotus caryae ruzskyi]*	*Formicidae*	S. E. Russia; Kazakhstan; Transcaucasus	Not yet checked	Not yet checked	Many trees	Trunks, cut wood	VL – M	
4.412	*[Camponotus pennsylvanicus saxatilis]*	*Formicidae*	S. E. Russia	Not yet checked	Not yet checked	Many trees	Trunks, cut wood	VL – L	
4.413	*[Leptothorax korbi]*	*Formicidae*	Azerbaijan	Not yet checked	Not yet checked	Many trees	Trunks (wood)	VL – L	
4.414	*[Leptothorax melnikovi]*	*Formicidae*	S. E. Russia, S. Siberia (West)	Not yet checked	Not yet checked	Many trees	Trunks (wood)	VL – L	
4.415	*[Megachile albidula]*	*Megachilidae*	Central Asia	Not yet checked	Not yet checked	*Robinia*	Leaves	VL – L	
4.416	*[Megachile kongracensis]*	*Megachilidae*	Uzbekistan, Tajikistan	Not yet checked	Not yet checked	*Robinia*	Leaves	VL – L	
4.417	*[Sirex (= Paururus) dux]*	*Siricidae*	Transcaucasus	Not yet checked	Not yet checked	*Abies*	Trunks (wood)	VL – L	
4.418	*Sirex (= Paururus) ermak* Semenov	*Siricidae*	Transbaikalia, S. Far East	Not yet checked	Not yet checked	*Larix*, *Picea*, *Pinus*	Trunks (wood)	VL – M	
4.419	*[Sirex (= Paururus) tianshanicus]*	*Siricidae*	Kazakhstan; Kyrgyzstan	Not yet checked	Not yet checked	*Picea schrenkiana*	Trunks (wood)	VL – L	
4.420	*[Sirex antennatus]*	*Siricidae*	S. Far East	Not yet checked	Japan	*Picea*, *Abies*	Trunks (wood)	VL – M	
4.421	*[Sirex sah]*	*Siricidae*	S. E. Russia; Transcaucasus; Ukraine; Central Asia (mountains)	Not yet checked	Iran	*Populus*	Trunks (wood)	VL – L	
4.422	*[Xoanon mysta]*	*Siricidae*	S. Far East	Not yet checked	Not yet checked	*Pinus koraiensis*	Trunks (wood)	VL – L	
4.423	*Sirex (= Xanthosirex) tardigradus (= S. cedrorum = X. phantasma)*	*Siricidae*	N. E. Russia; Transcaucasus, N. E. Siberia, S. Siberia (East), Transbaikalia, S. Far East; Transcaucasus	Not yet checked	Not yet checked	*Pinus*	Trunks (wood)	VL – M	
4.424	*[Cladius populi]*	*Tenthredinidae*	S. Far East	Not yet checked	Japan	*Populus*	Leaves	VL – L	
4.425	*[Heterarthrus (= Phyllotoma) flavicollis]*	*Tenthredinidae*	Transcaucasus	Not yet checked	Not yet checked	*Acer*	Leaves	VL – L	
4.426	*Eriocampa mitsukurii*	*Tenthredinidae*	S. Far East	Not yet checked	China, Japan	*Alnus*	Leaves	VL – L	
4.427	*[Xiphydria eborata]*	*Xiphydriidae*	S. Far East	Not yet checked	Japan	*Pinus*, *Picea*	Trunks (wood)	VL – M	

4.428	*[Xiphydria picta]*	*Xiphydriidae*	C. E. Russia, S. E. Russia; Belarus; Ukraine; Transcaucasus	Not yet checked	Europe, Japan	*Alnus*	Trunks (wood)	VL – L	
4.429	*[Xiphydria popovi]*	*Xiphydriidae*	N. E. Siberia, S. Siberia (East), Transbaikalia, S. Far East	Not yet checked	Japan	*Betula*	Trunks (wood)	VL – L	
				Lepidoptera					
4.430	*[Captoloma iteriorata]*	*Arctiidae*	S. Far East	Not yet checked	Japan, Koreas	*Quercus*	Leaves	VL – L	
4.431	*[Rhyparioides amurensis]*	*Arctiidae*	S. Far East	Not yet checked	China, Japan	*Ulmus, Malus,* other trees	Leaves	VL – M	
4.432	*[Argyresthia (= Argyrestia) fundella* f. *albicornis]*	*Hyponomeutidae*	S. Far East, N. Far East	Not yet checked	Not yet checked	*Abies, Picea*	Needles	VL – M	
4.433	*Argyresthia (= Argyrestia) fundella*	*Hyponomeutidae*	C. E. Russia, N. E. Russia; Belarus	Not yet checked	North, middle and south Europe	*Abies, Picea*	Needles	VL – M	
4.434	*[Brahmaea certhia]*	*Brahmaeidae*	S. Far East	Not yet checked	China, Koreas	*Fraxinus, Syringa*	Leaves	VL – L	
4.435	*[Brahmaea christophi]*	*Brahmaeidae*	Azerbaijan	Not yet checked	Iran	*Fraxinus, Syringa*	Leaves	VL – L	
4.436	*[Holcocerus vicarious]*	*Cossidae*	S. Far East	Not yet checked	China, Japan	*Populus*	Trunks (wood)	VL – L	
4.437	*[Drepana scabiosa]*	*Drepanidae*	S. Far East	Not yet checked	China, Japan, Koreas	*Quercus mongolica*	Leaves	VL – L	
4.438	*Epicopeia mencia (= E. albofasciata)*	*Epicopeiidae*	S. Far East	Not yet checked	China, Koreas	*Ulmus*	Leaves	VL – L	
4.439	*Dichomeris (= Ypsolopha = Hypsolophus) ustulella*	*Gelechiidae*	S. E. Russia, S. Far East, N. Far East; Ukraine; Transcaucasus	Not yet checked	Not yet checked	*Betula, Corylus, Carpinus*	Leaves	VL – L	
4.440	*[Abraxas orientalis]*	*Geometridae*	S. Far East	Not yet checked	China, Japan, Koreas	*Ulmus, Salix*	Leaves	VL – M	
4.441	*[Bupalus cembraria]*	*Geometridae*	S. Far East	Not yet checked	Not yet checked	*Pinus pumila*	Needles	VL – L	
4.442	*[Bupalus vestalis]*	*Geometridae*	S. Far East	Not yet checked	Not yet checked	*Pinus koraiensis*	Needles	VL – L	
4.443	*[Cidaria comis]*	*Geometridae*	S. Far East	Not yet checked	China, Japan	*Abies nephrolepis*	Needles	VL – L	
4.444	*[Cidaria djaconovi]*	*Geometridae*	S. Far East	Not yet checked	Not yet checked	*Picea ajanensis*	Needles	VL – L	
4.445	*[Comibaena tenuisaria]*	*Geometridae*	S. Far East	Not yet checked	Not yet checked	*Quercus mongolica*	Leaves	VL – L	

Table 4. INSECTS LEPIDOPTERA

4.446	*[Eilicrinia subcordaria]*	*Geometridae*	S. E. Russia; Kazakhstan; Central Asia	Not yet checked	Not yet checked	*Betula*, other deciduous	Leaves	VL – L	
4.447	*[Erannis (= Hybernia) golda]*	*Geometridae*	S. Far East	Not yet checked	Japan	*Ulmus, Tilia*, fruit trees	Leaves	VL – M	
4.448	*[Garaeus mirandus mirificus]*	*Geometridae*	S. Far East	Not yet checked	Japan	*Picea ajanensis*	Needles	VL – L	
4.449	*[Hipparchus dieckmanni]*	*Geometridae*	S. Far East	Not yet checked	Japan, Koreas	*Quercus*	Leaves	VL – L	
4.450	*[Hipparchus glaucaria]*	*Geometridae*	S. Far East	Not yet checked	Japan	*Quercus mongolica*	Leaves	VL – L	
4.451	*[Hypomecis (= Boarmia) angulifera]*	*Geometridae*	S. Far East	Not yet checked	China, Japan, Koreas	*Abies, Picea*	Needles	VL – M	
4.452	*[Naxa seriaria]*	*Geometridae*	S. Far East	Not yet checked	China, Japan, Koreas	*Syringa, Fraxinus manshurica*	Leaves	VL – M	
4.453	*Arlognophos (= Boarmia) amoenaria*	*Geometridae*	S. Far East	Not yet checked	Not yet checked	*Picea, Abies*	Needles	VL – L	
4.454	*Odontoptera (= Gonodontis) bidentata*	*Geometridae*	N. E. Russia, C. E. Russia, S. E. Russia, S. Siberia, Transbaikalia, S. Far East; Belarus; Ukraine; Kazakhstan; Central Asia	Not yet checked	Not yet checked	*Populus (*incl. *P. tremula), Quercus, Alnus, Betula, Prunus*	Leaves	VL – L	
4.455	*Zethenia rufescentaria (= Z. consociaria)*	*Geometridae*	S. Far East	Not yet checked	Japan	*Picea ajanensis*	Needles	VL – L	
4.456	*[Gracillaria (= Coloptilia) mandschurica]*	*Gracillariidae*	S. Far East	Not yet checked	Not yet checked	*Quercus*	Leaves	VL – M	
4.457	*[Phyllonorycter (= Lithocolletis) pruinosella]*	*Gracillariidae*	Central Asia	Not yet checked	Not yet checked	*Salix, Populus*, mainly *P. pruinosa*	Leaves	VL – L	
4.458	*Cameraria (= Lithocolletis) obliquifascia*	*Gracillariidae*	Central Asia	Not yet checked	Not yet checked	*Populus, Salix*	Leaves	VL – M	
4.459	*Lithocolletis populi*	*Gracillariidae*	Central Asia	Not yet checked	Not yet checked	*Populus*, mainly *P. alba*	Leaves	VL – M	
4.460	*[Phyllocnistis extrematrix]*	*Gracillariidae (= Phyllocnistidae)*	C. E. Russia, S. E. Russia	Not yet checked	Not yet checked	*Populus*	Leaves	VL – M	
4.461	*[Phyllocnistis xenia]*	*Gracillariidae (= Phyllocnistidae)*	Central Asia	Not yet checked	Not yet checked	*Populus*	Leaves	VL – M	
4.462	*Endoclita (= Phassus) excrescens*	*Hepialidae*	S. Far East	Not yet checked	Japan	*Fraxinus mandshurica*	Trunks (wood)	VL – M	Main damage – to young trees

Table 4. INSECTS LEPIDOPTERA

4.463	*[Bhima eximia]*	*Lasiocampidae*	S. Far East	Not yet checked	Not yet checked	*Ostrya*, *Quercus*, *Carpinus*	Leaves	VL – L	
4.464	*[Bhima idiota]*	*Lasiocampidae*	S. Far East	Not yet checked	Not yet checked	*Populus*, *Padus*, other trees	Leaves	VL – L	
4.465	*Dendrolimus pini [= D. segregatus]*	*Lasiocampidae*	S. Far East	Not yet checked	China, Japan, Koreas	*Pinus funebris*	Needles	VL – L	
4.466	*[Dendrolimus undans]*	*Lasiocampidae*	S. Far East	Not yet checked	China, Japan, Koreas	*Rosaceae*, *Juglans*, *Quercus*, *Salix*, other trees	Leaves	VL – L	
4.467	*[Epicnaptera arborea]*	*Lasiocampidae*	N. E. Russia, C. E. Russia	Not yet checked	Not yet checked	*Betula*, *Populus*, other trees, *Quercus*	Leaves	VL – L	
4.468	*[Eriogaster neogena]*	*Lasiocampidae*	S. E. Russia, S. Siberia; Transcaucasus	Not yet checked	Not yet checked	*Caragana*, *Cytisus*, *Robinia*	Leaves	VL – M	
4.469	*Eriogaster henkei*	*Lasiocampidae*	Central Asia	Not yet checked	Not yet checked	Deciduous	Leaves	VL – L	
4.470	*Paralebeda plagifera*	*Lasiocampidae*	S. Far East	Not yet checked	India	*Phellodendron*, *Quercus*, *Corylus*, *Tilia*, *Rosaceae*, other trees	Leaves	VL – L	
4.471	*Monema (=Miresa) flavescens*	*Limacodidae (= Heterogeneidae)*	S. Far East	Not yet checked	China, Japan, Koreas	*Rosacea*, *Ulmus*, *Corylus*, other deciduous	Leaves	VL – M	
4.472	*Parasa consocia*	*Limacodidae (= Heterogeneidae)*	S. Far East	Not yet checked	Japan, Koreas	Many deciduous	Leaves	VL – M	
4.473	*Parasa hilarata*	*Limacodidae (= Heterogeneidae)*	S. Far East	Not yet checked	China, Japan, Koreas	*Quercus*, *Betula*, other deciduous	Leaves	VL – M	
4.474	*Parasa sinica*	*Limacodidae (= Heterogeneidae)*	S. Far East	Not yet checked	China, Japan, Koreas	Many deciduous	Leaves	VL – M	
4.475	*[Niphanola fusca]*	*Lycaenidae*	S. Far East	Not yet checked	Japan	*Quercus mongolica*	Leaves	VL – L	
4.476	*[Thecla (= Zephyrus) attilia]*	*Lycaenidae*	S. Far East	Not yet checked	China, Japan, Koreas	*Quercus mongolica*	Leaves	VL – L	
4.477	*[Thecla (= Zephyrus) brilliantine]*	*Lycaenidae*	S. Far East	Not yet checked	China, Koreas	*Quercus mongolica*	Leaves	VL – L	
4.478	*[Thecla (= Zephyrus) lutea]*	*Lycaenidae*	S. Far East	Not yet checked	Japan	*Quercus mongolica*	Leaves	VL – L	
4.479	*[Thecla (= Zephyrus) oberthuri]*	*Lycaenidae*	S. Far East	Not yet checked	China, Japan, Koreas	*Quercus*	Leaves	VL – L	

Table 4. INSECTS LEPIDOPTERA

4.480	*[Thecla (= Zephyrus) orientalis]*	*Lycaenidae*	S. Far East	Not yet checked	China, Japan, Koreas	*Quercus*	Leaves	VL – L	
4.481	*[Thecla (= Zephyrus) raphaelis]*	*Lycaenidae*	S. Far East	Not yet checked	China, Koreas	*Fraxinus manshurica*	Leaves	VL – L	
4.482	*[Thecla (= Zephyrus) saphirina]*	*Lycaenidae*	S. Far East	Not yet checked	China, Japan, Koreas	*Quercus mongolica*	Leaves	VL – L	
4.483	*[Thecla (= Zephyrus) signata]*	*Lycaenidae*	S. Far East	Not yet checked	China	*Quercus mongolica*	Leaves	VL – L	
4.484	*[Thecla (= Zephyrus) smaragdina]*	*Lycaenidae*	S. Far East	Not yet checked	China, Koreas	*Quercus mongolica*	Leaves	VL – L	
4.485	*[Canna malachitis]*	*Lymantriidae*	S. Far East	Not yet checked	China	*Tilia*	Leaves	VL – L	
4.486	*[Colocasia (= Calocasia) mus]*	*Lymantriidae*	S. Far East	Not yet checked	China, Japan	*Betula, Alnus*	Leaves	VL – L	
4.487	*[Euproctis (=Artaxa) niphonis]*	*Lymantriidae*	S. Far East	Not yet checked	China, Japan, Koreas	*Carpinus, Ostryia*	Leaves	VL – L	
4.488	*[Gynaephora lugens]*	*Lymantriidae*	N. Siberia, N. Far East	Not yet checked	Not yet checked	*Betula, Salix,* other trees	Leaves	VL – L	
4.489	*[Leucoma (=Arctonis) alba]*	*Lymantriidae*	S. Far East	Not yet checked	China, Koreas	*Quercus mongolica*	Leaves	VL – L	
4.490	*[Leucoma flavo-sulfurea Ersch.] !*	*Lymantriidae*	Kazakhstan, Central Asia	Not yet checked	Not yet checked	*Populus*	Leaves	L – H	
4.491	*[Olene olga]*	*Lymantriidae*	S. Far East	Not yet checked	Not yet checked	*Padus, Corylus, Acer*	Leaves	VL – L	
4.492	*Calliteara (= Dasychira) lunulata*	*Lymantriidae*	S. Far East	Not yet checked	China, Japan	*Quercus, Castanea,* other trees	Leaves	VL – L	
4.493	*Calliteara (= Dasychira) pseudabietis*	*Lymantriidae*	S. Far East	Not yet checked	China, Japan, Koreas	*Cryptomeria,* other trees	Leaves	VL – L	
4.494	*Euproctis (= Nygmia) piperita*	*Lymantriidae*	S. Far East	Not yet checked	China, Japan, Koreas	*Quercus mongolica*	Leaves	VL – L	
4.495	*Euproctis (=Artaxa) subflava*	*Lymantriidae*	S. Far East	Not yet checked	China, Japan, Koreas	*Quercus, Castanea,* other trees	Leaves	VL – L	
4.496	*Leucoma candida*	*Lymantriidae*	N. E. Siberia, S. Siberia, Transbaikalia, N. Far East, S. Far East	Not yet checked	China, Japan, Koreas, Mongolia	*Populus (*incl. *P. tremula)*	Leaves	VL – M	
4.497	*Numens (= Numenes) disparilis*	*Lymantriidae*	S. Far East	Not yet checked	China, Japan, Koreas	*Carpinus, Ostryia*	Leaves	VL – L	
4.498	*[Amphipyra schrenki]*	*Noctuidae*	S. Far East	Not yet checked	China, Japan, Koreas	*Betula davurica*	Leaves	VL – L	
4.499	*[Aucha flavomaculata]*	*Noctuidae*	S. Far East	Not yet checked	China, Japan	*Quercus, Tilia*	Leaves	VL – L	

Table 4. INSECTS LEPIDOPTERA

4.500	*[Catocala (= Ephesia) dissimilis]*	*Noctuidae*	S. Far East	Not yet checked	Japan	*Quercus mongolica*	Leaves	VL – L	
4.501	*[Catocala (= Ephesia) praegnax]*	*Noctuidae*	S. Far East	Not yet checked	China, Japan, Koreas	*Quercus mongolica*	Leaves	VL – L	
4.502	*[Catocala (= Ephesia) streckeri]*	*Noctuidae*	S. Far East	Not yet checked	Not known	*Quercus mongolica*	Leaves	VL – L	
4.503	*[Catocala (=Marmonia) dula]*	*Noctuidae*	S. Far East	Not yet checked	Japan	*Quercus mongolica*	Leaves	VL – L	
4.504	*[Catocala lara]*	*Noctuidae*	S. Far East	Not yet checked	Japan	*Tilia*	Leaves	VL – L	
4.505	*[Chasminodes (= Leocyma) albonitens]*	*Noctuidae*	S. Far East	Not yet checked	Japan, Koreas	*Tilia*	Leaves	VL – L	
4.506	*[Cosmia (= Calymnia) camptostigma]*	*Noctuidae*	S. Far East	Not yet checked	China, Japan, Koreas	*Quercus mongolica*	Leaves	VL – L	
4.507	*[Cosmia (= Calymnia) moderata]*	*Noctuidae*	S. Far East	Not yet checked	Not known	*Quercus, Tilia*	Leaves	VL – L	
4.508	*[Cosmia (= Calymnia) ulmivora]*	*Noctuidae*	Central Asia (mountains)	Not yet checked	Not known	*Ulmus*	Leaves	VL – L	
4.509	*[Cosmia imbuta]*	*Noctuidae*	S. E. Russia	Not yet checked	Not yet checked	*Populus*	Leaves	VL – L	
4.510	*[Pangrapta vasava]*	*Noctuidae*	S. Far East	Not yet checked	Japan	*Ulmus*	Leaves	VL – L	
4.511	*[Xanthia gilvago]*	*Noctuidae*	S. E. Russia, S. Siberia; Central Asia; Transcaucasus	Not yet checked	Not yet checked	*Populus, Ulmus*	Inflorescences	VL – L	
4.512	*Cosmia (= Calymnia) subtilis*	*Noctuidae*	Central Asia (mountains)	Not yet checked	Not known	*Rosaceae, Populus*	Leaves	VL – M	
4.513	*Thyas (= Lagoptera = Dermaleipa) juno*	*Noctuidae*	S. Far East	Not yet checked	China, Japan, Koreas, Malaya	*Betula, Prunus* & other trees	Leaves	VL – L	
4.514	*[Acronicta catocaloida]*	*Noctuidae (= Lymantriidae)*	S. Far East	Not yet checked	Japan	*Quercus mongolica*	Leaves	VL – L	
4.515	*[Acronicta hercules]*	*Noctuidae (= Lymantriidae)*	S. Far East	Not yet checked	China, Japan	*Ulmus*	Leaves	VL – L	
4.516	*Acronicta intermedia (= A. incretata)*	*Noctuidae (= Lymantriidae)*	S. Far East	Not yet checked	China, Japan, Koreas	*Fagus, Alnus, Rosaceae*	Leaves	VL – L	
4.517	*Acronicta lutea*	*Noctuidae (= Lymantriidae)*	S. Siberia, Transbaikalia, S. Far East	Not yet checked	China, Japan, Koreas, Mongolia	*Populus, Carpinus*	Leaves	VL – L	
4.518	*[Nola fumosa]*	*Noctuidae (=Arctiidae)*	S. Far East	Not yet checked	Japan, Koreas	*Quercus*	Leaves	VL – L	
4.519	*[Earias pudicana pupillana]*	*Noctuidae (=Cymbidae)*	S. Far East	Not yet checked	China, Japan	*Populus*	Leaves	VL – L	
4.520	*Earias turana*	*Noctuidae (=Cymbidae)*	Central Asia	Not yet checked	Not known	*Salix*	Leaves	VL – L	
4.521	*Nycteola (= Sarrothripus) asiatica*	*Noctuidae (=Cymbidae)*	Central Asia	Not yet checked	Not known	*Populus, Salix*	Leaves	VL – L	

Table 4. INSECTS LEPIDOPTERA

4.522	*[Raphia approximata]*	*Noctuidae (=Lymantriidae)*	Kazakhstan, Central Asia	Not yet checked	Not yet checked	*Populus*	Leaves	VL – L	
4.523	*Acronicta megacephala (=Subacronicta centralis)*	*Noctuidae (=Lymantriidae)*	Kazakhstan, Central Asia	Not yet checked	Iran, China	*Populus, Salix*	Leaves	VL – L	
4.524	*[Cerura (= Harpyia) lanigera]*	*Notodontidae*	S. Siberia, Transbaikalia, S. Far East; Georgia	Not yet checked	Japan, Koreas	*Populus (*esp. *P. tremula), Salix*	Leaves	VL – M	
4.525	*[Cerura aeruginosa]*	*Notodontidae*	S. E. Russia, S. Siberia; Kazakhstan; Central Asia	Not yet checked	Not yet checked	*Salix*	Leaves	VL – L	
4.526	*[Clostera (= Pygaera) curtuloides]*	*Notodontidae*	S. Far East	Not yet checked	Not known	*Populus tremula*	Leaves	VL – L	
4.527	*[Cnethodonta grisescens]*	*Notodontidae*	S. Far East	Not yet checked	Japan	*Ulmus, Tilia*	Leaves	VL – L	
4.528	*[Dicranura (= Cerura = Harpyia) przewalskii]*	*Notodontidae*	Central Asia	Not yet checked	Not yet checked	*Salix, Populus*	Leaves	VL – M	
4.529	*[Lophocosma atriplaga]*	*Notodontidae*	S. Far East	Not yet checked	Japan, Koreas	*Corylus, Ostrya, Carpinus*	Leaves	VL – L	
4.530	*[Nadata splendida]*	*Notodontidae*	S. Far East	Not yet checked	China, Japan, Koreas	*Quercus mongolica*	Leaves	VL – L	
4.531	*[Notodonta dembovskii]*	*Notodontidae*	S. Far East	Not yet checked	Japan	*Betula*	Leaves	VL – L	
4.532	*[Phalerodonta bombycina]*	*Notodontidae*	S. Far East	Not yet checked	Japan, Koreas	*Quercus mongolica*	Leaves	VL – L	
4.533	*[Pterostoma grisea]*	*Notodontidae*	S. Far East	Not yet checked	Not known	*Populus tremula, Maackia amurensis*	Leaves	VL – L	
4.534	*[Ptilodon (= Lophopteryx) suturata]*	*Notodontidae*	S. Far East	Not yet checked	China, Japan	*Acer barbinerve*	Leaves	VL – L	
4.535	*[Spatalia (= Spatelia) dives]*	*Notodontidae*	S. Far East	Not yet checked	China, Japan	*Quercus mongolica*	Leaves	VL – L	
4.536	*[Spatalia (= Spatelia) doerriesi]*	*Notodontidae*	S. Far East	Not yet checked	China, Japan	*Quercus mongolica*	Leaves	VL – L	
4.537	*[Spatalia (= Spatelia) plusiotis]*	*Notodontidae*	S. Far East	Not yet checked	China, Japan, Koreas	*Quercus mongolica*	Leaves	VL – L	
4.538	*[Stauropus basalis]*	*Notodontidae*	S. Far East	Not yet checked	China, Japan	*Carpinus*	Leaves	VL – L	
4.539	*[Urodonta viridimixta]*	*Notodontidae*	S. Far East	Not yet checked	Not yet checked	*Quercus mongolica*	Leaves	VL – L	
4.540	*Lampronadata (= Nadata) cristata*	*Notodontidae*	S. Far East	Not yet checked	China, Japan, Koreas	*Quercus mongolica*	Leaves	VL – L	
4.541	*Phalera assimilis*	*Notodontidae*	S. Far East	Not yet checked	China, Japan, Koreas	*Quercus*	Leaves	VL – L	
4.542	*[Apatura nycteis]*	*Nymphalidae*	S. Far East	Not yet checked	China, Koreas	*Ulmus*	Leaves	VL – L	

Table 4. INSECTS LEPIDOPTERA

4.543	*[Apatura schrenki]*	*Nymphalidae*	S. Far East	Not yet checked	North Korea	*Carpinus, Ostrya, Ulmus*	Leaves	VL – L	
4.544	*[Neptis thisbe]*	*Nymphalidae*	S. Far East	Not yet checked	China, Koreas	*Quercus mongolica*	Leaves	VL – L	
4.545	*[Sephisa dichroa]*	*Nymphalidae*	S. Far East	Not yet checked	China, Japan, Koreas, Vietnam	*Quercus incana*	Leaves	VL – L	
4.546	*[Salebria lornata]*	*Pyralidae*	S. Far East	Not yet checked	Japan	*Pinus thunbergiana*, other *Pinus*	Needles	VL – L	
4.547	*Elegia fallax (= E. atrifasciella)*	*Pyralidae*	S. E. Russia; Armenia	Not yet checked	Not yet checked	*Quercus*	Leaves	VL – L	
4.548	*[Caligula (= Calligula) boisduvalii]*	*Saturniidae*	Transbaikalia, S. Far East	Not yet checked	Japan, Mongolia	*Quercus, Tilia, Corylus, Juglans*	Leaves	VL – M	
4.549	*Actias selene*	*Saturniidae*	S. Far East	Not yet checked	China, India, Japan, Malaya, Sri Lanka	*Salix, Juglans manshurica*, other trees	Leaves	VL – L	
4.550	*Antheraea pernyi*	*Saturniidae*	S. Far East	Not yet checked	China, Koreas	*Quercus, Castanea*	Leaves	VL – L	
4.551	*Antheraea yamamai*	*Saturniidae*	S. Far East	Not yet checked	Japan	*Quercus, Castanea*	Leaves	VL – L	
4.552	*Caligula (= Dictyoploca) japonica*	*Saturniidae*	S. Far East	Not yet checked	China, Japan, Taiwan	*Juglans, Quercus*, other trees, *Castanea*	Leaves	VL – M	
4.553	*Neoris (= Saturnia) huttoni (= N. stoliczkana = N. schenki)*	*Saturniidae*	Kazakhstan, Central Asia (mountains)	Not yet checked	Indis, Iran, Pakistan	*Crataegus, Fraxinus*, fruit trees, *Acer, Pistacea*	Leaves	L – H	
4.554	*Rhodinia fugax*	*Saturniidae*	S. Far East	Not yet checked	Japan	*Quercus mongolica*	Leaves	VL – L	
4.555	*Synanthedon spheciformis*	*Sesiidae (=Aegeriidae)*	C. E. Russia, N. E. Russia; Belarus; all Siberia, Transbaikalia, all Far East	Not yet checked	Europe and Asia generally	*Alnus*, *Betula*	Sprouts and branches	VL – M	
4.556	*[Dalbina exacta]*	*Sphingidae*	S. Far East	Not yet checked	China, Koreas	*Fraxinus, Syringa*	Leaves	VL – L	
4.557	*[Kentrochrysalis streckeri]*	*Sphingidae*	S. Far East	Not yet checked	Not known	*Fraxinus manshurica*	Leaves	VL – L	
4.558	*[Marumba jankowskii]*	*Sphingidae*	S. Far East	Not yet checked	China, Japan	*Tilia mandshurica*	Leaves	VL – L	
4.559	*[Marumba maacki]*	*Sphingidae*	S. Far East	Not yet checked	Not yet checked	*Tilia amurensis*	Leaves	VL – L	
4.560	*[Marumba sperchius]*	*Sphingidae*	S. Far East	Not yet checked	China, Japan, India	*Castanea, Quercus*	Leaves	VL – L	

Table 4. INSECTS LEPIDOPTERA & ORTHOPTERA

4.561	*[Smerinthus (= Callambulyx) tatarinovi]*	*Sphingidae*	Transbaikalia, S. Far East	Not yet checked	China, Japan, Koreas	*Ulmus*	Leaves	VL – M	
4.562	*[Smerinthus coecus]*	*Sphingidae*	C. E. Russia, S. Siberia, Transbaikalia, S. Far East	Not yet checked	China, Japan	*Salix, Populus*	Leaves	VL – L	
4.563	*Smerinthus planus*	*Sphingidae*	S. Siberia, Transbaikalia, S. Far East	Not yet checked	China, Japan	*Populus, Salix,* fruit trees	Leaves	VL – M	
4.564	*[Ancylis repandana]*	*Tortricidae*	S. Far East	Not yet checked	Not yet checked	*Quercus mongolica*	Leaves	L – H	
4.565	*[Archips (= Cacoecia = Tortrix) sarthana]*	*Tortricidae*	Kazakhstan, Kyrgyzstan, Uzbekistan	Not yet checked	Not yet checked	*Acer*	Trunks (wood)	VL – L	
4.566	*[Archips (= Cacoecia) disparana]*	*Tortricidae*	S. Far East	Not yet checked	Not yet checked	*Prunus*, other deciduous	Leaves	VL – L	
4.567	*[Pammene glaucana]*	*Tortricidae*	S. Far East	Not yet checked	Not yet checked	*Quercus mongolica*	Sprouts	L – M	
4.568	*[Tortrix aurichalcana]*	*Tortricidae*	S. Far East	Not yet checked	China, Japan, Koreas	*Tilia*	Leaves	L – H	
4.569	*[Eclysma westwoodi]*	*Zygaenidae*	S. Far East	Not yet checked	China, Japan, Koreas	Many deciduous	Leaves	VL – M	
				Orthoptera					
4.570	*[Primnoa ussuriensis]*	*Acrididae*	S. Far East	Not yet checked	Not yet checked	Deciduous plants	Leaves	VL - M	
4.571	*Anacridium (= Acridium) aegyptium*	*Acrididae*	S. E. Russia; Transcaucasus; Ukraine (Crimea); Kazakhstan; Central Asia	Not yet checked	Mediterranean, Iran, Afghanistan; Northern Africa	*Robinia, Populus, Quercus*, other trees	Leaves	VL - M	
4.572	*Eirenephilus longipennis (= E. debilis)*	*Acrididae*	S. Siberia, Transbaikalia, S. Far East; Kazakhstan	Not yet checked	China, Japan, Koreas, Mongolia	*Populus, Ulmus, Malus*, other trees	Leaves	VL - M	
4.573	*Oedaleus infernalis*	*Acrididae*	S. Far East	Not yet checked	China, Japan, Koreas	Deciduous plants	Leaves	VL - L	Main damage – to young plantations and in nurseries
4.574	*Prumna (=Primnoa) primnoa*	*Acrididae*	S. Siberia, N. E. Siberia, N. Far East, Transbaikalia, S. Far East	Not yet checked	China, Mongolia	*Populus, Syringa, Juglans*, other trees	Leaves	VL - M	
4.575	*Schistocerca gregaria*	*Acrididae*	Transcaucasus; Central Asia	Not yet checked	Iran, Afghanistan, Pakistan; Africa	*Populus, Salix, Acer*, other trees	Leaves	VL - M	
4.576	*Gryllotalpa africana*	*Gryllotalpidae*	S. Far East; Central Asia	Not yet checked	China, Japan, Afghanistran, Australia, New Zealand, Africa, South Eastern Asia	Deciduous plants	Roots	L - M	Main damage – to young plantations and in nurseries

Table 4. INSECTS ORTHOPTERA

4.577	*[Isophya caspica stshelkanovtzevi]*	*Tettigoniidae*	Azerbaijan	Not yet checked	Iran	*Quercus, Parrotia*, other trees	Leaves	VL – L	
4.578	*[Isophya gracilis (= I. vulgaris)]*	*Tettigoniidae*	S. E. Russia	Not yet checked	Not yet checked	*Quercus, Acer*, other trees	Leaves	VL – M	
4.579	*[Pholidoptera (=Uvarovitsia) satunini]*	*Tettigoniidae*	Armenia; Azerbaijan	Not yet checked	Not yet checked	Deciduous & fruit trees	Leaves	VL – L	
4.580	*Isophya redtenbacheri*	*Tettigoniidae*	Georgia	Not yet checked	Turkey	*Fraxinus, Robinia, Pyrus, Quercus*, other trees	Leaves	VL – M	
4.581	*Isophya taurica*	*Tettigoniidae*	Ukraine (Crimea)	Not yet checked	Not yet checked	*Quercus, Carpinus, Pyrus*, other trees	Leaves	VL – M	
4.582	*Pholidoptera pustulipes (= Olynthoscelis pontica)*	*Tettigoniidae*	S. E. Russia; Ukraine (Crimea)	Not yet checked	Not yet checked	Deciduous & fruit trees	Leaves	VL – L	
4.583	*Poecilimon scythicus*	*Tettigoniidae*	S. E. Russia; Ukraine	Not yet checked	Not yet checked	Different trees and other plants	Leaves	VL – L	

Table 5. Priority forest diseases causing significant damage on the territory of the former USSR

N°	Pest	Group of organisms	Distribution			Main host plants in the former USSR	Damaged parts of plants	Economic significance in area of origin	Remarks
			In the former USSR	In North America	In other countries				
Fungi									
5.1	*Stegophora ulmea* (Schweinitz: Fries) Sydow & Sydow (= *Gnomonia ulmea* (Schweinitz: Fries) Thümen = '*Gloeosporium ulmicolum*' = *Cylindrosporella ulmea* = *Asteroma ulmea* (L.E. Miles) Sutton = *Gloeosporium ulmeum* = *Sphaeria ulmea* Schweinitz: Fries = *Dothidella ulmea* (Schweinitz: Fries) Ellis & Everhart = *Lambro ulmea* (Schweinitz: Fries) E. Müller in E. Müller & Arx) **	*Ascomycetes: Diaporthales*	Absent	Canada (at least in Quebec, Nova Scotia, but likely to occur in other provinces), USA (widespread from the Great Plains to the Atlantic Ocean)	Netherlands (successfully eradicated in 2000); China (likely, since repeatedly detected on exported bonsais)	*U. americana* (preferred host), *U. alata, U. carpinifolia, U. crassifolia, U. glabra, U. hollandica, U. japonica, U. laciniata, U. laevis, U. parvifolia, U. procera, U. pumila, U. serotina, U. thomasii, U. rubra, Zelkova serrata*	Leaves, twigs & buds	L – M	
5.2	*Cronartium fusiforme* [= *Peridermium cerebrum*]	*Basidiomycetes, Uredinales*	S. Far East	USA (Central & Eastern)	Asia, India	*Pinus*	Trunks (wood)	L – M	Already EPPO quarantine pest

Table 6. Forest diseases causing significant damage on the territory of the former USSR, for which more information is needed

N°	Pest	Group of organisms	Distribution			Main host plants in the former USSR	Damaged parts of plants	Economic significance in area of origin	Remarks
			In the former USSR	In North America	In other countries				
Fungi									
6.1	[*Anisomyces odoratus (= Anisimyces odorata)*]	*Ascomycetes, Diaporthales*	Russia: widespread	Not known	?	Coniferous	Wood	L – M	Main damage – to treated wood
6.2	[*Biatorella difformis (= Biatoridina pinastri)*]	*Ascomycetes, Lecanorales*	Russia: widespread in pine area; Baltic countries; Belarus	Not known	?	*Pinus*	Trunks and branches	L – M	Main damage – to young trees
6.3	[*Cenangium ulmi*]	*Ascomycetes, Helotiales*	?	Not known	?	*Ulmus*	Central buds and sprouts	L - M	Main damage - to young trees
6.4	[*Ceratocystis buxi*]	*Ascomycetes, Ophiostomatales*	?	Not yet checked	Not yet checked	Deciduous	Wood	L	
6.5	[*Ceratocystis exiguum*][possibly *Ceratostomella exigua = Ophiostoma minus*	*Ascomycetes, Ophiostomatales*	?	Not yet checked	Not yet checked	Deciduous	Wood	L	
6.6	[*Coriolus vaporarius*] possibly = *Anthrodia sinuosa*	*Basidiomycetes*	?	Not known	?	Coniferous & deciduous	Wood	L – H	Main damage – to buildings
6.7	[*Cylindrosporium ulmi (= Phyllosticta bellunensis)*] possibly *C. ulmicola*	*Ascomycetes, Dothideales*	?	Not yet checked	Not yet checked	*Ulmus*	Leaves	L	Main damage – to seedlings
6.8	[*Cytophoma pulchella*]	*Deuteromycetes, Sphaeropsidales*	S. E. Russia	Not known	?	*Fraxinus excelsior*	Trunks & branches (wood)	L – H	
6.9	[*Eidamia catenulata*]	*?*	?	Not yet checked	Not yet checked	*Quercus, Juglans*	Wood	L	
6.10	[*Endoxylina stellulata*]	*Ascomycetes, ?*	S. E. Russia ; Ukraine	Not known	?	*Fraxinus excelsior*	Trunks (wood)	L – M	
6.11	[*Epicoccum purpureum*] possibly *E. purpurascens*	*Ascomycetes, Dothideales*	?	Not yet checked	Not yet checked	Coniferous	Wood	L	

Table 6. PATHOGENS FUNGI & BACTERIA

6.12	[*Gymnosporangium amelanchieris*]	*Basidiomycetes, Uredinales*	S. E. Russia ; Ukraine; Transcaucasus	Not known	?	*Juniperus communis*, fruit trees	Trunks (wood)	L – M	Main damage – to young trees
6.13	[*Hericium diversidens*]	*Basidiomycetes*	?	Not yet checked	Not yet checked	Deciduous	Wood	L	
6.14	*Ophiostoma kubanicum*	*Ascomycetes, Ophiostomatales*	?	Not known	?	*Quercus*	Trunks & branches (wood)	L – H	Main damage - to young trees and seedlings
6.15	[*Phyllosticta lacerans*]	*Ascomycetes, Dothideales*	?	Not yet checked	Not yet checked	*Ulmus*	Leaves	L	Main damage – to seedlings
6.16	[*Sclerophoma pithya* v. Hohnk] possibly *S. pithyophila* or *pythiophila*	*Ascomycetes, Dothideales*	S. E. Russia; Kazakhstan	Not known	?	*Pinus*	Needles & central sprouts	L – M	Main damage - to seedlings and to 4 – 12 year-old plantations
6.17	[*Typhula graminearum*]	*Basidiomycetes, Aphyllophorales*	N. E. Russia, C. E. Russia, S.E. Russia, S. Siberia, S. Far East; Baltic countries; Belarus; Moldova; Ukraine	Not known	?	*Pinus* and other trees	Buds of 1-year seedlings	L – M	Main damage – to young seedlings
6.18	[*Verticillium cubanicum (= V. kubanicum)*]	*Ascomycetes, Hypocreales*	?	Not known	?	*Quercus, Acer, Ulmus, Tilia, Betula, Populus*, other trees	Trunks (wood)	M – H	Main damage – to seedlings and young trees
6.19	[*Verticillium glaucum*]	*Ascomycetes, Hypocreales*	?	Not yet checked	Not yet checked	Coniferous & deciduous	Wood	L	
Bacteria									
6.20	[*Pseudomonas quercus*]	*Gracilicutes, Pseudomonadaceae*	Widespread in oak area	Not known	?	*Quercus*	Trunks & branches (wood)	L – M	Vector – aphid *Lachnus roboris*
6.21	[*Pseudomonas remifaciens*]	*Gracilicutes, Pseudomonadaceae*	Widespread	Not known	?	*Populus (*including *P. tremula)*	Trunks & branches (wood)	L – M	

Table 7a. Forest diseases causing significant damage on the territory of the former USSR, but which are already present in other parts of the EPPO region

N°	Pest	Group of organisms	Distribution			Main host plants in the former USSR	Damaged parts of plants	Economic significance in area of origin	Remarks
			In the former USSR	In North America	In other countries				
Fungi									
7a.1	*Apiognomonia errabunda* [*Gloeosporium tiliae (= Gnomonia tiliae)*]	*Deuteromycetes, Melanconiales*	?	USA	Europe	*Tilia*	Leaves, stems of seedlings	L – M	Main damage – to seedlings
7a.2	*Apiognomonia quercina* [*Gloeosporium quercinum* (probably – *Gnomonia quercinum)*]	*Deuteromycetes, Melanconiales*	?	USA	Europe	*Quercus*	Leaves, acorns	L	The main damage – to seedlings
7a.3	*Armillaria mellea*	*Basidiomycetes, Agaricales*	Widespread	USA	Europe	Deciduous & coniferous	Roots & trunks (wood)	L – H	
7a.4	*Botryotinia fuckeliana* [*Botrytis cinerea*]	*Ascomycetes, Helotiales*	?	USA	Europe	*Picea, Larix, Abies, Pinus,* other plants	Needles	L – M	Main damage – to seedlings in glasshouse nurseries
7a.5	*Cenangium ferruginosum* [*C. abietis (= Dothichiza ferruginosa)*]	*Ascomycetes, Helotiales*	?	USA	Europe	*Pinus*	Central buds and sprouts	L - M	Main damage – to 15 – 20 year-old pines
7a.6	*Cenangium populneum (= Encoelia fascicularis)* [= *Dothichiza populina*]	*Ascomycetes, Helotiales*	?	Present (in temperate zone)	Europe	*Populus, Fraxinus, Salix, Sorbus*	Central buds and sprouts	L - M	Main damage – to young trees
7a.7	[*Ceratocystis fagi*] = *C. piceae*	*Ascomycetes, Ophiostomatales*	?	Not yet checked	Europe	Deciduous	Wood	L	
7a.8	[*Ceratocystis quercus*]	*Ascomycetes, Ophiostomatales*	?	Not yet checked	E. Europe	Deciduous	Wood	L	
7a.9	*Chrysomyxa abietis*	*Basidiomycetes, Uredinales*	Russia; Latvia; Lithuania; Kazakhstan; Kyrgyzstan	Not known	Europe (widespread); Japan	*Picea, Abies*	Needles	VL – L	Main damage – to young plants
7a.10	*Chrysomyxa ledi*	*Basidiomycetes, Uredinales*	?	USA	Europe	*Picea*	Needles	VL – L	Main damage – to young plants

Table 7a. PATHOGENS FUNGI

7a.11	*Chrysomyxa pirolata* [= *Ch. pyrolae*]	*Basidiomycetes, Uredinales*	?	USA	Europe	*Picea*	Cones and seeds	L – M	
7a.12	*Ciboria* [*Sclerotinia*] *betulae*	*Ascomycetes, Helotiales*	?	Not yet checked	Europe	*Betula*	Seeds	VL – L	Main damage – in storage
7a.13	*Colpoma (= Hysterium) quercinum* [*Cytospora quercella (= Clithris quercina)*]	*Ascomycetes, Diaporthales*	?	USA (in temperate zone)	Europe	*Quercus*	Trunks & branches (bark and wood)	L – M	Main damage – to young trees
7a.14	*Coniophora cerebella (= C. puteana)*	*Basidiomycetes, ?*	?	USA	Europe	Coniferous and deciduous	Wood	L – M	Main damage – to buildings
7a.15	[*Coriolus hirsutus*]= *Trametes hirsuta*	*Basidiomycetes*	?	N. America (temperate)	Europe	Deciduous	Wood	L	
7a.16	*Cronartium flaccidum [Endocronartium pini](= Peridermium pini)*	*Basidiomycetes, Uredinales*	Russia: widespread in susceptible pines area; Baltic countries; Belarus; Moldova; Ukraine; Transcaucasus	Not known	Europe (widespread); China; Japan; Korea	*Pinus sylvestris, P. nigra, P. montana*, other *Pinus*	Trunks and branches (wood)	L – H	Main damage – to 30 – 50 year-old monocultures of pines
7a.17	*Cronartium ribicola*	*Basidiomycetes, Uredinales*	Russia: widespread in susceptible pines area; Baltic countries; Belarus; Moldova; Ukraine	Canada and USA (in temperate zone)	Europe (widely); Asia (widely); Taiwan	*Pinus strobus, P. sibirica, P. mandchurica*, other *Pinus, Ribes*	Trunks and branches (wood)	L – H	Main damage – to *Pinus strobus*
7a.18	*Cryphonectria* [*Endothia*] *parasitica*	*Ascomycetes, Diaporthales*	S. E. Russia, S. Far East; Ukraine; Georgia	Canada and USA (in temperate zone)	Europe (widely); China; India; Japan; Korea; Taiwan; Turkey; Tunisia	*Castanea, Fagus, Quercus, Carpinus*	Trunks and branches (wood)	L – H	Main damage – to *Castanea* forests at the Caucasus
7a.19	*Cryptodiaporthe* [= *Dothichiza*] *populea*	*Ascomycetes, Diaporthales*	?	USA	Europe	*Populus*	Trunks and branches	L – M	Main damage - to young trees
7a.20	*Cytospora decipiens*	*Deuteromycetes, Sphaeropsidales*	?	USA	Europe	*Carpinus*	Trunks & branches (bark and wood)	L – M	Main damage – to young trees
7a.21	[*Cytospora foetida*]	*Deuteromycetes, Sphaeropsidales*	S. E. Russia	Not known	Bulgaria	*Populus*, other deciduous	Trunks & branches (bark and wood)	L – H	Main damage – to young trees
7a.22	[*Cytospora intermedia*]	*Deuteromycetes, Sphaeropsidales*	Russia: widespread in oak area; Ukraine	Canada	Germany, Hungary	*Quercus*	Acorns, trunks & branches	L – M	Main damage – to young trees
7a.23	[*Discula brunneo-tingens*]	*Ascomycetes, Phacidiales*	?	Not yet checked	Europe	Coniferous	Wood	L	

Table 7a. PATHOGENS FUNGI

7a.24	*Epicoccum nigrum* [*E. purpurascens*]	*Ascomycetes, Dothideales*	?	Not yet checked	Europe	Coniferous	Wood	L	
7a.25	[*Fibuloporia vaillantii*] = *Poria (Antrodia) vaillantii*	*Basidiomycetes*	Russia: widespread	N.America	Europe, Nepal	Coniferous & deciduous	Wood	L – H	Main damage – to buildings
7a.26	*Fomes fomentarius*	*Basidiomycetes, Aphyllophorales*	?	USA	Europe	*Betula, Fagus, Populus, Alnus, Salix,* other trees	Trunks (wood)	L – M	Main damage – to wood
7a.27	*Fomitopsis* [= *Fomes*] *(= Laricifomes) officinalis*	*Basidiomycetes, Aphyllophorales*	Russia: widespread in coniferous area; Baltic countries; Belarus	Central and Western North America	Europe	*Larix, Pinus, Abies,* some other coniferous	Trunks (wood)	L – M	Main damage – to wood
7a.28	*Fomitopsis (= Fomes) pinicola*	*Basidiomycetes, Aphyllophorales*	?	Present	Europe (widely); Asia (widely)	Coniferous & some deciduous	Trunks (wood)	L – M	Main damage – to wood
7a.29	*Fomitopsis rosea (= Fomes roseus)*	*Basidiomycetes, Aphyllophorales*	?	Canada; USA	Europe (widely); India; Japan; Kenya; Pakistan;	*Pinus*, other coniferous	Wood	L – M	Main damage – to treated wood
7a.30	*Gibberella pulicaris* [*Fusarium sambucinum*]	*Ascomycetes, Hypocreales*	?	Not yet checked	Europe	*Pinus*, *Picea*	Wood	L	
7a.31	*Gloeophyllum sepiarium (= G. hirsutum = Lenzites sepiaria)*	*Basidiomycetes, ?*	Russia: widespread	Widespread	Europe.Widespread in Northern hemisphere	*Pinus, Picea,* other coniferous	Wood	L – M	
7a.32	*Gremmeniella* [= *Ascocalyx*] *abietina* [= *Scleroderris lagerbergii = Brunchorstia pinea = B. destruens*]	*Ascomycetes, Helotiales*	Russia; Estonia; Lithuania; Belarus; Georgia	Canada; USA	Europe (widespread); Japan	*Picea abies, Pinus sylvestris, Pinus, Picea, Larix, Abies*	Needles	L – H	Main damage – in nurseries and to young plantations
7a.33	*Gymnosporangium clavariiforme*	*Basidiomycetes, Uredinales*	S. E. Russia ; Ukraine; Transcaucasus	USA	Europe	*Juniperus communis,* fruit trees	Trunks (wood)	L – M	Main damage – to young trees
7a.34	*Gymnosporangium fuscum* [*G. sabinae*]	*Basidiomycetes, Uredinales*	S. E. Russia ; Ukraine; Transcaucasus	Canada (BC) and USA (CA) (not widely)	Europe (widely); China; Cyprus; Lebanon; Syria; Turkey; Arab Emirates; Algeria; Morocco	*Juniperus sabina, J. rubescens, J. virginiana, Pyrus,* other fruit trees	Trunks (wood)	L – M	Main damage – to young trees
7a.35	*Gymnosporangium juniperinum* [*G. juniperi*] *(= G. cornutum)*	*Basidiomycetes, Uredinales*	S. E. Russia ; Ukraine; Transcaucasus	Widespread	Europe, Widespread in temperate Northern hemisphere	*Juniperus communis,* fruit trees	Trunks (wood)	L – M	Main damage – to young trees

Table 7a. PATHOGENS FUNGI

7a.36	*Gymnosporangium tremelloides* [*G. mali-tremelloides*]	*Basidiomycetes, Uredinales*	S. E. Russia ; Ukraine; Transcaucasus	Present	Europe; Western Africa; East Asia	*Juniperus communis*, fruit trees	Trunks (wood)	L – M	Main damage – to young trees
7a.37	*Herpotrichia juniperi (= H. nigra)*	*Ascomycetes, Dothideales*	?	Widespread	Europe (widely); Asia (widely)	*Picea*, *Pinus*, *Juniperus*	Needles	L – M	Main damage – to seedlings
7a.38	*Heterobasidion annosum* [*Fomitopsis annosa*] *(= Fomes annosus)*	*Basidiomycetes, Aphyllophorales*	Russia: widespread in coniferous area; Baltic countries; Belarus; Ukraine	Mexico; Cuba; Canada; USA	Europe (widely); Asia (widely); Morocco; Papua New Guinea; Fiji; Dominican Repub.; Jamaica; Australia; New Zealand	*Pinus*, *Picea*, *Abies*, *Larix*, *Juniperus*	Roots and trunks (wood)	M – VH	
7a.39	*Hirschioporus abietinus = Trichaptum abietinum*	*Basidiomycetes*	?	N. America	Europe	Coniferous	Wood	L	
7a.40	*Hypoxylon mammatum* [*H. pruinatum*]	*Ascomycetes, Sphaeriales*	Russia: widespread; Ukraine	Canada; USA	Europe except North	*Populus tremula*, *Populus*	Trunks & branches (wood)	L – M	
7a.41	*Inonotus (= Polyporus) dryophilus*	*Basidiomycetes, Aphyllophorales*	Widespread in oak area	Widespread	Europe, Widespread in temperate Northern hemisphere	*Quercus*	Trunks (wood)	L – M	Main damage – to wood
7a.42	*Ischnoderma resinosum (=Polyporus resinosus = P. benzoinus = P. fuliginosus = P. fuscus)*	*Basidiomycetes, Aphyllophorales*	Russia: widespread	Widespread	Widespread in Northern hemisphere	Coniferous and some deciduous	Trunks (wood)	L – M	
7a.43	*Lachnella* [*Dasyscypha*] *(= Lachnellula = Dasyscyphus = Trichoscyphella) willkommii*	*Ascomycetes, Helotiales*	Widespread in susceptible larches area	North-East (not widely)	Europe (widely); China; Japan	*Larix decidua*, *L. sibirica (L. rossioa)*, other *Larix*	Trunks and branches (wood)	L – H	Main damage - to young trees
7a.44	*Laetiporus sulphureus*	*Basidiomycetes*	?	Not yet checked	Europe	*Quercus, Acer, Salix, Populus, Fagus, Tilia, Larix*, others	Trunks (wood)	L	Main damage – to wood
7a.45	*Lentinus lepideus*	*Basidiomycetes, ?*	?	USA	Europe	*Pinus*, other coniferous	Wood	L – M	
7a.46	*Lirula macrospora* [*Lophodermium macrosporum*]	*Ascomycetes, Phacidiales*	?	USA	Europe	*Picea*	Needles	L – M	Main damage - to young trees
7a.47	*Lophodermella* [*Hypodermella*] *sulcigena*	*Ascomycetes, Rhytismatales*	?	Not yet checked	Europe	*Pinus*	Needles	L	Main damage – to seedlings

Table 7a. PATHOGENS FUNGI

7a.48	*Lophodermium conigerum*	*Ascomycetes, Rhytismatales*	Estonia	Not yet checked	Europe	*Pinus*	Needles	L	Main damage - to young trees
7a.49	*Lophodermium pinastri*	*Ascomycetes, Rhytismatales*	?	USA	Europe	*Pinus*	Needles	L – M	Main damage - to young trees
7a.50	*Lophodermium seditiosum (= Leptostroma rostrupii)*	*Ascomycetes, Rhytismatales*	Widespread	North (boreal zone)	Northern and Central Europe	*Pinus*	Needles	L – H	Main damage - to seedlings in nurseries (less than 8 year-old)
7a.51	*Massaria inquinans (= M. vomitoria = M. gigaspora)*	*Loculoscomycetes*	Widespread in *Acer* anad Fraxinus areas	Widespread	Europe, Widespread in temperate Northern hemisphere	*Acer & Fraxinus*	Trunks & branches (wood)	L – M	
7a.52	*Melampsora allii-populina*	*Basidiomycetes, Uredinales*	Widespread in *Populus* area	Not known	Europe; Africa; South – West Asia; South America	*Populus*	Leaves & sprouts	L – M	Main damage - to young trees
7a.53	*Melampsora larici-populina*	*Basidiomycetes, Uredinales*	Widespread in *Populus* area	Not known	Europe; Northern Africa; Asia	*Populus*	Leaves & sprouts	L – M	Main damage - to young trees
7a.54	*Melampsora laricis (= M. populnea* f. sp. *laricis)* [*M. larici-tremulae*]	*Basidiomycetes, Uredinales*	Widespread in *Populus* area	Not known	Europe; Middle East; Kenya; South Africa; Uruguay	*Populus, Larix*	Leaves, needles & sprouts	L – M	Main damage – to young trees
7a.55	*Melampsora populnea* f. sp. *pinitorqua* [*M. pinitorqua*]	*Basidiomycetes, Uredinales*	Russia: widespread except Far East; Baltic countries; Belarus; Moldova; Ukraine; Transcaucasus	Not known	Europe; Middle East; Kenya; South Africa; Uruguay	*Pinus, Populus*	Needles leaves, & sprouts	L - M	Main damage - to pine seedlings and young trees of *Populus*
7a.56	*Melampsora populnea* f. sp. *rostrupii* [*M. rostrupii*]	*Basidiomycetes, Uredinales*	Widespread in *Populus* area	Absent	Europe; Middle East; Kenya; South Africa; Uruguay	*Populus*	Leaves and sprouts	L – M	*Mercurialis* (alternative host) doesn't exist in North America
7a.57	*Melampsorella caryophyllacearum* [*M. cerastii*]	*Basidiomycetes, Uredinales*	C. E. Russia, S. E. Russia, S. Siberia; Ukraine	Not yet checked	Europe	*Abies*	Trunks & branches (wood)	L	Main damage - to mono-cultures
7a.58	*Melampsoridium betulae (= M. betulinum = Melampsora betulina)*	*Basidiomycetes, Uredinales*	Widespread in birch area	Widespread	Europe;Widespread in temperate Northern hemisphere; New Zealand	*Betula, Larix*	Leaves, needles	L – M	Main damage – to seedlings
7a.59	*Meria* [= *Hartigiella*] *laricis*	*Ascomycetes, Dothideales*	Russia: widespread except Far East; Baltic countries; Belarus; Moldova; Ukraine	USA	Europe	*Larix sibirica, Larix dahurica,* other *Larix*	Needles	L – H	Main damage - to 2 – 3 year-old seedlings

Table 7a. PATHOGENS FUNGI

7a.60	*Microsphaera alphitoides* [= *Oidium dubium*]	*Ascomycetes, Erysiphales*	Russia: widespread in oak area; Baltic countries; Belarus; Moldova; Ukraine	N. America	Europe	*Quercus*	Leaves	L - M	Main damage – to young seedlings
7a.61	*Microsphaera hypophylla* [= *M. silvatica* sp. *nova*]	*Ascomycetes, Erysiphales*	Russia: widespread in oak area; Baltic countries; Belarus; Moldova; Ukraine	Not yet checked	Europe	*Quercus*	Leaves	VL – L	Main damage – to young seedlings
7a.62	*Mycosphaerella* [*Cercospora*] *microsora* [= *M. millegrana*]	*Ascomycetes, Dothideales*	?	Not yet checked	Europe	*Tilia*	Leaves	L	Main damage – to seedlings
7a.63	*Mycosphaerella tassiana* [*Cladosporium herbarum*]	*Ascomycetes, Dothideales*	?	Not yet checked	Europe	*Pinus* and deciduous	Pine needles, deciduous wood	L	Main damage – to seedlings
7a.64	[*Naemospora croceola (= Diatrype stigma)*]	*?*	?	N. America	Europe	*Quercus*	Trunks, roots and branches (wood)	L	Main damage - to young trees
7a.65	*Nectria cinnabarina* [= *Tubercularia vulgaris*]	*Ascomycetes, Hypocreales*	?	USA	Europe	*Ulmus, Carpinus, Castanea, Populus, Acer, Betula*	Trunks & branches (wood)	L – H	Main damage - to seedlings and young trees
7a.66	*Nummularia bulliardii (= Biscogniauxia nummularia = Hypoxylon nummularium)*	*Pyrenomycetes*	S. E. Russia; Ukraine	Widespread	Widespread in the world	*Quercus, Fagus*	Trunks & branches (bark)	L – M	Main damage - to young trees
7a.67	*Ophiostoma (= Ceratocystis) piceae* [*O. (= Graphium = Verticillium) roboris*]	*Ascomycetes, Ophiostomatales*	S. E. Russia ; Moldova; Ukraine; Transcaucasus; Central Asia	Present (in temperate zone)	Europe	*Quercus*	Acorns, trunks & branches (wood)	L – H	Main damage - to seedlings and young trees
7a.68	*Ophiostoma (= Ceratocystis) piceae* [*O. (= Graphium = Verticillium) valachicum*]	*Ascomycetes, Ophiostomatales*	S. E. Russia ; Moldova; Ukraine; Transcaucasus; Central Asia	Present (in temperate zone)	Europe	*Quercus*	Acorns, trunks & branches (wood)	L – H	Main damage – to seedlings and young trees
7a.69	[*Ophiostoma quercus*](*O. querci*)	*Ascomycetes, Ophiostomatales*	S. E. Russia ; Moldova; Ukraine; Transcaucasus; Central Asia	USA, Canada	Europe	*Quercus*	Trunks & branches (wood)	L – H	Main damage - to young trees and seedlings
7a.70	*Ophiostoma* [= *Ceratocystis = Graphium*] *ulmi*	*Ascomycetes, Ophiostomatales*	C. E. Russia, S. E. Russia; Baltic countries; Belarus; Moldova; Ukraine; Transcaucasus; Central Asia	Canada; USA	Europe (widespread); India; Iran	*Ulmus*	Trunks (wood)	M – VH	Main damage – to European elm species

Table 7a. PATHOGENS FUNGI

7a.71	*Oxyporus populinus*	*Basidiomycetes, Aphyllophorales*	?	N. America	Europe	*Acer, Betula, Alnus, Tilia, Quercus*, other trees	Trunks (wood)	L	Main damage – to wood
7a.72	*Paxillus panuoides*	*Basidiomycetes*	?	USA	Europe	Coniferous & deciduous	Wood	L – M	Main damage – to buildings
7a.73	*Penicillium purpurogenum*	*Ascomycetes, Eurotiales*	?	N. America	Europe	Coniferous & deciduous	Wood	L	
7a.74	[*Penicillium roseum*] = *Gliocladium roseum*	*Ascomycetes, Eurotiales*	?	N. America	Europe	Coniferous & deciduous	Wood	L	
7a.75	*Peniophora gigantea*	*Basidiomycetes, ?*	?	USA	Europe	Coniferous	Wood with bark	L – M	
7a.76	*Phacidium infestans (= P. abietis = P. pini–cembrae = Gremmenia gigaspora)*	*Ascomycetes, Phacidiales*	Russia: widespread in pine area; Baltic countries; Belarus; Moldova; Ukraine	North of USA	Europe; Japan - ?	*Pinus, Juniperus, Picea, Abies*	Needles	L – H	Main damage – to seedlings and young trees
7a.77	*Phaeolus* [= *Polyporus*] *schweinitzii*	*Basidiomycetes, Aphyllophorales*	Widespread	USA	Europe	*Pinus, Larix, Picea, Thuja, Abies, Quercus, Prunus*	Roots and trunks (wood)	L – M	
7a.78	*Phellinus hartigii (= Fomes hartigii = F. robustus)* [*Ph. hartigi*]	*Basidiomycetes, Aphyllophorales*	N. E. Russia, C. E. Russia, N.E. Siberia, N.W. Siberia, S. Siberia; Baltic countries; Belarus; Ukraine; Transcaucasus	Widespread	Europe, World-wide distribution	*Abies, Picea, Pinus, Tsuga, Taxus*, some other coniferous	Trunks (wood)	L – M	Main damage – to wood
7a.79	*Phellinus igniarius*	*Basidiomycetes, Aphyllophorales*	Widespread in aspen area	USA	Europe	*Populus tremula*, other trees	Trunks (wood)	L	Main damage – to wood
7a.80	*Phellinus pini (= Fomes pini)*	*Basidiomycetes, Aphyllophorales*	Widespread	Present	Northern Europe; Asia	*Pinus, Larix, Abies*, other coniferous	Trunks (wood)	L – M	Main damage – to wood
7a.81	[*Phellinus pini* var. *abietis (= Fomes pini* var. *abietis)*]= *Phellinus chrysoloma*	*Basidiomycetes, Aphyllophorales*	Russia: widespread; Baltic countries; Belarus; Ukraine; Transcaucasus; Central Asia	N. America	Europe	*Picea, Pinus, Larix, Abies*, some other coniferous	Trunks (wood)	L – M	Main damage – to wood
7a.82	*Phellinus robustus (= Fomes robustus = F. hartigii)*	*Basidiomycetes, Aphyllophorales*	Widespread in oak area	Widespread	Europe, World-wide distribution	*Quercus, Castanea, Carpinus*, other trees	Trunks (wood)	L – M	Main damage – to wood
7a.83	*Phellinus tremulae (= Fomes tremulae)*	*Basidiomycetes, Aphyllophorales*	Widespread in aspen area	USA	Europe	*Populus tremula*, some other *Populus*	Trunks (wood)	L – H	Main damage – to wood

Table 7a. PATHOGENS FUNGI

7a.84	*Pholiota adiposa*	*Basidiomycetes, Agaricales*	?	Not yet checked	Europe	*Abies, Picea, Populus, Betula, Tilia*	Trunks (wood)	L	Main damage – to wood
7a.85	[*Phyllosticta quercus*]	*Ascomycetes, Dothideales*	?	N. America	Europe	*Quercus*	Leaves	VL - L	Main damage – to seedlings
7a.86	*Polyporus squamosus*	*Basidiomycetes, Aphyllophorales*	?	USA	Europe	*Quercus, Populus, Ulmus,* others	Trunks and roots (wood)	L – M	
7a.87	[*Polystictus circinatus* var. *triqueter*]	*Basidiomycetes, ?*	N. E. Russia, C. E. Russia, S.E. Russia, S. Far East; Baltic countries; Belarus; Moldova; Ukraine	Not known	?	*Picea, Pinus, Larix,* other coniferous	Trunks and roots (wood)	L – H	
7a.88	*Pucciniastrum areolatum* [*Thecopsora padi*]	*Basidiomycetes, Uredinales*	?	Not known	Europe (widely); Asia (incl. Japan)	*Picea*	Cones and seeds	L – M	
7a.89	*Rhizina undulata* [*Rhizina inflata*]	*Ascomycetes, Pezizales*	S. E. Russia; Ukraine	USA	Europe	*Pinus, Picea, Larix, Abies,* other trees	Roots and trunks (wood)	L – M	Main damage - to young trees
7a.90	*Rosellinia quercina*	*Ascomycetes, Sphaeriales*	?	USA	Europe	*Quercus,* deciduous & coniferous	Roots of seedlings	L – M	Main damage – in nurseries
7a.91	*Schizophyllum commune*	*?*	?	USA	Europe	Coniferous & deciduous	Wood	L – M	
7a.92	*Sclerotinia borealis* [*S. graminearum*] = *Myriosclerotinia borealis*	*Ascomycetes, Helotiales*	N. E. Russia, C. E. Russia, S.E. Russia, S. Siberia, S. Far East; Baltic countries; Belarus; Moldova; Ukraine	Present	Northern Europe; Japan	*Pinus*	Buds of 1-year seedlings	L – M	Main damage – to seedlings
7a.93	*Sclerotinia* [*Stromatinia*] *pseudotuberosa*	*Ascomycetes, Helotiales*	Widespread	Not known	Europe	*Quercus*	Acorns	L – M	Main damage – in storage
7a.94	*Septoria betulae*	*Ascomycetes, Dothideales*	?	USA (not widely)	Europe	*Betula*	Leaves	L	Main damage – to seedlings
7a.95	[*Septoria caraganae (= Mycosphaerella jaczewskii)*]	*Ascomycetes, Dothideales*	?	Temperate N. America	Europe	*Caragana*	Leaves	L	Main damage – to seedlings
7a.96	*Septoria quercina = S. quercicola*	*Ascomycetes, Dothideales*	?	USA	Europe	*Quercus*	Leaves	VL - L	Main damage – to seedlings
7a.97	*Serpula (= Boletus) lacrymans*	*?*	Widespread	Widespread	Europe: Widespread in the world	Coniferous & deciduous	Wood	M – VH	Main damage – to buildings
7a.98	*Stereum sanguinolentum*	*Basidiomycetes, Aphyllophorales*	?	USA	Europe	*Pinus, Picea, Larix*	Trunks (wood)	L – M	
7a.99	*Sydowia polyspora* [*Sclerophoma pithyophila (= Dothichiza ferruginosa)*]	*Ascomycetes, Dothideales*	?	Present	Europe (widely)	*Pinus*	Needles	L – M	Main damage - to seedlings in nurseries

7a.100	*Taphrina johansonii* [= *T. johansoni*]	*Ascomycetes, Taphrinales*	?	Not yet checked	Europe	*Populus tremula*	Fruits	L	
7a.101	*Taphrina pruni*	*Ascomycetes, Taphrinales*	?	N. America	Europe	*Prunus padus*	Fruits	L	
7a.102	*Taphrina rhizophora* [= *T. rhizophorus*]	*Ascomycetes, Taphrinales*	?	Not yet checked	Europe	*Populus*	Fruits	L	
7a.103	[*Trichoderma lignorum*] = *T. viride*	*?*	?	N. America	Europe	*Pinus, Picea*	Wood	L	
7a.104	*Valsa sordida* [= *Cytospora chrysosperma*]	*Ascomycetes, Diaporthales*	?	USA	Europe	*Populus, Tilia*	Trunks & branches (bark and wood)	L – H	Main damage – to young trees
7a.105	*Venturia tremulae* [= *Pollaccia radiosa*]	*Deuteromycetes, Hyphomycetales*	?	USA	Europe	*Populus tremula* & other *Populus*	Leaves and sprouts	L – H	Main damage – to 1 – 5 year-old seedlings
7a.106	*Verticillium albo-atrum*	*Ascomycetes, Hypocreales*	Russia: widespread; Baltic countries; Belarus; Moldova; Ukraine; Kyrgyzstan; Uzbekistan	Widespread	Europe (widely); Asia (widely); Africa (widely); Australia; New Zealand	*Quercus, Acer, Ulmus, Tilia, Betula, Populus*, other deciduous	Trunks (wood)	M – H	Main damage – to seedlings and young trees
7a.107	*Verticillium dahliae*	*Ascomycetes, Hypocreales*	Russia: widespread; Baltic countries; Belarus; Moldova; Ukraine; Transcaucasus; Central Asia	Canada; USA	Europe (widely); Asia (widely); Africa (widely); South America (widely); New Zealand; Australia	*Quercus, Acer, Ulmus, Tilia, Betula, Populus*, other deciduous	Trunks (wood)	M – H	Main damage – to seedlings and young trees
7a.108	[*Verticillium lateritium*] = *V. tenerum*	*Ascomycetes, Hypocreales*	?	N. America	Europe	Deciduous & coniferous	Wood	L	
				Bacteria					
7a.109	[*Pseudomonas quercus*]	*Gracilicutes, Pseudomonada-ceae*	Widespread in oak area	Not known	?	*Quercus*	Trunks & branches (wood)	L – M	Vector – aphid *Lachnus roboris*
7a.110	[*Pseudomonas remifaciens*]	*Gracilicutes, Pseudomonada-ceae*	Widespread	Not known	?	*Populus (*including *P. tremula)*	Trunks & branches (wood)	L – M	
7a.111	*Pseudomonas syringae*	*Gracilicutes, Pseudomonada-ceae*	?	USA	Europe	*Populus*	Trunks & branches (wood)	L – M	

Table 7b. Forest diseases causing significant damage on the territory of the former USSR, which may present risk only or mainly to plants, which are not considered as forest trees and shrubs in most of the non-Asian part of the EPPO region

N°	Pest	Group of organisms	Distribution			Main host plants in the former USSR	Damaged parts of plants	Economic significance in area of origin	Remarks
			In the former USSR	In North America	In other countries				
Fungi									
7b.1	[*Fusarium caraganae*]	*Ascomycetes, Hypocreales*	?	Not yet checked	Not yet checked	*Caragana*	Wood	L	
7b.2	*Marssonina juglandis* (Lib.) Magn.	*Deuteromycetes, Melanconiales*				*Juglans*	Fruits, leaves, sprouts	L – M	
7b.3	*Taphrina polyspora* (Svr.) Joh.	*Ascomycetes, Taphrinales*				*Acer tataricum*	Leaves	L – M	Main damage to nurseries and city plantations
Bacteria									
7b.4	*Xanthomonas juglandis* Pierse	Gracilicutes, Pseudomonada-ceae				*Juglans*	Fruits	L – H	

Table 8. Forest diseases causing significant damage on the territory of the former USSR added to the data base and not yet prioritized

N°	Pest	Group of organisms	Distribution			Main host plants in the former USSR	Damaged parts of plants	Economic significance in area of origin	Remarks
			In the former USSR	In North America	In other countries				
Fungi									
8.1	*Alternaria tenuis* Nees.	*Ascomycetes, Dothideales*			Europe	Many trees	Seeds, seedlings	L – H	
8.2	*Aspergillus glaucus* Link.	*Ascomycetes, Eurotiales*			Europe	*Quercus*	Acorns	L – H	Main damage in storage
8.3	*Aspergillus niger* Link	*Ascomycetes, Eurotiales*				Many trees	Seeds	L – M	
8.4	*Bjerkandera adusta* Karst.	*?*				Deciduous	Wood	L – M	
8.5	*Ceratocystis coeruleum* (Münch) H. et Syd.	*Ascomycetes, Ophiostomatales*				*Pinus, Picea*	Wood	L	Leads to the blue colour of wood
8.6	*Ceratocystis pini* (Münch) H. et Syd.	*Ascomycetes, Ophiostomatales*				*Pinus, Picea*	Wood	L	Leads to the blue colour of wood
8.7	*Ceratocystis roboris* Georg. et Teod.	*Ascomycetes, Ophiostomatales*	S. E. Russia, C. E. Russia, Moldova, Ukraine, Transcaucasus, Central Asia			*Quercus*	Trunks & branches (wood)	L – VH	Spread by insects (scolytids, cerambycids, buprestids), water & wind
8.8	*Cercospora acerina* Hart.	*Ascomycetes, Dothideales*			Europe	*Acer*	Fruits, seeds, seedlings	L – M	
8.9	*Coleosporium campanulae* Pers.	*Basidiomycetes, Uredinales*			Europe	*Pinus*	Needles	VL – L	
8.10	*Coleosporium senecionis* Fr.	*Basidiomycetes, Uredinales*			Europe	*Pinus*	Needles	VL – L	
8.11	*Coleosporium sonchiarvensis* Lev.	*Basidiomycetes, Uredinales*			Europe	*Pinus*	Needles	VL – L	
8.12	*Coleosporium tussilaginis* Lev.	*Basidiomycetes, Uredinales*			Europe	*Pinus*	Needles	VL – L	
8.13	*Coriolellus serialis* (Fr.) Murr.	*?*			?	Coniferous	Wood	L – M	
8.14	*Coriolus versicolor* (L.) Quel.	*Basidiomycetes, ?*			Europe	Deciduous & coniferous	Wood	L – M	
8.15	*Coriolus zonatus* (Fr.) Quel.	*Basidiomycetes, ?*			Europe	Deciduous	Wood	L – M	
8.16	*Daedalia quercina* (L.) Fr.	*Basidiomycetes, ?*			Europe	*Quercus*	Butt part of trunks (wood)	L – M	

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8.17	*Dothidella betulina* (Fr.) Sacc.	Ascomycetes, Dothideales				*Betula*	Leaves	L	
8.18	*Dothidella ulmi* (Duv.) Wint.	Ascomycetes, Dothideales			Europe	*Ulmus*	Leaves	L – M	Main damage to ornamentals in cities
8.19	*Ganoderma applanatum* (Pers. ex Wallr.) Pat.	*Basidiomycetes, Aphyllophorales*				*Tilia, Acer, Salix, Populus, Ulmus*, some coniferous	Butt part of trunks (wood)	L – M	Main damage – to city plantations
8.20	*Gloeophyllum abietinum* (Butt.) Karst.	*Basidiomycetes, ?*			?	*Picea, Abies* other coniferous	Wood	L – M	
8.21	*Gloeosporium betulinum* West.	*Deuteromycetes, Melanconiales*			Europe	*Betula*	Leaves	L	
8.22	*Gloeosporium tiliae* Oud.	*Deuteromycetes, Melanconiales*			Europe	*Tilia*	Leaves	L – M	Main damage to nurseries and city plantations
8.23	*Gloeosporium tremulae* Pass.	*Deuteromycetes, Melanconiales*			?	*Populus tremula*	Leaves	L – M	Main damage to nurseries and city plantations
8.24	*Hendersonia acicola* Münch. et Tub	*Ascomycetes, Sphaeriales*			Europe	*Pinus*	Needles	L – H	Main damage – to 3 – 12 old trees
8.25	*Hirschioporus fusco-violaceus* (Fr.) Donk.	*Basidiomycetes, ?*			?	*Pinus, Larix*	Wood	L – M	
8.26	*Hysterographium fraxini* (Pers.) De Not.	*Ascomycetes, Ophiostomatales*			Europe	*Fraxinus*	Trunks & branches (wood)	L – H	
8.27	*Inonotus dryadeus* (Pers. et Fr.) Murr.	*Basidiomycetes, Aphyllophorales*	S. E. Russia, Transcaucasus		Europe	*Quercus, Fagus, Castanea, Abies nordmanniana*	Butt part of trunks (wood) & roots	L – H	Main damage – to 80-year and more old trees (mainly *Quercus*)
8.28	*Inonotus obliquus* (Pers.) Pil.	*Basidiomycetes, Aphyllophorales*			Europe	*Betula, Acer, Fagus, Sorbus, Fraxinus*, etc.	Trunks (wood)	L – M	
8.29	*Lenzites betulina* (L. ex Fr.) Fr.	*Basidiomycetes, ?*			Europe	*Betula* & other deciduous	Wood	L – M	
8.30	*Lophodermium juniperinum* (Fr.) de Not	*Ascomycetes, Phacidiales*	S. E. Russia, C. E. Russia (East - Ural), Siberia		Europe	*Juniperus*	Needles	L – H	
8.31	*Marssonina betulae* (Zied.) Magn.	*Deuteromycetes, Melanconiales*			Europe	*Betula*	Leaves	L	

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8.32	*Marssonina populi* Kleb.	*Deuteromycetes, Melanconiales*			Europe	*Populus*	Leaves	L – M	Main damage to nurseries and city plantations
8.33	*Nectria ditissima* Tul.	*Ascomycetes, Hypocreales*			Europe	*Fagus, Populus*	Trunks & branches (wood)	L – M	Main damage to city plantations
8.34	*Nectria galligena* Bres.	*Ascomycetes, Hypocreales*			Europe	*Acer, Fagus, Quercus,* fruit and other deciduous trees	Trunks & branches (wood)	L – M	Main damage to city plantations
8.35	*Penicillium glaucum* Link.	*Ascomycetes, Eurotiales*			Europe	*Quercus*	Acorns	L – H	Main damage in storage
8.36	*Penicillium italicum* Pers.	*Ascomycetes, Eurotiales*			Europe	*Quercus*	Acorns	L – H	Main damage in storage
8.37	*Peniophora sanguinea* (Fr.) Bres.	*?*			?		Wood	L – M	
8.38	*Phomopsis quercella (*Sacc*)*	*Ascomycetes, Diaporthales*			Europe	*Quercus*	Acorns	L – M	Main damage in storage
8.39	*Phytophthora cactorum* (L et C) Schröt	*Oomycetes, Peronosporales*			Europe	Deciduous and coniferous	Seedlings	L	
8.40	*Piptoporus betulinus* (Bull. ex Fr.) Karst.	*Basidiomycetes, ?*			Europe	*Betula*	Trunks (wood)	L	
8.41	*Pollaccia elegans* Serv. (= *Venturia populina* (Vuill.) Fabr.)	*Deuteromycetes, Hyphomycetales*			Europe	*Populus tremula*	Leaves & sprouts	L – M	Main damage to nurseries and city plantations
8.42	*Rhizopus nigricans* Hhr.				Europe		Seeds	L	
8.43	*Rhizosphaeria kalkhoffii* Bub.	*Deuteromycetes,*	Estonia, N. E. Russia (Karelia)		Europe	*Picea*	Needles, seedlings	L – M	Main damage – to seedlings and young trees
8.44	*Rhizosphaeria pini(*Corda*)* Maubl.	*Deuteromycetes,*	S. E. Russia, C. E. Russia (East - Ural), Siberia, Transcaucasus		Europe	*Abies*	Needles, seedlings	L – M	Main damage – to seedlings and young trees
8.45	*Rhytisma acerinum* (Pers.) Fr.	*Ascomycetes, Rhytismatales*			Europe	*Acer*	Fruits	L – M	Main damage in nurseries
8.46	*Rhytisma punctatum* Rehm.	*Ascomycetes, Rhytismatales*			?	*Acer*	Leaves	VL – L	Main damage in nurseries
8.47	*Rhytisma salicinum* Rehm.	*Ascomycetes, Rhytismatales*			Europe	*Salix*	Leaves	L – M	

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8.48	*Septoria populi*	Ascomycetes, Dothideales				*Populus*	Leaves	L – M	Main damage to nurseries and city plantations
8.49	*Taphrina alni-incanae* (Kühn.) Magn.	*Ascomycetes, Taphrinales*			?	*Alnus*	Fruits	VL – L	Cause a deformation of fruits
8.50	*Taphrina auctumnalis*	*Ascomycetes, Taphrinales*			?	*Betula*	Leaves	VL – L	
8.51	*Taphrina aurea* (Pers.) Fr.	*Ascomycetes, Taphrinales*				*Populus*	Leaves	VL – L	Main damage to nurseries and city plantations
8.52	*Taphrina betulina* Rostr.	*Ascomycetes, Taphrinales*				*Betula*	Leaves	VL – L	
8.53	*Taphrina carnea* Joh.	*Ascomycetes, Taphrinales*				*Betula*	Leaves	VL – L	
8.54	*Taphrina epiphylla* Sacc.	*Ascomycetes, Taphrinales*				*Alnus incana*	Leaves	VL – L	
8.55	*Taphrina tosquinettü* (West.) Magn.	*Ascomycetes, Taphrinales*				*Alnus glutinosa*	Leaves	VL – L	
8.56	*Thamnidium elegans* Link						Seeds	L	
8.57	*Thelephora terrestris* Ehr.	*Basidiomycetes,*			Europe	Coniferous	Seedlings	L – M	
8.58	*Thyrostroma compactum* Sacc.	*Deuteromycetes, Hyphomycetales*	N. E. Russia, C. E. Russia, S. E. Russia, Ural		?	*Tilia, Ulmus, Acer*	Trunks & branches (wood)	L – H	
8.59	*Trichothecium roseum* Link					*Acer, Fraxinus, Quercus, Pinus, Picea*	Seeds	L – M	
8.60	*Verticillium leave* Fr.	*Ascomycetes, Hypocreales*			?	*Pinus*, *Picea*, other coniferous	Wood	L	Leads to the red colour of wood
8.61	*Vuilleminia comedens* Maize.	*Basidiomycetes, Aphyllophorales*			?	*Quercus*	Trunks & branches (wood)	L – M	

Table 8. PATHOGENS BACTERIA

Bacteria									
8.62	*Erwinia quercina* Held. et Schr.	Gracilicutes, Enterobacteria-ceae			Europe	*Quercus*	Acorns	L – M	Main damage in storage
8.63	*Pseudomonas fluorescens* Migula	Gracilicutes, Pseudomonada-ceae			Europe	*Pinus*	Seedlings	L – M	Main damage – to 1-year seedlings
8.64	*Pseudomonas fraxini* Vuill. (= P. savastanoi pv. fraxini (Janse) Young et al.)	Gracilicutes, Pseudomonada-ceae				*Fraxinus*	Trunks & branches (wood)	L – M	
8.65	*Pseudomonas pini* Vuill.	Gracilicutes, Pseudomonada-ceae	N. E. Russia, C. E. Russia, Siberia			*Pinus*	Trunks & branches (wood)	L – H	Main damage – to 60-year and more old trees

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