Manuel Halvelik

THE TRIMERAL SYSTEM IN BIOLOGICAL TAXONOMY

A REVOLUTIONARY NEW APPROACH

Version 2.1

2002

The present work is an application in actual practice
of the theoretical analysis and the elements
expounded in the
INTERNATIONAL TERMINOLOGICAL KEY
by the same author

which is a special feature of his world language project

UNIESPO (Universal Esperanto).

Manuel Halvelik

The
Trimeral System in Biological Taxonomy
(“Universal Taxonomy”)

Editorial Assistant: Derek Casselle, Newcastle, GB

ISBN 90-75859-01-5
D/1996/77471/1

Main reference works

Pres. F. BOERNER, horticulturist
— Taschenwörterbuch der Botanischen Pflanzennamen
Paul Parey Verlag, Berlin 1951

Prof. F.C. WERNER, zoologist
— Wortelemente lateinisch-griechischer Fachausdrücke
Max Niemeyer Verlag, Leipzig/Halle 1968

Dr. W.M.A. DE SMET, zoologist
— Introduction to New Biological Nomenclature
Association for NBN, Kalmthout (Belgium), 1974

XV th International Congress of Zoology
— International Code of Zoological Nomenclature
London 1964

XII th International Botanical Congress
— International Code of Botanical Nomenclature
Utrecht 1978

International Committee on Bionomenclature
— Draft BioCode
Taipei 1997

Dr. C.A. BACKER, botanist
— Verklarend Woordenboek
van Wetenschappelijke Plantennamen (660 pag.)
Uitg. L.J. Veen, Amsterdam 2000

1 - The Key to the Key

There can be no denying that change and discovery since the 18th Century inception of Linnaean Biological Nomenclature has left this system in a state of chaos. Its inadequacies are the subject of many articles in scientific journals; and the topic absorbs unending time and energy at international symposia and seminars. But rather than elaborate upon any of that, let it be "first things first" by summarizing the fundamental causes of this deplorable situation...

First of all, in our own Anglo-Saxon technological era, knowledge and active use of Latin, let alone Greek, has dropped to an all-time low in the academic world. And it is arguable that study of these classic languages is best left to historians and philologists. But in any event many biologists — zoologists, botanists, virologists, and the like — are scarcely able to find the correct word forms among the labyrinthine intricacies of (neo)Latin grammar, when they have to name or rename yet another genus or species. Moreover, handbooks such as *The International Code of Zoological Nomenclature,* regarded as Gospel Truth, are themselves such a web of rules — plus a host of exceptions to those rules — that even a spider would be hard put to find its way around this web. Topping this is the idiotic situation that the life sciences are applying five (yes five!) <u>different</u> sets of rules, valid only in the disciplines concerned: botany, zoology, cultivated plants, bacteriology, virology.

Then, there is the explosive advance in Genetics (cladism) and similar new life sciences, which makes it ever more and more imperative not only to reconsider the whole phylogenetic ramification of living things, but also in fact to reorganize the whole Linnaean system — this still too hazy mirror of Evolution on Earth — from top to bottom!

Only a few decades ago this very idea might have looked like a horrible nightmare to biologists, confronted by mountains of archives piled up in their temples dedicated to Natural History, and compiled by generations of researchers. But today we have a formidable tool at hand, brought about by the advances in electronics: His Supremacy the Computer. Now we have

Databanks; now we have CD-Roms with sight and sound; and above all now we have the INTERNET with a limitless potential for information retrieval and exchange, making it possible even to (quickly!) find the proverbial needle in a haystack ...

So, what are we waiting for?

We are waiting for a totally logical and easy-to-use system to replace the cumbersome and creaky Linnaean one. A system which would do away with the onerous need to master dead and extremely complex languages. A system with a moderate number of simple rules, as free of exceptions as possible; so that they can be remembered and adhered to without racking one's brain or spending valuable time on a complicated handbook. A system fully compatible with the computer. A system so coherent as to provide a solid infrastructure needing no extension or modification, once mastered, and leaving users free to apply complete attention to their objective study: living things and their evolution, without bothering about linguistics.

Admittedly, many proposals to this end have already seen the light of day, including representation by numbers instead of names or by expressing everything in plain English. In fact, the need for mucking out these Augean stables has become so urgent at this start of the 21st Century, that a so-called *Draft BioCode* has been worked out by a special commission to that end — the International Committee on Bionomenclature (ICB) — which code must and undoubtedly will be discussed by representatives of all the life sciences. Well, here is yet another proposal, but this time on an entirely new footing ... with many advantages, never seen before. A bold statement, indeed, but let the reader judge for himself in the following chapters.

The operating principle is essentially that of a constant, close engagement between three mechanical components analogous to the steering wheel, the gear box, and the accelerator pedal of a motor car. The steering wheel would be a new taxonomic framework proper, the gear box a new nomenclative wordlist, and the accelerator pedal a new linguistic infrastructure, the latter being free of the complexities of Latin and Greek. In fact, the whole has a Tau-like infrastructure. This combination is so easily

mastered that it would scarcely be an exaggeration to call it child's play resembling the Lego-concept. To tell the truth, automated registration (Rule2) is yet another and important factor in the system, which we shall not enlarge upon here, since it belongs to the world of computer software, but which constitutes no principal complication in itself.

Ideally, the steering wheel — the Trimeral System[1] — should be dealt with first. But since nothing can be described or demonstrated without involving verbal means, the gear box, alias the new vocabulary, must take precedence.

Do not panic, dear reader, it will not be absolutely necessary to learn an entire new language, but only how to consult the reference handbook compiled with its help: the **International Terminological Key** (ITK) and, if desired for understanding the meaning of a species name, an Esperanto dictionary. Certainly this is infinitely easier than having to wrestle with convoluted Latin declensions, conjugations, orthography, and even uncertain semantics !

This ITK is a modest bilingual dictionary, listing over 5000 scientific word roots, *adapted from* Latin or Greek originals, in which each root has both a fixed form and a fixed meaning, and can therefore be easily linked to any other member of the group, or be given an appropriate affix, also of a fixed form and fixed meaning. Thus the old Latin and Greek stems are reincarnated, so to speak, in a modern simplified and streamlined form. There is no longer any need to worry about assimilative affix variations, such as *syn* becoming *sym, syr, syll,* or even *sy;* or *ad* becoming *ac, af, ag, al, ap.* No more wondering whether *-us* should not rather be *-um* or *-ae* or *-os*. Consequently, practitioners in any scientific discipline — not only biologists — which by tradition happens to be embedded in those dead languages, can now jettison their old burden.

The ITK table of scientific word stems can dispose of the traditional intricacies of grammar, because it is embedded in a

[1] The term trimeral ("three-membered") has been coined to avoid confusion with *trinominal* ("three-named").

new “constructed” world language, called **Uniespo**, which lends its simple orthography and absolutely rational grammar to the forming of actual scientific terms from the building blocks presented. In other words: if one element provides the necessary building blocks, the other one provides mortar and tools. As yet, the ITK dictionary translates only from and to English, but that can of course be replaced by any living language.

Uniespo (or Universal Esperanto) is a considerably expanded and rationalized version of traditional Esperanto. The latter — despite popular opinion to the contrary — is no pidgin at all and perfectly capable of producing high-flown literature, but has always been lacking in the fields of sciences and technology. Not from any inherent inability to absorb scientific loanwords, but because its traditional grammar is completely at a loss for a secure way to organize and digest purely scientific words. Its offspring Uniespo, however, rectifies this shortcoming — making “Language for Special Purposes” its broad-spectrum prime objective, with Bionomenclature a choice field of application.

As stated before, there is no inherent need to master this new language in any conventional sense, though a working knowledge would be useful, of course. But, where up to now consulting a Latin or Greek dictionary — for constructing (or understanding) a given scientific name — is like entering a labyrinth to non-philologists, the International Terminological Key is completely regular in structure and usage (no exceptions!) Therefore, any intelligent person can employ this small handbook confidently and effectively, after memorizing only a couple of introductory pages on composition and orthography.[2]

In fact, by simple analysis of the scientific names exampled further on in this publication, many of its components and rules will become immediately apparent.

[2] A voluminous treatise will eventually be available (for free) as a PDF-file.

At this point it is only right and reasonable to acknowledge that Dr. W.M.A. D**E** S**MET,** a renowned Belgian zoologist, has already devised a somewhat similar approach, called New Biological Nomenclature (NBN). This has been published (mainly in Esperanto) under the imprint of a scientific Association[3] with the same name and which has already accomplished a significant reordering of zoological terminology and taxonomy. But, since the initiator makes almost a clean sweep of established taxonomy, denying even the concept of genus (i.e. recognizing only families) and insisting that all generic and higher names be translated into everyday traditional Esperanto, there seems to be little point in pursuing this train of thought, however meritorious the venture.

Some other noteworthy workers in the same field but along divergent lines, all esperantists, were: Prof. Carl Støp-Bowitz, a Norwegian biologist; Prof. Paul Neergaard, a Danish botanist, and B.Sc. G.F. Makkink, a Dutch agricultural researcher.

Uniespo, on the other hand, sets out to liberalise taxonomy by giving it a versatility which makes the going so easy — for "splitters" as well as "bumpers" — that biological nomenclature should cease to be plagued by vehement, time-wasting discussions at seminars and in periodicals.

Essentially, then, this booklet presents a new (triple) tool and demonstrates how it should be applied; but nothing more. If biologists[4] choose to accept it — a big "if " — then the actual

---

[3] Seat: NBN, Hertendreef 12, B-2920 Kalmthout (Belgium).

[4] In fact, it would be better to use the term "biontologists" in the very broad perspective of this new system, which can be applied by practitioners in all the life sciences (bacteriologists, horticulturists, breeders aso.) and even beyond.

operational decisions remain theirs. The examples given on subsequent pages thus are just examples and in no way immutable final forms! Nor are the rules the basis of any claim to some ultimate and absolute perfection. What they should prove, though, is that the Trimeral System, the ITK, and its embedding Uniespo, constitute an enormous leap forward over the classical Latin-based Linnaean system... enough to justify the monumental task of completely rewriting all the textbooks on taxonomy or systematics.

2 - Naming the Child

1 Let us begin by doing away with the ill-conceived Law of Priority !! Scientific disciplines in general seek maximum objectivity and precision. Yet, with Taxonomy there is acceptance of even the most ambiguous and nonsensical name for a species, in the misguided belief that this Law will make a paragon of the little monster, creating stability and clarity. But in this computerized day and age, this obsolete Law can much more efficiently and surely be replaced by enabling reference to a worldwide databank — a new kind of "Zoological and Botanical Record" — literally at one's fingertips: a Central Biological Catalogue, and thus from now on governed by a **Law of Reference** ! To that end, a subject should be given that name which fits it best, and leave all other candidates out, regardless of how recently or long ago that name was first coined, and no matter whether it came from a distinguished professional or an obscure amateur. Names of authors and dates of description — the so-called "indications" — would appear in this Catalogue only as a supplement, not directly linked to the name itself, i.e. as information for people interested in archives.

> A researcher, WALCKENAER, who published an extensive study about spiders in 1805, concluded that LINNAEUS had listed far too many disparate species under the same generic name, and that they should therefore be distributed over a greater number of genera. So, e.g. he thought up the genus *Epaira* for the cross or garden spider, naming it *Epeira diadema.* But no, because LINNAEUS' work of 1758 preceded his, only the name *Aranea diadema* was considered worthy of official acceptance, thus perpetuating the confusion.

2 Naturally, deciding on the most appropriate name should entail an accurate assessment of all the

relevant facts about the group under consideration. Including a situation where new findings — either theoretical or observed — may make it necessary to alter an existing and accepted name, despite its previous validity. Now, since it remains essential to know exactly which species or genus is affected, this is where the Law of Reference comes into play. It will, in all required instances, also give the **Catalogue Number** — a listing procedure for which the established Decimal Classification seems ready-made. The new CBC Databank could output a totality of detail on any taxon or species, or even subspecies. And if anyone is interested in the historic background, all the names ever assigned, plus when and where and by whom, could be accessed too. Except that there would no longer be any real need to preserve all those little known and often unpronounceable personal names.

So the globeflower might be fully catalogued as:

Trollius laxus CBC 34-1056.

At the moment of publication, this system of cataloguing all living things in a worldwide databank may appear like sciencefiction to some, not aware yet of the BioCode commotion. However, even they cannot stay blind for the explosive growth of information technology nor for this practicability being near at hand. In fact, such cataloguing would and should become a fully automated process, provided it is modelled on the way the human brain stores and accesses its information.[5] No formally constituted overseeing authority (always lagging behind) would any longer be necessary if the CBC — through on-lining with other databanks — continually monitors all the relevant books and periodicals. If a given name allocation is found in, say, five (distinctly) different sources during, say, three consecutive years, then this name will become officially recognized and recorded as such — without any human intervention! While no specialist could ever hope to consult each and every member of his profession, the CBC would be able to achieve total and simultaneous coverage and thus enable consensus to be reached as expeditiously as possible.

[5] The author also conceived a set of algorithms enabling a parsing programme to automatically determine the subject of a given text.

As the CBC would undoubtedly register any and all newcomers arriving in literature — or even over the Internet itself — as yet "immature names" would have to be labelled by the customary asterisk standing for "not official, hypothetical", until the above criterion were satisfied. Of course, in case a given proposal proves to be too ephemeral or unpopular to be retained, also an "expiration date" should be implemented. And names which do not comply with the Rules of the BioCode would be discarded automatically.

3 Now, as to the **language** to be applied, we have to use a two-part methodology: the Key for recreating generic names and a new everyday (common) vocabulary for (re)creating specific names. Let us consider them separately.

4 **Generic names,** plus all higher taxons, are to be (re)created in accordance with the International Terminological Key (see the Introduction). Only a few grammatical rules, for linking the scientific roots of this Key or making derivations, have to be observed, all rigorously without exceptions. The roots themselves have a fixed form never altered by declensions of any kind.

1. All generic names, being substantives, end in *-O;* no more arbitrariness, confusion, uncertainty about a host of Latin suffixes for genders and cases:

   Lumbricus ∏ Lumbrik**o**
   Jasminum ∏ Jasmen**o**

2. If a leading stem ends on a consonant, and the trailing stem starts with one, then the vowel *-0* is to be inserted between the consonants:

   Raphiolepis ∏ Rafj**o**lepido from rafj• and lepid•
   Dinosaurus ∏ Din**o**sawro from din• and sawr'

3. If the leader ends on a vowel or the trailer starts with it, then that vowel takes the place of the above -0.

Epimys ∏ Epi|muzho from *epi•* and *muzh•*
Galanthus ∏ Galakt|anto from *galakt•* and *ant•*

4. If leader stem and trailer stem meet one another with DIFFERENT vowels, then both vowels have to be written:

Paronychia ∏ Para|onyxo from *para•* and *onyx•*
Monodon ∏ Mona|odonto from *mona•* and *odont•*

5. If leader and trailer meet one another with the SAME vowel, then both vowels combine into one:

Thelyper ∏ Tel|y|pero
from *tely•* ["female"] and *yper•* ["serve"].

This places some burden on the memory, but is nothing compared to coping with the welding practised in traditional latinized names. Besides, the ITK-handbook will always be able to clarify the "etymological" structure.

5 Naturally, **names** handed down as a whole **from the past,** which pertain exclusively to the object, are considered sufficient in themselves and need no revision other than that brought about by the new orthography (see Rule 18). After this it is only a matter of familiarisation...

Fagus ∏ Fago
Salix ∏ Saliko
Vulpes ∏ Vulpo

Cyprinus ∏ Tsiprino

6 In a relatively few number of cases, the elements of a compound generic name may, because of their **purely Latin origin,** have the consistency and form of a species name. This will be confusing and conflict with ordinary (popular) wording. In such instances it seems advisable to make a radical change over to the ITK-stems, while conserving the old meaning(s). The same goes for words imported from some ethnic tongue:

> *Passiflora* = "pasionfloro" in common language ∏ Algianto from the ITK-roots *algi•* ("pain") and *ant•* ("flower").

Phytolacca, irregularly composed of a Greek stem ("plant") plus an Italian one ("lacquer"), might be rephrased as Fytoglojo, with exactly the same meaning.

7 Another onion to peel is **the nature of a word stem.** In numerous cases, it has no recognisable identity, but is either a meaningless stump or a personal name, both equally untranslatable and therefore immune to even our Universal Key. A nonsensical word may be thought up by some author, lacking inspiration or just being lazy linguistically (*Lobivia* anagrammed from the correct form *Bolivia);* it could be a meaningful word where the etymological origin has been lost or become extremely archaic *(Radymna, Mogulones);* or it might be — worst of all — a personal name in honour of some high ranking but long forgotten patron. (Whoever was the Baron W. von Saint-Paul Hilaire in *Saintpaulia ?*)

* * * * * *

Now, with the object of making everything as clear and concise as possible, one should try in such cases to apply the following criteria::

1. Reduce complex ethnic spellings.to a minimum (ideally no more than four syllables), using only characters employed in Uniespo and the ITK, in accordance with Rule 18. And that goes of course for "Latin" centipedes too!

   Saxegothaea ∏ Saksegotio
   Boussingaultia ∏ Busingoltio
   Parapallaseakotylodermogammarus ∏ Kotylodermo
   Roberthoffstetteria nationalgeographica ∏ Robertusso

2. If non-Latin names are translatable — such as those latinized from Russian or Chinese — it is necessary, without exception, to turn them into combinations of corresponding and international ITK-roots.

   Krasnopoevaecejathus tyrgaensis REPINA, KHOMENTOVSKII, ZHURAULEVA & ROZANOV, 1964 ∏ Ruberosomfo turguja

3. Provide them with the ending *-(Z)IO* which, though having no meaning in itself, does serve as a marker to denote the word in question foreign and therefore officially devoid of coherent innate meaning:

   Brosmius ∏ Brosmio
   (German) Pfrille ∏ Pfrilio
   Fuxsio, Panio, Lineio, Lamarkio... a.s.o.

   The difference between this rule and Rule 5, is that here we are dealing with words having **no** (tangible) meaning, as opposed to those with at least **some** degree of comprehensibility

4. Where tradition need not be observed — as in coining a name for a new genus — but the author is determined to use a **proper name,** it should be borrowed from a universally existing concept such as a country, lake, mountain, city, ethnic group, mythological figure, or the

like — never a person's name and never forgetting the *(z)io*-ending or a default suffix — and observing the orthography of Uniespo! [see Rule 18]

e.g. Kubio (from Cuba); Ikario (from Icarus); Panio (from Pan)...
or Molukello (from the Moluccas).

5. Having become integrated with Uniespo, such names may then be regarded as technically equivalent to ITK-roots and applied in the same way.

Baluchitherium	∏	Balutshoterjo	[*terj*• = "animal"]
Turcmeniga	∏	Turkmenogeno	[*gen*• = "produce"]
Cubincolo	∏	Kubotsholo	[*tshol*• = "dwell"]

6. Instead of making an **anagram** from a compound word, it is better to inverse the order of the constituent elements, or select synonymous roots from the ITK.

Potamogeton/Aponogeton [potam• = "river"; geton• = "neighbour"]
Potamogetono / Getonopotamo
Fluviogetono / Amnjogetono
Potamoxomro / Potamovitshno

7. Where there are apparently **no constituents** but only a monolithic name, selecting different default endings is again preferable to coining anagrams.

Mitella / Tellima ∏ Mitjello / Mitjimmo
from mitj• ["scull-cap"]

8. Making **compounds with proper names**, not within the category of 7.4, is not allowed. Derivations on the other hand are allowed, if made with the suffixes mentioned under Rule 8.1.

Wattonithyris ∏ either Watonio or (eventually) Kyklotyro
Thomsonaria ∏ either Tomsonio or (eventually) Hermesarro

8 It is also important to note that the Key does not permit one of its OWN **word roots** to stand isolated in a text. Such roots must always be given a "plug" to seal them off against inadvertent use as common words and to preserve their scientific (normoglot) character. So, if a generic name contains only one such scientific root and is not linked either to another stem or a MEANINGFUL suffix, then the Key provides a number of special endings, called "**default suffixes**" — particularly applicable in biontology — containing any given vowel plus double consonant, and all having the same general meaning of "being, entity, living thing". They enable us to form about a hundred different names with each of the ITK-roots!

One may rightly object that this spelling of default suffixes is against the principles stated in Rule 18. That is true, but it is the ONLY deviation necessitated by this linguistic problem and justified by the great benefit it brings for differentiating between ever so many homonyms. The consonant doubles (geminations) will be pronounced with a little extra emphasis and/or duration, in order to make them recognisable in spoken language.

1. From among those default suffixes one can freely choose whichever seems the most appropriate element; that is closest to the original or best suited for making a distinction. This simple rule allows the bypassing of a great quantity of complicated graecolatin suffixes, when dealing with a real word.

-ULL	for	*-ulus, -ulum, -ula*	
-ARR	for	*-arius, -arium*	
-IDD	for	*-ide, -ides, -idus*	and so on

The difference between this procedure and the one presented in 7.3 is that we have here a meaningful word stem; and in the other, either a meaningless person's name or an ethnic term.

2. Normally, these suffixes are to be used ONLY with a lone root. If that root is (to be) linked with another root, the eventual default suffix should invariably be dropped.

   Hymenaea ∏ Himenazzo
   but *Hymenanthera* ∏ Himenantsero

3. Default suffixes can also be used to differentiate between **compounds** which would otherwise be **homonymous**.

   Microchaetina ∏ Mikroshetinno
   Microchaetana ∏ Mikroshetanno

4. The use of ordinary Uniespo-roots, as with names of pure Latin origin, is permissible in the same situation, but using strictly ITK-material is by far preferable.

   Oculina ∏ Okulinno [*okul'* = "eye"]
   but Omatinno [from *omat*•] is to be preferred**.**

5. Only ONE such suffix should be used at a time, but not two or three in a row! If the original name carries such a combination, or may in principle give rise to it, only one of these should be selected.

   Plumatella gives either Plumatto or Plumello but not Plumattello
   Valerianella gives either Valranno or Valrello, not Valrannello

6. Where the original ending is unclear or absent, the suffix –*AZZ* should be chosen as representative.

   Sylvia ∏ Silvazzo [from silv• = "forest, woods"]

9 **Specific names,** subspecies included, are to be expressed in the everyday common vocabulary of Uniespo, as follows, with no exception to the rules:[6]

* * * * * * *

Dear reader, we appreciate that tackling Everyday Uniespo as well, might be rather more than you'd bargained for! But do you really prefer to have to cope with both a Greek and a Latin dictionary? The compilation of a translating list Latin-Uniespo-English for epithets in biontology is at the planning stage in the form of a database file, should this need really be felt. So, in the meantime, the best course would be to use the ITK handbook in conjunction with one of the many easily obtainable Esperanto dictionaries — such as the two-way *The Esperanto-English Dictionary* by Dr. J.C. WELLS, in the well-known *Teach Yourself Books,* published by The English Universities Press; guaranteed a lot easier to consult than a Latin handbook! The "old" Esperanto will serve perfectly well for rendering epithets, until Uniespo-dictionaries become available, since on the everyday level of usage there's not all that much difference between them, except for spelling. So, get gourself The Key and an Esperanto dictionary — a small one will do quite well — and then donate those complex Latin and Greek volumes to a teacher of those languages.

1. All specific names, being adjectives, end in *-A*: so no more doubt over which Latin declension form should be used — they no longer apply.

rampans	∏	rampant**a**	["crawling"]
lacciferum	∏	lakoport**a**	["lacquer-carrying"]
gyratus	∏	shpiral**a**	["spiral"]

2. As a wedge / linkage — obligatory for this particular application — between the common word roots of a compound vernacular word, use one of these:

   -A if the leading stem is an adjective:
   picrococcus ∏ amar**a**kerna ["bitter kernel"]

[6] It is noteworthy that the NBN-Association has established a considerable number of useful and pertinent new epitheta for zoology.

-*O* if the leading stem is a substantive:
harpophyllus ∏ harpon**o**folia ["harpoon-leafed"]

-*I* if the leading stem is a verb:
flexibilis ∏ fleks**i**kapabla ["capable of bowing"]

-*E* if the leading stem is an adverb:
campylonascis ∏ kurb**e**kreska ["curved-growing"]

3. Compound words incorporating a numeral, preposition, or the like, are spelled without a juncture element. Numerals have to be written in full:

intermedius	∏	intermeta	["intermediate"]
redivivus	∏	revivanta	["reliving"]
sexdentatus	∏	sisdenta	["six-toothed"]
familiaris	∏	malsovadzha	["unwild"]

4. Although ordinary words are to be preferred for this specific naming, in contrast with generic word-forming, it is still possible to use a strictly technical term, taken from chemistry or anatomy for instance, or the usual geographical concepts or even a codenumber:

Melanogrammus aeglefina ∏ Melanogramo sensheligebla
= "peelable"; for the haddock. [French: *aiglefin*]

but:

Uragoga ipecacuanha ∏ Uragogo ipekaka, for the vomit-nut
Rosa chinensis ∏ Rozo tshinuja
Human Papilloma Virus #16 ∏ Papilomusso deksesa

5. Trivial names for plants and animals, as designated in Uniespo are considered equivalent to technical terms. That goes for self-contained singular words [see Rule 5], but not for titles or metaphors, using more than one word. Such names are to be distinguished by adding *-noma* ("named") as a pseudo-suffix.

Clupea harengus ∏ Klupeo harengonoma [herring]
Turdus merula ∏ Turdo merlonoma [blackbird]
Falco cherrug ∏ Falko tsherugonoma

[We borrowed this standard procedure from NBN.]

The cowslip, *Primula officinalis,* is popularly named "majfloro" [mayflower] in traditional Esperanto, but is scientifically named only as Primullo meditsina; although "majelomonata" ["(In the) month of May"] may do just as well for this epitethon.

6. A morphological or behavioural feature should override any purely geographical notion.

nilotica ∏ mevobeka
["from the Nile"] ["having a gull's beak"]

caspia ∏ kritshanta
["caspian"] ["screeching"]

7. The semantic elements of a compound word are considered to be of equal value and quality. They are normally cited in alphabetic order; but this sequence may be inversed if a synonym has to be coined with the same elements and meaning.

blugriza ["blue-grey"] preferable to grizablua ["grey-blue"]

8. Once attributed under the new Taxonomy, a specific name/word should never be changed, even if the species at stake needs to be moved to another genus. [For eventually ensuing homonymy see Rule 29.2]

Fringilla domesticus ∏ *Passer domesticus* ∏
Pasero familiara

Taenia diminuta ∏ *Hymenolepis diminuta* ∏
Himenolepido plieta

10 Another ill-advised custom is **tautonymy** between genus and epitheton. This should certainly be avoided, unless the repetition is not formal but only semantic (same meaning but other word). This goes for the subspecies too. Translation into Uniespo will more often than not automatically bring the necessary differentiation, anyway.

Cygnus cygnus	∏	Tsigno sovadzha	[”wild”]
Pica pica	∏	Pigo samnoma	[”same-name”]
Chloris chloris	∏	Xlorisso verdula	[”green-one”]
Gallus gallus	∏	Galjusso kokonoma	[”rooster”]

11 Genus and species names of a **particular nature,** such as “uncertain determination, hypothetical reconstruction, reference to another genus”, are to be marked by a special flag, to the right of the word concerned, as an exponential symbol (**o, +,** ∴).

alfataktsa ^{o} (reference to other genus)
[stands for “refero”]

betataktsa $^{+}$ (fossil or extinct species)
[stands for “fosilia”]

deltataktsa * (uncertain identification)
[stands for “maltserta”]

Arthonia nephromiaria ∏ Artonio nefromma ^{o}
(as dwelling on the particular genus Nefrommo).

Lernaea lusci ∏ Lernio gadussa ^{o} and not Lernio unuokula
(because it is a copepod parasite on *Gadus luscus*).

12 Reference to some generic name, related or unrelated, should theoretically be avoided, but cannot be ruled out in practice (parasitism!). Even more undesirable is the habit of referring to another species, related or unrelated. But, if it really cannot be avoided, one can resort to the mention *-spetsia* ("species") added as a tail to the normal epitheton. Its tape-worm aspect will make the name stand out as Hobson's choice by itself ...

Phaeospora granulosae ∏ Fajosporo grajnetsospetsia
Polycoccum bryonthae ∏ Polykoktso muskokotospetsia

13 Any scientific **species name** must consist of only one word. If two or more concepts are at stake, they must be merged into a single compound. However, one should avoid welding more than two concepts together. In such a case it is advisable to create a new name altogether. [see Rule 25]

New-Zealandian ∏ novazilenda
terrae novae ∏ novalanda
kwerka + betula (oak + birch) ∏ betulokwerka

14 **Acronyms and codes** — as in microbiology — are admissible on condition they obey the general naming procedures of Universal Taxonomy.[7]

"laser prone" ∏ laserosentema
HIV ∏ homimunetsa

15 An extremely important matter, where specific names are concerned, is **the characteristic(s)** which they are to express for typifying a given species. These are normally drawn — and in the following

[7] Universal Esperanto provides special rules for realms such as geology, astronomy, chemistry... and even jargon.

order — from morphology, habits, habitat, region, and (alas!) also substituted by proper names. The trouble is that such typifying particulars usually are rather limited in number, whereas the species may run into scores. This is particularly true for plants and animals on the lower rungs of the evolutionary ladder. Or, if there are sufficient characteristics to choose from, more often than not they are commonly shared by several species. Or, such characteristics may be short-lived or be just too particular, because they are linked to sex, season, age. Also, a typical trait may be quite hidden from view, and appear only on very close inspection (microbiology!). So, the biologist often faces a dilemma and will resort to nonsensical words (treated under Rule 7).

In view of these difficulties it is utopian to suppose one can and must always find the exclusive characteristic, and set it down in the specific name. Therefore we should radically shift the helm by prescribing that, when the few really prominent and exclusive characteristics have been judiciously allotted, a list be made of all possible other characteristics. Then, the as yet unnamed members of the group (= those in need of renaming) will receive them according to an arbitrary distribution of the characteristics, such as the alphabetical order. Moreover, since Uniespo (as well as Esperanto) is an agglutinative language, there are usually several ways to combine the elements of a given specific compound word, making synonyms feasible and, in this respect, even desirable. Besides which, a meaningful epitheton — even if erroneous — is a lot easier to remember!

The only really important consideration here is to make sure that a given species carry a characteristic name attached to no other species within the same genus, even though eventually all the members of that generic group may lay claim to the very same characteristic !

It is precisely this stumbling-block of characteristic exclusiveness which defeats the rival NBN-project, mentioned before. This has led its advocates to produce a number of anagrammatic proper names, in absolute contradiction with their declared policy of turning scientific names into everyday language, so even the layman may understand what is meant. **(See the application specimens for examples.)**

16 What about the **particular endings for taxons,** such as Family, Order, and Class? Well, in the Trimeral System they utterly lose their function of taxon indicators and will be seen no more!

1. To replace them, we now have some meaningful suffixes pertaining to the sort of name used:

-*ARO* for (high) taxons with vernacular names:
Birdaro, Algaro, Fungaro, Mikrobiaro
(Birds, Seaweed, Mushrooms, Microbes)

-*ESKOJ* for "related to a given genus":
Ericacea ∏ Erikeskoj
Blattidae ∏ Blateskoj

-*OJDOJ* for "merely looking like":
Nematoda ∏ Nematojdoj
Omphalodes ∏ Omfalojdoj

-*ITOJ* for "fossils":
Trilobita ∏ Trylobitoj
Pterisospermidae ∏ Ptersospermitoj

-*ULOJ* for "having this common characteristic"
Bryozoa ∏ Bryozouloj
Cormophytae ∏ Kormofytuloj

2. For the level of Family it is mandatory — and for taxons up to the level of Order, recommendable — to use the ending *-ESK* based on one of the relevant generic names (the chosen holotype).

Dermatemydidae	∏	Dermatemyseskoj
Apocynareae	∏	Apokyneskoj

3. It is possible to combine some of these determination suffixes.

-OJDESKOJ	from	*-OJD*	and	*-ESK*
-ITESKOJ	from	*-IT*	and	*-ESK*

4. If a particular genus needs to be split into **several subgenera,** then it is the original generic name which will receive the ending *-ESKOJ*.

Alfataktso	∏	Alfataktseskoj	Alfataktso { Betataktso

5. If a **fossil form** should prove to be still in existence or, inversely, a taxon become utterly extinct, it is sufficient to just alter the corresponding suffix and/or flag.

Coelacanth	Koelakanto+	∏ Koelakanto
Raphus solitarius	Rafjusso izolita	∏ Rafjusso izolita +

6. It is customary to use **vernacular names** along with scientific names for the highest taxons. Universal Taxonomy does not want to decide between these two and leaves the alternatives open for the specialists to choose.

Animals	∏	Bestaro / Terjarzhuloj
Birds	∏	Birdaro / Aviarzhuloj
Insects	∏	Insektaro / Entomarzhuloj
Mollusks	∏	Molbestaro / Moluskarzhuloj
Mushrooms	∏	Fungaro / Mykarzhuloj
Plants	∏	Plantaro / Fytarzhuloj
Seaweed	∏	Algaro / Fykarzhuloj

7. If a given subspecies or genus, having a name of its own, proves to be just **a particular life-form** of some other subspecies or genus, then it is to lose its prior name and acquire the name of the subspecies or genus it really belongs to. If the species name is apposite it can be conserved; otherwise it must be changed too.
[compare Rule 10.9]

Siredon pisciformis	∏ *Amblystoma tigrinum* = Amblystomo tigretsa [axolotl]
Leptocephalus morrisii	∏ *Anguilla anguilla* = Angwillo palengonoma [eel]

17 On the other hand, for ease of application and conciseness, **taxon names above the elementary level of Genus,** (or a genus having subgenera) MAY be abbreviated to just a couple of syllables, provided there is no immediate danger of confusion between them. By putting this superior taxon name — which is a single word — before a given generic name, one can at once put this genus in its wider setting and thus directly point to the true nature of the subject. This procedure is certainly not superfluous if two (or more) generic names are complete homonyms, and each pertains to different higher taxons or even to completely different realms. After all, many names, left to themselves, are equivocal about whether they pertain

to a plant or an animal, a bacterium or an elephant. [see Rule 20.2]

Gastrop•	for	Gastropoduloj	*(Gastropodidae)*
Fanerog•	for	Fanerogamuloj	*(Phanerogamae)*

1. This abbreviated form has to be marked by a capital letter at the beginning and a point at the end, preferably by a midway dot as used in mathematics. The normal number of syllables goes from one to four, although exceptions may occasionally occur to avoid homonymy.

Fag•	for	Fageskoj	*Fagales*
Abi•	for	Abieskoj	*Abietacea*
Shelyker•	for	Shelykereskoj	*Chelyceratae*
Konusofor•	for	Konusoforuloj	*Coniferophyta, Coniferae*

18 Finally we come to the not unimportant matter of **Orthography**, valid for the Key in particular as well as for common Uniespo.

1. All characters are pronounced as they are written, and written as they are pronounced, whatever their positioning, whatever speech sound comes before or after.[8] So the antique *C* and *Q(ue)* are gone — supplanted by either *S* or *K* or *TS*.

Consequently, no more variations of the sort: *sutchuenensis, setchuenensis, szechuanensis, szechwanensis, setchwanensis, szechuenensis*... but uniformly and simply: setshwanuja.

[The suffix -*UJ* stands for "land, region"]

[8] Uniespo also provides a system for transliteration of names from non-Latin alphabets, called "Universala Skribo" (Universal Writing).

2. The characters used are those to be found in the International Phonetic Alphabet (definitely not equivalent to English usage!) and have precisely the same pronunciations, except for the following digraphs: *SH* and *ZH* correspond respectively to *sh* in English *show,* and *j* in French *journal.* **In fact they ought to be the single characters *S* and *Z* with a cedilla.** If these letters are not (yet) available on a given typewriter or text editor, one can use the Chech equivalents with a caret, or most simply *SH* and *ZH* instead — as is done throughout this paper — which will do just as well. The two vowels *O* and *E* have (for English-speaking people) very much the phonetic values of *e* in *bed* and of *o* in *lock*. [9]

3. Digraphs (a pair of different letters for one phoneme) have been made extinct: *PH* is now always *F*; *TH* is now *T*; *AE* is now simply *E* or *A*; and so on. Therefore, all letters have to be individually pronounced, except for the just mentioned temporary *ZH and SH*.

Phacophyceae	∏	Fajofukuloj
Thalarctos	∏	Talasarkto
Elaeagnus	∏	Elajagno

4. Diphthongs are written with a vowel plus *j* or *w*, instead of *i* or *u* : *-aj, -oj, -uj, -aw, -ew,* etc.

5. Because of Rule 18.1, one should try to make names as easily pronounceable as possible, avoiding in particular a

[9] Interlinguists should make a note of the fact, that the spellings of new Uniespo and traditional Esperanto don't entirely match up; e.g. new /ts/w/dž/ against customary /c/ŭ/ĝ/.

succession of more than two or three consonants. Sandhi-rules should be obeyed: *pv* ∏ *pf*, *vk* ∏ *fk*, *tz* ∏ *ts*, etc. rather than just importing the original spelling forms. Such adaptations can also be used as a means of further differentiation between homonyms!

Ginkgo	∏	Ginko
Abudefduf	∏	Abudevdo

6. Emphasis goes invariably on the penultimate syllable. Only exception: fancy names for cross-breeds [Rule 26].

KryptogamUloj, BalenotsEpso, pintanAza, ventrostrIa

7. If the spelling of a particular name should afterwards be found wrong, there is now no more need to completely rename the group, but only and simply to correct the name in the CBC, which anyone can consult anytime.

Amb**y**stomo	∏	Amb**l**ystomo
river**o**puda	∏	river**a**puda

8. Gemination (doubling of a letter) in a word **stem** is no longer allowed and must be substituted by some "euphonic" adaptation. (Only the special **suffixes** referred to in 8.1 are allowed such a digression.)

Pyrrhocactus	∏	Py**r**okakto
Gekko	∏	Gek**x**o

*Because of recent evolutions, Taxonomy finds itself in a sort of crisis. The realizations of cladism and genetics, treatable with powerful computer programmes (manipulation of numerous data at the same time in the form of matrices) make it possible and imperative to revise **the whole** of traditional Systematics.*

[LA RECHERCHE, Nr.212, p.864]

3 - A Wholesome Threesome

19 The time-honoured custom of signalling the genus name as a noun (by its capital letter) and the species name as an adjective (with lower case letter) may be considered the core around which the whole of taxonomy is constructed. There is no intention of doing away with this vested building block — in spite of the fact that "genus" is an extremely vague and highly subjective concept[10] — but instead adding **a third element** in between the two already used, namely a taxon symbol. The elements of this new trimeral sequence of "Genus-Taxon-Species" will be referred to respectively as: **dependent - relator - governor**.

> Thus *Acer campestre* gets to be Atsero S kampara,
> and *Lithobius forficatus* becomes Litobio S tondila.

At first glance, this may look like a mere cosmetic operation, but under the following rules the reader will see that the new relator becomes a powerful tool for easy naming and recognition of taxons on higher and lower levels.

20 Instead of the customary Latin suffixes for indicating the taxon level *(-formes, -ales, -acea, -idae, -inae...)* now a **convenient relator** is placed in front of the name — whether written/spoken in full, or in the abbreviated form mentioned under Rule 17. It carries no full stop.

[10] We trust the CBC-procedure of Rule 2 will bring better agreement and more stability about generic names, through its automated "majority vote".

Since it is estimated that evolutionary embranchments will eventually reach up to 40 or 50 hierarchical levels, then theoretically a taxonomy should provide distinguishing elements equal to the worst-case-scenario. Traditional nomenclature has at its disposal only a meagre handful of suffixes with which to meet this challenge. And although they can be divided and subdivided by means of "subtaxons" and "supertaxons", that measure would be no more than a palliative. Therefore, the list of taxon symbols has been made as numerous as possible — while keeping them well diversified, ordered, and recognisable. Their attribution and distribution, in working practice, is up to the specialist; who can now be as detailed or generalised as desired, or as the ever insufficient data will permit.

The biological committees should supervise the naming and distribution of ALL taxons, from variety up to kingdom, in order to bring unity to handbooks and schoolbooks all over the world. But perhaps this exacting task would be taken over by the CBC anyway. Moreover, it should be a welcome opportunity for filling in the all too numerous blank spaces on the taxonomic map of Evolution.

By means of these relators it is now possible to move a whole taxon upwards or downwards at will, without having to change the taxon name, irrespective of its ending!

M	Imperio	kingdom	T	Tribo	tribe
P	Fylalo	phylum	F	Familio	family
B	Brantsho	branch	G	Genro	genus
K	Klaso	class	S	Spetsio	species
L	Kladalo	cladus	R	Raso	race
O	Ordo	order	V	Vario	variety

H	Hibridulo	hybrid
X	Taktsalo	taxon (any)
Y	Artefarito	artefact
Z	Synbiawzo	symbiosis

In between F and T may be added a further taxon N for “nation” (Natsio). T replaces “suborder”; L replaces “subclass”. H for hybrid is used for denoting cross-breeds (chimeras) incapable of reproducing themselves in Nature.

1. Evidently, the sequence(s) of an official representation must follow the normal hierarchical order, left-to-right in text for top-to-bottom in the table.

   Dicotylae ∏ Fanerog• G Dykotiledonuloj
   Lepadogaster ∏ Gobiez• G Lepasogastro

2. Which higher taxon(s) are to be mentioned, or which to be left out, will be freely decided by the specialist in each context. There are no absolute rules here, other than always keeping the trimeral array well in mind, if not explicitly in writing.

EXCESSIVE: Mandibl• Entom• Pter• Ektopter• Izopter• G Termito
SUFFICIENT: Entom• L Pterentomontjuloj for the cladus *Pterygota*

3. When a given name is valid for several higher taxons, the system allows for putting the relators concerned one after the other. It seems preferable, though not imperative, to keep them separated by a blank space.

   Synpet• O F Rubleskoj for order & family *Rublaceae*
   Axenarzh• T F Tserveskoj for tribe & family *Cervidae*

All right — acceptance of this new arrangement and its extra differentiation will almost certainly call for a lot of reshuffling among the traditional taxons. But then, we don’t get “owt for nowt”, do we? Besides, think of the peace, stability, and unity which must finally ensue !

4. In the spoken language it may prove practical to use the alternative NBN-proposal of adding *-(taktsal)anoj* ("taxon members") to the basic name.

O Delfeneskoj = "Delfenordanoj"

21 When **incorporating a scientific name into a text,** there is no longer any need to make its particular status stand out against the environment of normal language, by giving it a special emphasis such as (the usual) italics. The relator takes over this function perfectly well. One is now even at liberty to leave out the genus name altogether and use only the species name preceded by its relator — provided, of course, that the context makes it clear which genus it refers to.

"Speaking about Borago, its species name S meditsina *(spec. officinalis)* gets its name from the ancient practice of using it to make wounds close up quickly."

"Snake birds, like G Anhingo *(Anhinga),* pursue and catch fish under water."

22 As usual, **subspecies** are also defined by an extra adjective put after the normal species adjective. Here, however, the taxon symbol is subdivided by an indexing cross. Everything said about species names applies also to the subspecies names — particularly avoidance of tautonymy — except for the custom of employing mostly geographical concepts. [For varieties and races see Rule 27]. Deciding, which subspecies has to be considered as typical of the whole group, is a very vexed question, which might better be left to the CBC-programme of Rule 2, making a choice at random...

Motacilla flava flava ∏ Motatsillo gelba S_+ belguja
Motacilla thunbergi ∏ Motatsillo gelba S_+ skandinava
Motacilla flavissima ∏ Motatsillo gelba S_+ brituja
Motacilla feldeggi ∏ Motatsillo gelba S_+ balkana

23 **Supertaxons** are notated with an exponentially placed cross, and **subtaxons** with an indexed cross.

Thus K Karinuloj (*Carinates*) can, if one wishes, be degraded without more ado to subclass K_+ Karinuloj or be promoted to superclass K^+ Karinuloj; the name itself never needs to be changed, in sharp contrast with today's usage.

1. If a species should become a (sub)genus in itself, then the common language epitheton has to be turned into a standardized substantive.

Anaso S platabeka ("flat-beak") ∏ Anas• G_+ Platyrynxo or (if homonymy threatens) G_+ Rynxoplatyo [fictitious example]

24 It remains a sound practice to select a given species as representative for the whole genus **(the holotype);** then a given genus for the whole family, and so on up the scale. Obviously, whichever is selected as typical should be a precisely determined and widely known species.

1. In the present Universal Taxonomy this is expressed by placing the relator between square brackets, indicative of **"taxon type"** ("genus type, family type, subspecies type"). This in turn facilitates unified representation in general reference books, so that the same specimen of plant, animal, or mineral will always be used for a representative illustration. Moreover the relators may be judiciously combined.

Anas platyrhynchos ∏ Anaso [**S**] platabeka = "(genro)tipa"

According to NBN, the best-known and described species among *Cetacea* (whales) is *Tursiops truncatus,* the bottle-nosed dolphin, making it even typical for the whole order; therefore it should take the name Turshopsho [**OS**] trunkigita = "ordotipa" [from *tursh•* "shuttle" and *opsh•* "aspect"] in Universal Taxonomy.

2. It seems preferable to name a superior taxon after still living groups, rather than select a fossil for holotype, even if the fossils happen to be (far) more numerous.

Platanacea	∏ [K] Plataneskoj	"plane-trees"
Xiphosura	∏ [O] Ksifuvreskoj	"horseshoe-crabs"

3. Of course, if a given generic holotype ought to be regarded as belonging to another family, then it must be transferred there and the former family name will have to be changed according to a holotype newly selected from among its remaining genera... and so on for higher taxons.

F Alfataktseskoj
|— [G] Alfataktso
|— G Betataktso
|— G Gamataktso

changed to:

F Betataktseskoj
|— [G] Betataktso
|— G Gamataktso

and:

F Deltataktseskoj
|— G Alfataktso
|— [G] Deltataktso
|— G Zetataktso

4. A subspecies can also be selected as holotype for the species.

S rudzhatiga S_+ sibiruja ["red-twigged"]
S rudzhatiga [S_+] nordafrika = "spetsitipa"

5. Groupings by means of a holotvpe, having the ending –*ESK*, can go up to the level of order (Ordo), but this is not mandatory. Whenever a holotype of any hierarchical level is absent — i.e. has not yet been determined — the ending *-ESK* becomes naturally unusable.

6. If a family of genera is too loosely bound for determining a holotype, then the family name will have to be a characterising word ending on *-ULOJ* or a vernacular group name with simply *-ARO* as an ending instead of -*ESKOJ.* This applies also to taxons higher up.

Agamofilaria	∏	X Agamofiluloj
Diplistomulum	∏	X Diplostomuloj

25 From all the preceding Rules it should be clear, that there is no longer any need to incorporate the name of the author who first determined the species, nor the year in which this memorable event took place, as demanded by the now obsolete Priority Rule. Biological Nomenclature has better purposes to serve than be a memorial to past human endeavour!

26 Botany and Zoology both should accept race (Raso) as a (sub)form for a subspecies and, if yet another deviation from this taxon occurs, the conceptual symbol of variety (Vario)[11] i.e. cultivar. The same goes for hybrids.

[11] A question to consider is whether or not the notion of "regional subspecies" should be abandoned, and "race" become used instead.

Syringa vulgaris Charles X = Siringo S ordinara V KARLES'

Clematis lanupinosa x viticella = *Clematis Jackmani* = Klematisso H DZHAKMAN'

27 Race as well as Variety consists — just like the species — of a single name, written in capital letters and ending with an apostrophe to indicate that stress now lies on the last syllable. Contrary to Rule 17.6, it is (to be) regarded as a fancy proper name and must be spelled as a true Uniespo-word; the original (ethnic) orthography will be utterly disregarded and titles reduced to a single word of two to three syllables. Its form can be taken either from the original spelling or from the original pronunciation, depending on which is easiest to render.

Narcissus pseudonarcissus var. Queen Victoria ∏ Nartsiso S shajna V VIKTORI '

var. Amethyst ∏ V AMETYST '
var. Chocolate Soldier ∏ V TSHOKLAT '

1. If the original name is too short or ends on a difficult array of consonants, the vowel *-u* should be added.

   var. Bosc ∏ V BOSKU '
   rac. Dogue ∏ R DOGU '

2. Where practicable, a name or title may be translated into common Uniespo. [Here too, eventual homonymy (isonymy) may be countered by Rule 29.2]

   var. Sunshine ∏ V SUNBRIL'
   rac. Bouvier ∏ R BOVUL' ["ox-dog"]

After all, changes brought about by humans (genetic engineering) are fundamentally no different from those worked by Mother Nature.

3. For further differentiations (at this level!), all sorts of anagrams are permissible — contrary to Rule 7.6 — which is made possible by the particular nature of these names.

var. Alexander	∏	V ALEKSANT ‘
var. Alexandra	∏	V LEKSANDRA ‘
var. Alexandrina	∏	V KSANDRINA ‘

4. Such adaptations of fancy originals should be retained even if an original name has been patented as “trade name” for a cultivar or breed in commercial respect. Of course, it would be a great bonus if the Patent Office(s) as well as horticulturists and breeders agreed to accepting only norm-abiding names!

28 Real **synonyms** (different names for one and the same subject) must and will no doubt become impossible through the automated CBC [Rule 2].

Either *Natrix natrix* or *Coluber natrix* or *Tropidonotus natrix* for the ring-snake, but not all three considered valid, as actually found in three different handbooks!

29 Last but not least, **homonyms** (the same name for different subjects) are not allowed within the SAME taxon, but are to be tolerated if each belongs to a DIFFERENT superior taxon. It is to be expected that this sort of conflict will become of particular importance in the co-ordinated BioCode. In such a case it is advisable to put the superior taxon name in front of the homonymic name, at least once.

That is to say: whichever superior taxon really makes the difference.

Meropsheskoj G Meropsho ∏ Insekt• G Meropsho
Meropsheskoj G Meropsho ∏ Bird• G Meropsho

1. Homonyms resulting from a mere misspelling will be corrected without any more fuss.

G Amb**y**stomo ∏ G Amb**ly**stomo
S blank**o**denta ∏ S blank**a**denta

2. Whenever **homonymy** becomes inevitable, for lack of sufficient distinguishing features (compressible to a single word), it can easily be neutralised by applying **Greek numerals** as prefixes plus a hyphen.

Larus fuscus ∏ Larusso α-nigradorsa ["black-backed"]
Larus marinus ∏ Larusso β-nigradorsa
var. Fantasie ∏ V α-FANTAZI '
var. Fantasy ∏ V β-FANTAZI '
var. Phantasy ∏ V γ-FANTAZI '

30 As to **trivial names,** which need not be as rigorous as scientific names, the task must be left to... creative poets.

Aletris & Liatris brilsteleto ["blazing star"]
Coccinella Di-skarabeto ["ladybird"]

4.1 – Specimens for Botany

MOULDS, FUNGI, MUSHROOMS

High taxon layout based on:
Encyclopédie Bordas, Paris - Volume 10 - "La vie des plantes"

> Barring mistakes and omissions <

FUNGI	B MYKOFYTULOJ / FUNGARO
Ascomycetes	K **Askomykuloj**
Discomycetidae	L Kyklomykuloj
Heliotales	O Hevlotteskoj
Helotiacea	[F] Hevlotteskoj
Phacidiacea	F Pfakedjeskoj
Pezizales	O Pezizeskoj
Helvellacea	F Helvelleskoj
Pezizacea	[F] Pezizeskoj
Rhizinacea	F Ridzinneskoj
Tuberales	O Tuberulleskoj
Tuberacea	[F] Tuberulleskoj
Loculomycetidae	L Loklomykuloj
Dothiorales	O Dotjorruloj
Myriangiales	O Mirjangiuloj
Pseudosphaeriales	O Psewdosferuloj
Pyrenomycetidae	L Pirenemykuloj
Laboulbeniales	O Entomomykuloj
Clavicipitales	O Klavjotsepseskoj
Sphaeriales	O Sferuloj
Plectomycetidae	L Pleksomykuloj
Erysiphales	O Erysifneskoj
Erysiphacea	[F] Erysifneskoj
Plectascales	O Pleksaskuloj

Aspergillacea	F Spergilleskoj
Protascomycetidae	L Protaskomykuloj
Saccharomycetidae	O Saxaromykeskoj
Saccharomycetacea	[F] Saxaromykeskoj
Taphrinales	O Tafrinneskoj
Taphrinacea	[F] Tafrinneskoj
Basidiomycetes	K Bashedjomykuloj
Exobasidiales	L Ektobashedjeskoj
Exobasidiacea	[F] Ektobashedjeskoj
Phragmobasidiomyce	L Fragmobashedjomykuloj
Auriculariales	O Awrikkeskoj
Auriculariacea	[F] Awrikkeskoj
Tremellales	O Tremelleskoj
Tremellacea	[F] Tremelleskoj
Uredinales	O Uredinneskoj
Endophyllacea	F Endofyleskoj
Melampsoracea	F Melanopsoreskoj
Pucciniacea	F Putshinieskoj
Ustilaginales	O Ustilaggeskoj
Tilletiacea	F Tiletieskoj
Ustilaginacea	[F] Ustilaggeskoj
Gasteromycetes	L Gastromykuloj
Hynenogasteracea	F Himenogastreskoj
Hysterangiacea	F Hystrangieskoj
Lycoperdacea	F Lykoperdneskoj
Nidulariacea	F Nidulleskoj
Phallacea	F Pfalusseskoj
Holobasidiomycetes	L Holobashedjeskoj
Hymenomycetales	O Himenomykuloj
Agaricacea	F Agarikeskoj
Hydnaceae	F Hydnezzeskoj

Clavariacea	F Klavjarreskoj
Polyporaceae	F Polyporeskoj
Thelephoraceae	F Teljoforeskoj
Phycomycetes	K Fykomykuloj
Blastocladiales	O Blastokladeskoj
Blastocladiaceae	[F] Blastokladeskoj
Endogonales	O Endogoneskoj
Endogonaceae	[F] Endogoneskoj
Entomophtorales	O Entomoftoreskoj
Entomophtoraceae	[F] Entomoftoreskoj
Hyphochytriales	O Hyfoxytreskoj
Hyphochytriaceae	[F] Hyfoxytreskoj
Monoblepharidales	O Monablefareskoj
Monoblepharidaceae	[F] Monablefareskoj
Mucorales	O Mukorreskoj
Mucoraceae	[F] Mukorreskoj
Pilobolaceae	F Piluboluseskoj
Peronosporales	O Pernosporeskoj
Albuginaceae	F Albugeskoj
Peronosporaceae	[F] Pernosporeskoj
Plasmodiophorales	O Plasmodoforeskoj
Plasmodiophoraceae	[F] Plasmofoforeskoj
Saprolegniales	O Saprolegneskoj
Saprolegniaceae	[F] Saprolegneskoj
Chytridiales	O Xytrisseskoj
Chytridiaceae	[F] Xytrisseskoj

4.2 NON-LICHENIZED LICHEN-DWELLING FUNGI

Low taxon list based on the well detailed and illustrated determination handbook by
Clauzade, Diederich, & Roux: *Nelikeniĝintaj fungoj likenloĝaj*
Société linnéenne de Provence, Marseille 1989

> Barring mistakes and omissions <

Ascomycotina	**Klaso Askomykuloj**
Abrothallus acetabuli	Abrotsalo S atsetabla
Abrothallus bertianus	Abrotsalo S kalvidzhinta
Abrothallus cetrariae	Abrotsalo S gajlestiga
Abrothallus chrysanthus	Abrotsalo S avrumaflora
Abrothallus cladoniae	Abrotsalo S senranda
Abrothallus mairei	Abrotsalo S ebenadiska
Abrothallus microspermus	Abrotsalo S etasema
Abrothallus parmelianum	Abrotsalo S shildaro
Abrothallus parmotrematis	Abrotsalo S trushilda
Abrothallus peyritshii	Abrotsalo S senprujnuma
Abrothallus prodiens	Abrotsalo S elstara
Abrothallus suecicus	Abrotsalo S α-brunaspora
Abrothallus usneae	Abrotsalo S bartohava
Abrothallus welwitzchii	Abrotsalo S β-brunaspora
Actinopelis peltigericola	Aktinopeltso S peltsogera °
Adelococcus alpestris	Aedelokoktso S alpomonta
Adelococcus groedensis	Aedelokoktso S arafrukta
Adelococcus lecanorae	Aedelokoktso S raravanda
Agyrina crozalsii	Egyrinno S verdetafrukta
Agyrium cephalodioides	Egyrummo S dukapa
Anthostomella apogyra	Antostomo S netavanda
Apiosporella mongolica	Apisporo S mongoluja
Arthonia amylospora	Artonio S amelospora

Arthonia atropunctata	Artonio S nigrapunta
Arthonia basidiospora	Artonio S bashedjospora
Arthonia caerulescens	Artonio S profundeblua
Arthonia cinnabarinula	Artonio S tsinabra
Arthonia circinata	Artonio S tsirklostara
Arthonia clemens	Artonio S dekliveta
Arthonia cryptotheciae	Artonio S kashateka
Arthonia curreyi	Artonio S renospora
Arthonia destruens	Artonio S detrua
Arthonia epimela	Artonio S pirotshela
Arthonia epiphyscia	Artonio S surkolbasa
Arthonia ericetorum	Artonio S falsaranda
Arthonia excentrica	Artonio S ekstera
Arthonia farinacea	Artonio S farunetsa
Arthonia fuscopurpura	Artonio S brunapurpura
Arthonia galactinaria	Artonio S melkablanka
Arthonia gelidae	Artonio S frostama
Arthonia glaucomaria	Artonio S verdashultra
Arthonia insidiens	Artonio S entruda
Arthonia insitiva	Artonio S pleneshtopita
Arthonia intexta	Artonio S enplektita
Arthonia lepidophila	Artonio S bastoshata
Arthonia mazoziae	Artonio S konuseta
Arthonia microsticta	Artonio S makuleta
Arthonia molendoi	Artonio S vinomembrana
Arthonia neglectula	Artonio S nerimarkebla
Arthonia nephromiaria	Artonio S nefromma°
Arthonia nideri	Artonio S magraspora
Arthonia oligospora	Artonio S raraspora
Arthonia oxyspora	Artonio S pintaspora
Arthonia peltigera	Artonio S α-shildoporta

Arthonia peltigerina	Artonio S β-shildoporta
Arthonia pelvetii	Artonio S tutamonda
Arthonia phlyctidicola	Artonio S fliktidda °
Arthonia punctella	Artonio S puntohava
Arthonia rubescens	Artonio S rudzhidzhanta
Arthonia sphyridii	Artonio S elipsospora
Arthonia subconveniens	Artonio S malkonvena
Arthonia subvelutinae	Artonio S velureta
Arthonia tabescens	Artonio S sekidzhanta
Arthonia urceolata	Artonio S pokaletsa
Arthonia varia	Artonio S variema
Arthopyrenia microspila	Artapirno S makuleta
Arthrorhaphis citrinella	Artrorafjo S tsitrona
Arthrorhaphis grisea	Artrorafjo S griza
Ascohansfordiellopsis insectivora	**Askokarpello S insektomandzha**
Bacidia killiasi	Batsidio S rondafrukta
Barya lichenophila	Baryazzo S likenoshata
Broomella leptogiicola	Brumelio S shpinilospora
Buellia adjuncta	Buelio S aldona
Buellia badia	Buelio S dikavanda
Buellia brachyspora	Buelio S kurtaspora
Buellia destructans	Buelio S detruanta
Buellia imshaugii	Buelio S bluidzha
Buellia leptolepis	Buelio S maldikaskwama
Buellia nivalis	Buelio S nedzhablanka
Buellia pseudosaxatilis	Buelio S malaperinta
Buellia pulverulenta	Buelio S polvoplena
Buelliella minimala	Bueliello S minimala
Buelliella physciicola	Bueliello S fyskizza °
Buelliella pusilla	Bueliello S malgrandeta
Buelliella trypethelii	Bueliello S truhawta

Caliciella parasitica	Kalyksello S parazita
Calicium corynellum	Kalyksummo S nigrafrukta
Calicium retinens	Kalyksummo S firmetena
Calicium subparoicum	Kalyksummo S lepratsala
Capronia peltigerae	Kapronio S shildoporta
Carbonea supersparsa	Karbonno S disestara
Carbonea vitellinaria	Karbonno S ovogelbaspetsia
Catillaria mediterranea	Katlarro S mediteranea
Cercidospora caudata	Kerkosporo S vosta
Cercidospora collematum	Kerkosporo S koljemma°
Cercidospora epipolytropa	Kerkosporo S multadirekta
Cercidospora lichenicola	Kerkosporo S surlikena
Cercidospora stereocaulorum	Kerkosporo S sterekawla°
Cercidospora ulothii	Kerkosporo S shpinilospora
Chaenothecopsis brevipes	Xaenotekopsho S kurtapieda
Chaenothecopsis consociata	Xaenotekopsho S komunuma
Chaenothecopsis epithallina	Xaenotekopsho S surtsala
Chaenothecopsis exserta	Xaenotekopsho S elstara
Chaenothecopsis haematopus	Xaenotekopsho S sangapieda
Chaenothecopsis koerberi	Xaenotekopsho S nigrakapa
Chaenothecopsis nigra	Xaenotekopsho S nigra
Chaenothecopsis nigropedata	Xaenotekopsho S nigrapieda
Chaenothecopsis pusilla	Xaenotekopsho S malgrandeta
Chaenothecopsis pusiola	Xaenotekopsho S brunapodiska
Chaenothecopsis rubescens	Xaenotekopsho S rudzhidzha
Chaenothecopsis rubina	Xaenotekopsho S rudzha
Chaenothecopsis sagenidii	Xaenotekopsho S sagnedja°
Chaenothecopsis sanguinea	Xaenotekopsho S sangofarba
Chaenothecopsis savonica	Xaenotekopsho S α-brunaspora
Chaenothecopsis tasmanica	Xaenotekopsho S β-brunaspora

Chaenothecopsis treichelianum	Xaenotekopsho S lentokapa
Chaenothecopsis vainoana	**Xaenotekopsho S verdahypoteka**
Chaenothecopsis viridialba	Xaenotekopsho S verdablanka
Chaenothecopsis viridireagens	Xaenotekopsho S verdareaga
Clypeococcum cladonema	Klypekoktso S brantshidzha
Clypeococcum grossum	Klypekoktso S dika
Clypeococcum hypocenomyces	Klypekoktso S hypotsenomyka°
Clypeococcum placopsiphilum	Klypekoktso S plakopsha°
Cyphelium sessile	Tsyfello S sidanta
Dactylospora acarosporae	Daktylosporo S akarospora
Dactylospora athallina	Daktylosporo S rudzhepiteka
Dactylospora frigida	Daktylosporo S malvarma
Dactylospora glaucomarioides	Daktylosporo S verdashultra
Dactylospora hafellneriana	Daktylosporo S unuvanda
Dactylospora homoclinella	Daktylosporo S sameklina
Dactylospora inquilina	Daktylosporo S hejmesida
Dactylospora lamyi	Daktylosporo S kupolodiska
Dactylospora lobariella	Daktylosporo S bruneksipura
Dactylospora parasitica	Daktylosporo S parazita
Dactylospora parellaria	Daktylosporo S brunepiteka
Dactylospora pertusaricola	Daktylosporo S pertsarra°
Dactylospora placophylla	Daktylosporo S tabulofolia
Dactylospora porphyrea	Daktylosporo S purpura
Dactylospora protothallina	Daktylosporo S prototsala
Dactylospora rimulicola	Daktylosporo S fendolodzha
Dactylospora saxatilis	Daktylosporo S rokoshata
Dactylospora tegularum	Daktylosporo S tegoletsa
Dactylospora urceolata	Daktylosporo S krutsheta
Decampia engeliana	Dekampio S miskoloriga
Decampia hookeri	Dekampio S shpinilospora
Decampia rufescentis	Dekampio S rufidzhaspetsia

Dichosporium glomeratum	Dixosporo S glomeridzha
Didymella aipoliae	Didmello S tshiamgriza
Didymella berengeriana	Didmello S bruneksipura
Didymella brunii	Didmello S shwelaska
Didymella cladoniae	Didmello S kladonna º
Didymella crozalsiana	Didmello S malmultafrukta
Didymella epicarphinea	Didmello S surpajla
Didymella epimelanostola	Didmello S surnigravesta
Didymella martinatiana	Didmello S simplaparafiza
Didymella parvispora	Didmello S etaspora
Didymella perigena	Didmello S tshirkawnaska
Didymella sphinctrinoides	Didmello S kunpremitetsa
Didymella weillii	Didmello S anastoma
Diplonaevia parmeliae	Diplonajvo S parmella º
Diploschistes actinostomus	Diplosxizo S radibusha
Diploschistes scruposus	Diplosxizo S raspa
Discocera lichenicola	Kyklokerato S likenolodzha
Discothecium infestans	Kykloteko S damadzha
Dothidea lichenum	Dotidio S likena
Echinotecium cladoniae	Exinoteko S kladonna º
Echinotecium reticulatum	Exinoteko S retoforma
Endococcus alectoriae	Endokoktso S alektorra º
Endococcus alpestris	Endokoktso S alpomonta
Endococcus araneosus	Endokoktso S aranereta
Endococcus exerrans	Endokoktso S elmigra
Endococcus gyrophorarum	Endokoktso S tsirkloporta
Endococcus nanellus	Endokoktso S naneta
Endococcus parietinarius	Endokoktso S pariedinna º
Endococcus propinquus	Endokoktso S parentsa
Endococcus ramalinarius	Endokoktso S ramnalla º

Endococcus rugulosus	Endokoktso S fajnafalda
Endococcus stigma	Endokoktso S stigma
Endococcus zahlbrucknerellae	Endokoktso S zalbruknella º
Epilichen clauconigellus	Epilikeno S blunigra
Epilichen scabrosus	Epilikeno S krudega
Guignardia ahlesiana	Gignardio S brunafrukta
Guignardia fimbriatae	Gignardio S frandzha
Guignardia microthelia	Gignardio S etatsala
Guignardia olivieri	Gignardio S gajlovezika
Guignardia psoromoides	Gignardio S skabietsa
Guignardia verrucicola	Gignardio S verukolodzha
Hemigrapha astericus	Hemigrafo S stelara
Homostegia encaustica	Xomostego S enbruligita
Homostegia parmeliana	Xomostego S parmelia º
Homostegia piggotii	Xomostego S trivanda
Karschia linitaria	Karshio S brunepiteka
Karschia pertusariae	Karshio S pertsarra º
Karschia santessonii	Karshio S brunamedola
Karschia sordidae	Karshio S malpura
Karschia talcophila	Karshio S polvoshata
Keratosphaera batistae	Keratosfero S kashamykura
Koordersiella deightonii	Kordersio S senparafiza
Lachnella tetraspora	Laxnello S kwarspora
Lasiosphaeriopsis salisburyi	**Lasisferopsho S tsharbostroma**
Lasiosphaeriopsis stereocaulicola	Lasisferopsho S sterekawla º
Lecidea aggregantula	Letsidio S kunvena
Lecidea associata	Letsidio S asotsia
Lecidea cladoniaria	Letsidio S kladonna º
Lecidea dispersula	Letsidio S dissemita
Lecidea frigidella	Letsidio S fridoshata
Lecidea inquinans	Letsidio S makuliza

Lecidea insidiosa	Letsidio S insidega
Lecidea neglecta	Letsidio S nerimarkitaspetsia
Lecidea oroantarctica	Letsidio S sudapolusamonta
Lecidea perforans	Letsidio S traboritaspetsia
Lecidea punctum	Letsidio S punteta
Lecidea superjecta	Letsidio S surkovrita
Lecidea thallicola	Letsidio S tsalolodzha
Lecidea umbonella	Letsidio S dzhibeta
Lecidea verrucariae	Letsidio S veruketsa
Leciographa associata	Lekshografo S grupigita
Leciographa attendenda	Lekshografo S atentinda
Leciographa dubia	Lekshografo S dubinda
Leciographa furfuracea	Lekshografo S argiletsa
Leciographa gyrolophii	Lekshografo S turnikresta
Leciographa nephromatis	Lekshografo S renogloba
Leciographa parvula	Lekshografo S malgrandeta
Leciographa physciaria	Lekshografo S veziketsa
Leciographa rhyparizae	Lekshografo S rapidoradika
Leciographa stigma	Lekshografo S makula
Leciographa weissii	Lekshografo S nigrafrukta
Leciographa zwackhii	Lekshografo S dikepiteka
Leptosphaeria clarkii	Leptosferazzo S helabrunaspora
Leptosphaeria crozalsii	Leptosferazzo S sporokwaropa
Leptosphaeria geographicola	Leptosferazzo S ridzokarpa º
Leptosphaeria maheui	Leptosferazzo S rinodina º
Leptosphaeria pycnostigma	Leptosferazzo S densamakula
Leptosphaeria ramalinae	Leptosferazzo S ramnalla º
Leptosphaerulina peltigera	Leptosferullo S peltsogera º
Lethariicola siperi	Letarrotsholo S radifenda
Lichenostigma maureri	Likenostigmo S falsahista
Lichenostigma rugosa	Likenostigmo S faldoplena

Melanopsamma lettauiana	Melanopsamo S diferentsospora
Melaspilea canariensis	Melanoshpilo S kanariinsula
Melaspilea epigena	Melanoshpilo S surnaskidzha
Melaspilea leciographoides	Melanoshpilo S sternidiska
Melaspilea lentiginosa	Melanoshpilo S lentugara
Melaspilea rhododendri	Melanoshpilo S rjododendra º
Melaspilea tenellula	Melanoshpilo S malmola
Merismatium coccisporum	Merisso S kuglospora
Merismatium lecanorae	Merisso S senringa
Merismatium nigritellum	Merisso S nigretsa
Metasphaeria plurisepta	Metasfero S pluravanda
Metasphaeria superveniens	Metasfero S supredvena
Metasphaeria tartarina	Metasfero S infera
Microcalicium arenarium	Mikrokalykso S sablogrunda
Microcalicium conversum	Mikrokalykso S renversita
Microcalicium disseminatum	Mikrokalykso S dissemita
Micropeltopsis cetrariicola	Mikropeltsopsho S ketraria º
Microtelia minor	Mikroteljo S malgranda
Microthyrium cetrariae	Mikrotyrso S ketraria º
Microthyrium maculans	Mikrotyrso S makulara
Mollisia collematis	Molisio S koljemma º
Mollisia lesdainii	Molisio S lekanora º
Muellerella atricola	Myleriello S nigraspetsia º
Muellerella hospitans	Myleriello S gastanta
Muellerella lichenicola	Myleriello S likenolodzha
Muellerella polyspora	Myleriello S multspora
Muellerella pygmaea	Myleriello S pigmea
Muellerella stictinae	Myleriello S stiktazza º
Muellerella triseptata	Myleriello S trivanda
Muellerella vesicularia	Myleriello S vezika
Mycobilimbia acervata	Mykobinalembo S stakita

Mycobilimbia amoldiana	Mykobinalembo S briladiska
Mycobilimbia endocarpicola	Mykobinalembo S enfrukta
Mycobilimbia subfuscae	Mykobinalembo S bruneta
Mycobilimbia tetramera	Mykobinalembo S kwarparta
Myxotrichum bicolor	Mykotrixo S dukolora
Nanostictis peltigerae	Pumelostikto S peltsogera [o]
Nectria epicallopisma	Neksarro S epikaliopsha [o]
Nectria insidiosa	Neksarro S insidega
Nectria lecanodes	Neksarro S harofrukta
Nectria indigens	Neksarro S enlanda
Nectria lichenophila	Neksarro S likenoshata
Nectria parmeliae	Neksarro S almiela
Nectria rigidiuscula	Neksarro S rigideta
Nectria rubefasciens	Neksarro S rudzhaspekta
Nectriella erythrinella	Neksello S eritrinna [o]
Nectriella leptaleae	Neksello S leptalla
Nectriella ornamentata	Neksello S ornamita
Nectriella robergei	Neksello S orandzhafrukta
Nectriella santessoni	Neksello S rudzhafrukta
Nectriella subimperspicua	Neksello S nekomprenebla
Nectriella tenacis	Neksello S tenatsa
Nectriella tenuispora	Neksello S fajnaspora
Nectriella tincta	Neksello S punta
Nectriella verrucariae	Neksello S hevlarra [o]
Neolamya peltigerae	Neolamio S peltsogera [o]
Nesolechia cerasina	Nezolekto S brunepiteka
Nesolechia coccocarpiae	Nezolekto S koktsokarpa [o]
Nesolechia diversispora	Nezolekto S diversaspora
Nesolechia oxyspora	Nezolekto S α-shpinilospora
Nesolechia oxysporiza	Nezolekto S β-shpinilospora
Nesolechia xenophona	Nezolekto S verdepiteka

Niesslia cladoniicola	Nislio S kladonna °
Niptera lichenicola	Niptero S kladonna °
Niptera microscopica	Niptero S malgrandeta
Nitschkiopsis stictarum	Nitshkiopsho S stiktazza °
Norrlinia peltigericola	Norlinio S peltsogera °
Obryzum corniculatum	Obryzo S korniketsa
Opegrapha brevis	Opegrafo S mallonga
Opegrapha brigantina	Opegrafo S brigantia °
Opegrapha maculans	Opegrafo S makula
Opegrapha melanospila	Opegrafo S nigramakula
Opegrapha pulvinata	Opegrafo S remburazha
Opegrapha quaternella	Opegrafo S kwaropa
Opegrapha rinodinae	Opegrafo S kirlileda
Opegrapha saxatilis	Opegrafo S rokoshata
Opegrapha stigmodes	Opegrafo S tsikatra
Opegrapha thelotrematis	Opegrafo S teljotremta °
Ophiobolus aspiciliae	Ofibolo S harashilda
Ophiobolus barbarus	Ofibolo S barbara
Ophiobolus thallicola	Ofibolo S tsalolodzha
Orbicula buellia	Orbikko S buelia °
Orbicula variolariae	Orbikko S pustula
Orbilia coccinella	Orbilio S purpurakerna
Orbilia peltigerae	Orbilio S peltsogera °
Paranectria affinis	Paranekso S parentsa
Paranectria oropensis	Paranekso S shpinilospora
Paranectria superba	Paranekso S superba
Pezizella epithallina	Pezizio S surtsala
Phacopsis campestricola	Pfakopsho S kamparaspetsia
Phacopsis crustulosae	**Pfakopsho S krustoplenaspetsia**
Phacopsis ericetorum	Pfakopsho S erikeja
Phacopsis geographici	Pfakopsho S teroglobospetsia

Phacopsis huuskonenii	Pfakopsho S helahimenura
Phacopsis lesdainii	Pfakopsho S purpurahimenura
Phacopsis usneae	Pfakopsho S usnea º
Phacopsis vulpina	Pfakopsho S vulporudzhaspetsia
Phaespora caninae	Fajosporo S ordinaregaspetsia
Phaespora catolechiae	Fajosporo S kawtolekta º
Phaespora consocians	Fajosporo S kunligidzha
Phaespora corae	Fajosporo Spupila
Phaespora decolorans	Fajosporo S senkoloriga
Phaespora exoriens	Fajosporo S entruda
Phaespora fritzei	Fajosporo S densagrupa
Phaespora granulosae	Fajosporo S grajnetsaspetsia
Phaespora parasitica	Fajosporo S parazita
Phaespora parmeliarum	Fajosporo S parmelia º
Phaespora peltigericola	Fajosporo S peltsogera º
Phaespora peregrina	Fajosporo S fremda
Phaespora rimosicola	Fajosporo S fendolodzha
Phaespora subantarctica	Fajosporo S sudapolusa
Phaespora supersparsa	Fajosporo S dissemita
Phaespora triplicantis	Fajosporo S trioblidzha
Phaesporis interlatens	Fajosporisso S interkshitaspetsia
Phaesporis melasperma	Fajosporisso S nigrasemaspetsia
Phaesporis phaeosperma	Fajosporisso S rudzhasemaspetsia
Phaesporis podzimekii	Fajosporisso S kwartsita
Pharcidia arthoniae	Farkiddo S artonia º
Pharcidia coarctate	Farkiddo S kunpremita
Pharcidia collematis	Farkiddo S gluifita
Pharcidia coniodes	Farkiddo S konusetsa
Pharcidia constrictella	Farkiddo S kunligita
Pharcidia cupularis	Farkiddo S pokaletsa
Pharcidia dealbans	Farkiddo S kurbaspora

Pharcidia ephebes	Farkiddo S belajunula
Pharcidia epiramalina	Farkiddo S α-ramnalla °
Pharcidia epiramalina	Farkiddo S β-ramnalla °
Pharcidia frigida	Farkiddo S fridama
Pharcidia haesitans	Farkiddo S alglua
Pharcidia hygrophila	Farkiddo S humidoshata
Pharcidia lacustris	Farkiddo S lagoshata
Pharcidia lichenicola	Farkiddo S likenolodzha
Pharcidia maritima	Farkiddo S tshemara
Pharcidia microspora	Farkiddo S etaspora
Pharcidia porocyphi	Farkiddo S kurbaspora
Pharcidia punctillum	Farkiddo S puntizita
Pharcidia ramalinae	Farkiddo S γ-ramnalla °
Pharcidia rivolorum	Farkiddo S rivereta
Pharcidia thallina	Farkiddo S tiga
Pharcidia verrucarium	Farkiddo S veruka
Phragmonaevia fuckelii	Fragmonajvo S najlospora
Phragmonaevia peltigerae	Fragmonajvo S peltsogera °
Physalospora aspiciliae	Fysosporo S aspidotsilia °
Physalospora collematis	Fysosporo S koljemma °
Physalospora friesii	Fysosporo S senvandaspora
Physalospora lecanorae	Fysosporo S lekanora °
Physalospora leptogiophila	Fysosporo S sekagrunda
Physalospora xanthoriae	Fysosporo S ksantorra °
Plagiostoma cahirensis	Plagjostomo S egitpuja
Plagiostoma conductrix	Plagjostomo S kunigita
Plagiostoma prasiolae	Plagjostomo S ajletsa
Plagiostoma solorinae	Plagjostomo S solorina °
Plectocarpon lichenum	Pleksokarpo S likena
Plectocarpon pseudosticta	Pleksokarpo S shajnamakula
Pleoscutula arsenii	Pleiskutlo S heteroderma °

Pleospilis ascaridiella	Pleishpilo S vermoforma
Pleosphaeria lichenothricis	Pleisfero S likenotrixa º
Pleospora collematum	Pleisporo S koljemma º
Pleospora crozalsii	Pleisporo S disstarafrukta
Pleospora leptogiicola	Pleisporo S leptogga º
Pleospora peripherica	Pleisporo S tshirkawanta
Plowrightia mereschkowskyi	Plorixtio S surshela
Polyblastia diminuta	Polyblasta S malgrandigita
Polyblastia discrepans	Pleisporo S malakorda
Polycoccum arnoldii	Polykoktso S netavanda
Polycoccum bryonthae	Polykoktso S muskokotaspetsia
Polycoccum cartilaginosum	Polykoktso S kartilaga
Polycoccum cladoniae	Polykoktso S kladonia º
Polycoccum crassum	Polykoktso S ornamispora
Polycoccum dzieduszyckii	Polykoktso S elipsaspora
Polycoccum epicrassum	Polykoktso S surdikazha
Polycoccum galligenum	Polykoktso S gajlofara
Polycoccum gelidarium	Polykoktso S glatsiejaspetsia
Polycoccum innatum	Polykoktso S ennaskita
Polycoccum jamesii	Polykoktso S multafrukta
Polycoccum kerneri	Polykoktso S tsaljodetrua
Polycoccum marmoratum	Polykoktso S marmora
Polycoccum microsticticum	Polykoktso S etapuntara
Polycoccum opulentum	Polykoktso S fruktoplena
Polycoccum peltigerae	Polykoktso S peltsogera º
Polycoccumrugulosarium	Polykoktso S fajnafalda
Polycoccum sporastatiae	Polykoktso S sporostatsa
Polycoccum squamarioides	Polykoktso S skwametsa
Polycoccum tinantii	Polykoktso S verukospora
Polycoccum trypethelioides	Polykoktso S tsalobora
Polycoccum umbilicarae	Polykoktso S omfalarra º

Polycoccum vermicularium	Polykoktso S vermetsa
Polycoccum versisporum	Polykoktso S diversaspora
Polyschistes mairei	Polysxizo S elstarafrukta
Protothelenella crocae	Prototeljenno S safrana
Protothelenella santessoni	Prototeljenno S surskwama
Pyrenidium actinellum	Pirnedjo S radiara
Pyrenidium hetairizans	Pirnedjo S okopaspora
Pyrgidium montellicum	Pyrgedjo S montetaspetsia
Rhagadostoma lichenicola	Ragostomo S likena
Rhizocarpon advenulum	Ridzokarpo S zhusveninta
Rhizocarpon malenconianum	Ridzokarpo S galjlofara
Rhizocarpon schedomyces	Ridzokarpo S apudfunga
Rhynchomeliola lichenicola	Rynxomelyo S surlikena
Rinodina insularis	Rinodino S surlikena
Rosellinia aspera	Roselinio S kruda
Rosellinia cladoniae	Roselinio S kladonna °
Rosellinia nephromatis	Roselinio S nefromma °
Rosellinula frustulosae	Roseliniullo S disspetsigitaspetsia
Rosellinula haplospora	Roseliniullo S simplaspora
Rosellinula kalbii	Roseliniullo S multaspora
Rosellinula lopadii	Roseliniullo S multabrantsha
Sarcopyrenia gibba	Sarxopirno S dzhiba
Sarea aurellae	Sareo S avrumaspetsia
Scutula affinis	Skutlazzo S parentsa
Scutula aggregata	Skutlazzo S amasigita
Scutula aspicilliae	Skutlazzo S aspidotsilia °
Scutula cristata	Skutlazzo S kombila
Scutula epicladonia	Skutlazzo S kladonna °
Scutula epiphylla	Skutlazzo S surfolia
Scutula episema	Skutlazzo S sursema
Scutula krempelhuberi	Skutlazzo S brunepiteta

Scutula leptogica	Skutlazzo S maldiketsa
Scutula leptogii	Skutlazzo S leptogea º
Scutula miliaris	Skutlazzo S etagrajna
Scutula ramalinae	Skutlazzo S ramnalla º
Scutula solorinaria	Skutlazzo S solorinarra º
Scutula stereocaulorum	Skutlazzo S sterekawla º
Scutula tuberculosa	Skutlazzo S tuberara
Skyttea cruciata	Skytio S krutsigita
Skyttea fusispora	Skytio S shpinilospora
Skyttea hawksworthii	Skytio S striofrukta
Skyttea nitschkei	Skytio S turbanospora
Skyttea spinosa	Skytio S dorsa
Skytella muelleri	Skytiello S elipsospora
Sphaerulina chlorococca	Sferullo S verdaglobeta
Sphaerulina dolichotera	Sferullo S longaspetsia
Sphaerulina dubiella	Sferullo S maltserta
Sphaerulina endococcoidea	Sferullo S englobetsa
Sphaerulina intermedia	Sferullo S enmeza
Sphaerulina lepidiotae	Sferullo S skwametsa
Sphaerulina parvipuncta	Sferullo S punteta
Sphaerulina tabacinae	Sferullo S tabaka
Sphinctrina anglica	Sfintinno S angluja
Sphinctrina leucopoda	Sfintinno S blankapieda
Sphinctrina tubiformis	Sfintinno S tuboforma
Sphinctrina turbinata	Sfintinno S tsirkla
Spolverinia punctum	Spolverio S punta
Stegia vermicularis	Stegazzo S vermetospetsia
Stictis cladoniae	Stiktisso S kladonna º
Stigmidium aggregatum	Stigmedjo S kungrupa
Stigmidium allogenum	Stigmedjo S malegala
Stigmidium dispersum	Stigmedjo S dissemita

Stigmidium eucline	Stigmedjo S beleklina
Stigmidium fuscatae	Stigmedjo S malhelaspetsia
Stigmidium glebarum	Stigmedjo S alglua
Stigmidium hageniae	Stigmedjo S konusofrukta
Stigmidium icmadophilae	Stigmedjo S ikmofila°
Stigmidium marinum	Stigmedjo S tshemara
Stigmidium peltidae	Stigmedjo S peltsogera°
Stigmidium schaereri	Stigmedjo S malegalatshela
Stigmidium solorinarium	Stigmedjo S soljorina°
Stigmidium stygnospilum	Stigmedjo S makulatsha
Stigmidium superpositum	Stigmedjo S supresida
Stratisporella episemoides	Stratsosporo S sursema
Strongyleuma albipes	Strongolewso S blankapieda
Synaptospora tartaricola	Synapsosporo S tartaruja
Telimena foreaui	Telmenno S longaspora
Teratoschaeta rondoniensis	Tatrosheto S multabrantsha
Thamnogalla crombei	Tamnogalgo S vezikiza
Thelidium parvum	Teljedjo S malgranda
Thelocarpon epibolum	Teljokarpo S surholtsa
Thelocarpon epithallinum	Teljokarpo S surtsalja
Thelocarpon lichenicola	Teljokarpo S surlikena
Trematosphaeria dermatocaponis	Tremtosfero S dermatokarpa°
Trematosphaeria lophiostoma	Tremtosfero S vertotrua
Trichonectria hirta	Trixonekso S hirta
Trichosphaeria lichenum	Trixosfero S surlikena
Tryblidaria capensis	Trybliddo S sudafrika
Tryblidaria lusitanica	Trybliddo S portugaluja
Unguiculariopsis lichenicola	Unglopsho S surlikena
Verrucaria congestula	Hevlarro S kunprema
Weddellomyces epicallopisma	Wedelio S kalopia°

4.3 RACES (VARIETIES) OF PEARS

Alexander Lucas	R LYKAS ‘	
André Desportes	R DEPORT '	
Beurré Hardy	R BERARDI '	
Bonne Louise d’Avranches	R DAVRANTSH '	
Bosc	R BOSKU '	
Bristol Cross	R BRISTOS '	
Charnue	R KARNUL '	“fleshy one”
Clapp’s Favourite	R FAVORIT '	
Clara Frijs	R KLARAF '	
Colorée de juillet	R JULIKOLOR '	“July’s colour”
Comte de Chambord	R DESHAMBOR '	
Comtesse de Paris	R PARIZULIN '	“Parisian woman”
Conférence	R KONFERENTS '	
Conseiller de la Cour	R KONSILIST '	“councellor
Doyenné de Comice	R DUKOMIS '	
Doyenné de juillet	R JULIDEKAN '	“July’s deacon”
Doyenné de Mérode	R DEMEROT '	
Dr. Jules Huyot	R WIJOT '	
Durandeau	R DURANDU '	
Early Market	R FRUMERKAT '	
Épargne	R ELSHPAR '’	“savings”
Eva Baltet	R EVABALT '	
Gieser Wildemanspeer	R SOVADZHUL '	“savage one”
Giffard	R GIFART '	
Gøteborgs Diamant	R DIAMANT '	“diamond”
Gråpäron	R GRIZPIR '	“grey pear”
Hodge	R HODZHU '	
Hofstade	R HOFSTAT '	
Höstbergamott	R HOSTAMOT '	
Joséphine de Malines	R JOSMALIN '	
Laxton’s Superb	R LAKSTON '	
Légipont	R LEGIPONT '	
Lübecker Bergamott	R LYBEKOT '	

Marguerite Marillat	R	**MARILAT '**	
Marie-Louise	R	**MARILIS '**	
Moltke	R	**MOLKE '**	
Påskpäron	R	**PASKOPIR '**	“Easter pear”
Précoce de Trévoux	R	**FRUAPER '**	“early arrival”
Saint-Rémy	R	**SANTREM '**	
Seckel	R	**SETSKEL '**	
Skånskt	R	**PLEJBEL '**	“loveliest”
Sockerpäron	R	**SUKERPIR '**	“sugar pear”
Souvenir du Congrès	R	**KONGRESAN '**	“Congressist”
Triomphe de Vienne	R	**VIENAVENK '**	“Viennese triumph”
Tyson	R	**TAJSON '**	
Williams	R	**WILIAMS '**	
Winter Williams	R	**WINTERWIL '**	
Worden Seckel	R	**WORDENSEK '**	

The only rule for [spelling correctly] the gender of generic names, it appears to me, is:
one must memorise the genders case by case !
[The same goes for] different gender terminations of nouns from the classic languages.

[F BOERNER]

5.1 – Specimens for Zoology

BIRDS

High taxon layout based on:
Encyclopédie Bordas, Paris - Volume 1 - "La vie animale"

> Barring mistakes and omissions ! <

AVES	B AVJARZHOJ / BIRDOJ
Archaeornithes	L Arxornituloj
Archaeopterygiformes	O+ Arxoptereskoj
Neornithes	L Neornituloj
Leptopterygales	O+ Leptopteruloj
Sphenisciformes	O Sfenikkeskoj
Spheniscidae	[F] Sfenikkeskoj
Struthioniformes	O Struteskoj
Apterygidae	F Aeptereskoj
Casuariidae	F Kaswareskoj
Dromalidae	F Dromalleskoj
Rheidae	F Rejazzeskoj
Struthionidae	[F] Struteskoj
Tinamiformes	O Tinameskoj
Tinamiidae	[F] Tinameskoj
Stenopterygales	O+ Stenopteruloj
Anseriformes	O Ansereskoj
Anatidae	F Anaseskoj
Anhimidae	F Anhimeskoj
Anseridae	[F] Ansereskoj
Apudiformes	O Apuseskoj
Apodidae	[F]Apuseskoj
Caprimulgiformes	O Erifomulgeskoj
Caprimulgidae	[F] Erifomulgeskoj

Charadriiformes	O Xaradrusseskoj
Alcidae	F Alkeskoj
Charadriidae	[F] Xaradrusseskoj
Laridae	F **Larusseskoj** ⇐
Scolopacidae	F Sklopakkeskoj
Ciconiiformes	O Tsikonieskoj
Ardeidae	F Ardeeskoj
Balaenicipitidae	F Tsetotsepseskoj
Ciconiidae	[F] Tsikonieskoj
Coliiformes	O Kolieskoj
Coliidae	[F] Kolieskoj
Columbiformes	O Kolombeskoj
Columbidae	[F] Kolombeskoj
Pterochidae	F Pteroxeskoj
Coraciiformes	O Korakeskoj
Alcedinidae	F Altsedeskoj
Coraciidae	[F] Korakeskoj
Meropidae	F Meropeskoj
Upupidae	F Upupeskoj
Cuculiformes	O Kukoleskoj
Cuculidae	[F] Kukoleskoj
Falconiformes	O Falkeskoj
Accipitridae	F Aktsipitreskoj
Cathartidae	F Kataresseskoj
Falconiidae	[F] Falkeskoj
Sagittariidae	F Sagitarreskoj
Galliformes	O Galjusseskoj
Galliidae	[F] Galjusseskoj
Megapodidae	F Megapodeskoj
Phasianidae	F Fazaneskoj
Tetraonidae	F Tetronneskoj

Gaviifomres	O Gavieskoj
Gaviidae	[F] Gavieskoj
Gruiformes	O Gruseskoj
Gruidae	[F] Gruseskoj
Rallidae	F Raluseskoj
Passeriformes	O Pasereskoj
Alaudidae	F Alawdeskoj
Bombycillidae	F Bombikilleskoj
Certhiidae	F Tsertieskoj
Corvidae	F Korveskoj
Fringillidae	F Fringeskoj
Hirundinidae	F Hirundeskoj
Laniidae	F Laniusseskoj
Menuridae	F Menuvreskoj
Motacillidae	F Tsinokawdeskoj
Muscicapidae	F Musxotsapseskoj
Oriolidae	F Avrolleskoj
Paradisaeidae	F Paradizezzeskoj
Paridae	F Parueskoj
Passeridae	[F] Pasereskoj
Prunellidae	F Prunelleskoj
Regulidae	F Redzhulleskoj
Sittidae	F Sititeskoj
Sturnidae	F Sturneskoj
Sylviidae	F Silvazzeskoj
Troglodytidae	F Troglodyteskoj
Turdidae	F Turdeskoj
Pelecaniformes	O Pelikaneskoj
Pelecanidae	[F] Pelikaneskoj
Phalacrocoracidae	F Falakrokorakeskoj
Sulidae	F Sulaeskoj

Phoenicopteriformes	O Fenitsoptereskoj
Phoenicopteridae	[F] Fenitsoptereskoj
Piciformes	O Pigeskoj
Indicatoridae	F Indikatteskoj
Picidae	[F] Pigeskoj
Ramphastidae	F Ramfasseskoj
Podicipediformes	O Poditsopodeskoj
Podicipedidae	[F] Poditsopodeskoj
Procellariiformes	O Protselarreskoj
Diomedeidae	F Diomedeskoj
Hydrobatidae	F Hidrobasheskoj
Procellariidae	[F] Protselarreskoj
Psittaciformes	O Psitakeskoj
Psittacidae	[F] Psitakeskoj
Strigiformes	O Strigeskoj
Strigidae	[F] Strigeskoj
Trochiliformes	O Troxilleskoj
Trochilidae	[F] Troxilleskoj
Trogoniformes	O Trogoneskoj
Trogonidae	[F] Trogoneskoj

5.2 - SEA GULLS

Low taxon list based on the award winning
determination handbook by
Peter Harrison: *Seabirds, an identification guide*
Christopher Helm, London 1983

> Barring mistakes and omissions ! <

Laridae	**Familio Larusseskoj**
Anous minutus	Aenoho S blankakufa
Anous stolidus	Aenoho S fajnabeka
Anous tenuirostris	Aenoho S brunakrura
Chlidonias hybridus	Xlidonno S hibrida
Chlidonias leucopterus	Xlidonno S blankaflugila
Chlidonias niger	Xlidonno S nigra
Gygis alba	Gygeso S blanka
Larosterna inca	Laroshterno S blanka
Larus argentatus	Larusso S ardzhenta
argentatus argentatus	S_+ ardzhentetsa
argentatus atlantis	S_+ lardzhagonura
argentatus cachinnans	S_+ pliblanka
argentatus heuglini	S_+ gelbakrura
argentatus michahellis	S_+ pligriza
argentatus mongolicus	S_+ pligranda
argentatus smithsonianus	S_+ nordamerika
argentatus taimyrensis	S_+ rozakrura
argentatus vegae	S_+ plivigla
Larus atricilla	Larusso S ridanta
Larus audouinii	Larusso S rudzhokula
Larus belcheri	Larusso S rubandovosta
Larus brevirostris	Larusso S kurtabeka
Larus brunnicephalus	Larusso S brunakapa

Larus bulleri	Larusso S nigrabeka
Larus californicus	Larusso S rudzhafemura
Larus canus	Larusso [S] mildarigarda
canus brachyrhynchus	S_+ kurtanaza
canus kamtschatschensis	S_+ kamtshatka
Larus cirrocephalus	Larusso S grizakapa
cirrocephalus cirrocephalus	S_+ tsindrokolora
cirrocephalus poiocephalus	S_+ herbokolora
Larus crassirostris	Larusso S nigravosta
Larus delawarensis	Larusso S bendobeka
Larus dominicanus	Larusso S gelbokula
Larus fuliginosus	Larusso S fulgoplena
Larus furcatus	Larusso S forkovosta
Larus fuscus	Larusso S nigramantela
fuscus graellsii	S_+ sweltaflugila
Larus genei	Larusso S gratsilabeka
Larus glaucescens	Larusso S glakalaflugila
Larus glaucoides	Larusso S blankaflugila
glaucoides kumlieni	S_+ brunareta
Larus heermanni	Larusso S buntabeka
Larus hemprichi	Larusso S fulgetsa
Larus hyperboreus	Larusso S gelbomatorba
Larus ichtyaethus	Larusso S fishagla
Larus leucophthalmus	Larusso S blankokula
Larus macullipennis	Larusso S brunatshapa
Larus marinus	Larusso S nigradorsa
Larus melanocephalus	Larusso S nigrakapa
Larus minutus	Larusso S malgranda
Larus modestus	Larusso S griza
Larus novaehollandiae	Larusso S purpurabeka
novaehollandiae forsteri	S_+ awstralia

novaehollandiae hartlaubii	S_+ koloshnura
novaehollandiae scopolinus	S_+ novzilenda
Larus occidentalis	Larusso S rozomatorba
occidentalis livens	S_+ gelbakrura
Larus pacificus	Larusso S bekega
Larus philadelphia	Larusso S blankazona
Larus pipixcan	Larusso S binokla
Larus relictus	Larusso S longapieda
Larus ridibundus	Larusso S ridatshanta
Larus sabini	Larusso S trikolora
Larus saundersi	Larusso S nigrapolma
Larus schistisagus	Larusso S ardezodorsa
Larus scoresbi	Larusso S rudzhabeka
Larus serranus	Larusso S montara
Larus thayeri	Larusso S grizokula
Larus tridactyla	Larusso S trifingra
tridactyla pollicaris	S_+ nigraprimala
tridactyla tridactyla	S_+ (subspetsinoma)
Pagophila eburnea	Pagosofilo S ebura
Phaetusa spec.	Fajtusso S {spetsinoma)
Procelsterna cerulea	Protseloshterno S blugriza
Rhodostetia rosea	Rjodosteto S roza
Sterna albifrons	Shternazzo S blankafrunta
Sterna albostriata	Shternazzo S blankastria
Sterna aleutica	Shternazzo S aleutuja
Sterna anaethetus	Shternazzo S brunaflugila
Sterna aurantia	Shternazzo S orandzhabeka
Sterna balaenarum	Shternazzo S nigrakapa
Sterna bengalensis	Shternazzo S tufeta
Sterna bergii	Shternazzo S nukotufa

Sterna bernsteini	Shternazzo S nigrapinta
Sterna caspia	Shternazzo S sangobeka
Sterna dougalli	Shternazzo S rozetsa
Sterna elegans	Shternazzo S eleganta
Sterna eurygnatha	Shternazzo S lardzhamaksela
Sterna forsteri	Shternazzo S nigramaska
Sterna fuscata	Shternazzo S brunega
Sterna hirundinacea	Shternazzo S hirundetsa º
Sterna hirundo	Shternazzo S hirunda º
Sterna lorata	Shternazzo S zonizita
Sterna lunata	Shternazzo S maskoporta
Sterna maxima	Shternazzo S redzha
Sterna melanogastra	Shternazzo S nigraventra
Sterna nereis	Shternazzo S orandzhakrura
Sterna nilotica	Shternazzo S mevobeka
Sterna paradisaea	Shternazzo S paradiza
Sterna repressa	Shternazzo S blankavanga
Sterna sandvicensis	Shternazzo S palapinta
Sterna striata	Shternazzo S sulketa
Sterna sumatrana	Shternazzo S nukobenda
Sterna superciliaris	Shternazzo S gelbabeka
Sterna trudeaui	Shternazzo S nedzhotshapa
Sterna virgata	Shternazzo S rubanda
Sterna vittata	Shternazzo S girlanda

5.3 - RACES (VARIETIES) OF DOGS

Airedale	R ARDAL ‘	
Barbet	R BARBET '	“little beard”
Basset	R BASET '	
Barzoï	R BARZOJ '	
Basenji	R BASENZHU '	
Beagle	R BIGEL '	
Bobtail	R NODVOST '	“knot-tail”
Boston-terrier	R BOSTER '	
Boxer	R BOKSIST '	“fist-fighter”
Bull-terrier	R BULTER '	
Cairn-terrier	R KERNTER '	
Chihuahua	R TSHIWAN '	
Chow-chow	R TSHOTSHO '	
Collie	R KOLI '	
Deerhound	R TSERVUL '	“deer-one”
Doberman-pincher	R DOBERPINTSH '	
Dogue	R DOGU '	
Fox-terrier	R FOKSTER '	
Griffon	R GRIFON '	
Hushpuppy	R HUSHPUP ‘	
Husky	R HUSKI '	
Kerryblue	R KERIBLU '	
King Charles	R KINTSHAR '	
Lévrier	R LEPORUL '	“hare-one”
Loulou	R LULU '	
Mastiff	R MASTIF '	
Molosse	R MOLOS '	
Newfoundlander	R NJUFON '	
Papillon	R PAPILIUL '	“butterfly-one”
Pincher	R PINTSHIST '	“pincher”
Pointer	R MONTRIST '	“indicator”
Pomeranian	R POMERAN '	

Poodle	R PUDEL '	
Pug-dog	R MOPS '	
Retriever	R REAKIR '	“win-back”
Ridge-back	R KRESTODORS '	“ridge-back”
Saint-Bernard	R BERNARDUL '	“Bernard-one”
Samoyede	R SAMOJED '	
Schipperke	R SHIPIST '	“boat-man”
Schnauzer	R MUZELUL '	“snout-one”
Sealyham-terrier	R SILIHAM '	
Setter	R METIST '	“putter”
Shepherd	R SHAFHUND '	“sheep-dog”
Skye-terrier	R TSHIELTER '	“sky-earth”
Spaniel	R HISPANUL '	“Spaniard”
Terrier	R TERJER '	
Welsh Corgi	R WELKOR '	
Wippet	R WIPET '	

Linguists, who didn’t know biology,
and biologists, who didn’t know linguistics,
have created a situation harmful to both disciplines.

[F.C. WERNER]

6 - Reading Coffee Grounds

Extremely simple and efficient though the new Trimeral System may be, we cannot disguise from ourselves the fact that a wide gap yawns between mere exposition and actual application. What steps are there to take? What obstacles might be encountered?

Presumably the first step would be to organize a worldwide think-tank of specialists from ALL the biological disciplines — none left out — including people from Asia and Africa, not just from the Western World, but all willing to undertake the great change-over. May we see the advent of this dream in the coming BioCode Symposium, planned in Greece for the year 2002? Surely the existence of I**NTERNET** makes such an undertaking theoretically feasible and exchange of ideas, if not task division, fast and efficient.

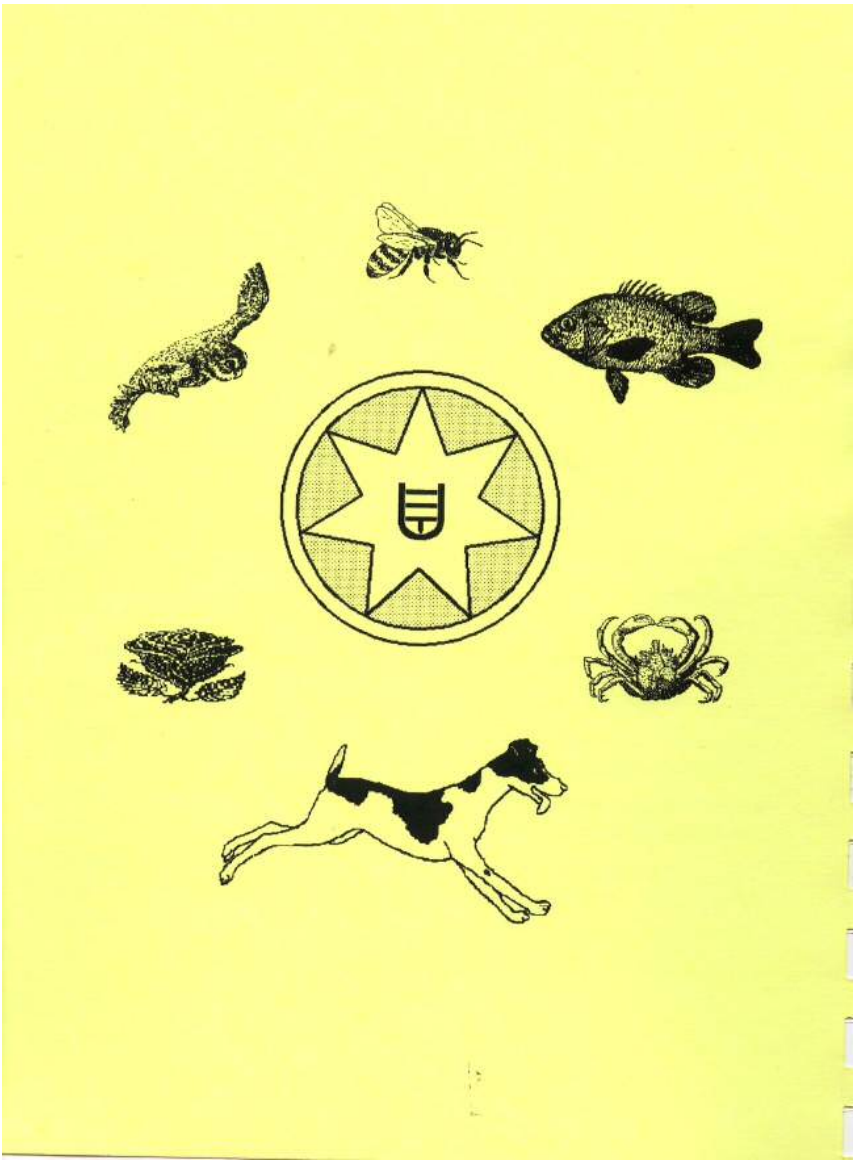
Whatever the way of launching the ship, that Body should absolutely include accomplished philologists, for running a fine comb through the enormous amount of latinized names, in order to establish their etymological meanings — or their lack of such. These people know *how* to say it, where biologists know *what* to say ...

Finally, with (about) all the old names reframed or replaced by better ones, and the taxon structures reconsidered, expanded, consolidated, unified, there looms the long-winded labour of painstakingly feeding all these data into the Central Databank mentioned at the beginning. Or, perhaps more probably, this compilation might progress parallel to the drafts submitted and... agreed upon by some majority of participants.

Anyway, oppositions will certainly be numerous and fierce, from many directions. There will be the celebrated academicians who spent a lifetime among the classic names, producing important works of reference based on them, and now seeing their work apparently outstripped. There will be the bookworms: heart and soul devoted to sifting through endless shelves of archives, for establishing whoever was first in line for the cherished Law of Priority, and whose endeavours will become null and void or at least reduced to life in the margin. There will be even those publishers and bookshops kicking back, because of their valuable stocks of handbooks growing obsolete almost overnight.

So, we do not cherish high hopes about the established Scientific Community, bound by age-old traditions. More likely than not the initiative would come from enthusiastic outsiders. Time will tell. That is... if this small brochure succeeds in reaching public attention, since Conspiracy of Silence is a very powerful means for keeping even the most promising project in solitary confinement.

* * * * * * *



Whoever gets confronted with the subject, cannot avoid at present to make his or her personal choice between the following old and new items**:**

Over ¾ trouble with inflectional Latin grammar.	Less than ¼ trouble with agglutinative Uniespo grammar.
Very intricate and even chaotic spelling.	Very simple and regular spelling.
Complicated pronunciations.	Clear prononciation scheme.
Different endings for different taxons with uncertainty.	A typical symbol for each taxon without special endings.
Never secure Law of Priority (minority vote).	Stable Law of Reference (majority vote).
Capricious rules with many exceptions.	Logical rules with hardly any exceptions.
Complicated Latin dictionary.	Easy to use ITK word-lists.
Memory straining handbooks.	Memory helping handbook.
A host of uncontrollable name variations.	Well organized name variabilities.
Almost impossible material for automatic treatment by computer.	Highly adapted material for automatic treatment by computer.
Taxonomy restricted to botany or to zoology or to virology or to ...	Taxonomy operative for any and all living things... and beyond.

Dear reader, think about it!

Excerpt from the International Key

ae•	not
agan•	charm
akant•1	thorn
akant•2	rub
aktin•1	bright
aktin•2	needle
ambly•	blunt
amnj•	river
angw•	serpent
ant•1	flower
ant•2	decoration
ap•1	away
ap•2	extremity
api•	berry
aps+	absolute
arta•	bread
artr•	joint
arx•	master
arž•	person
aski•	exercice
avj•	bird
awr•1	hearing
awr•2	ear
bary•	heavy
baš•	foundation
bi•	life
bina•	two
blast•	bud
blefar•	eyelid
bol•1	drive
bol•2	current
bry•1	moss
fil•2	fiber
fluvj•	river

bry•2	flowering
daktyl•1	finger
daktyl•2	datefruit
del•1	apparent
del•2	allure
dermat•	fur
didm•1	couple
didm•2	testicle
din•1	frightening
din•2	rolling
dipl•	double
dix•	divide
dots•	girder
drom•1	arena
drom•2	port
dy•	two
egyr•	collective
ekt•	outward
entom•	insect
epi•1	add
epi•2	eminent
erif•	goat
ery•	pull
exin•	viper
faj•1	brown
faj•2	happy
fajt•	bright
falakr•	barren
faner•	display
fark•	furrow
fenits•	purple
fil•1	adept
kawd•	tail
kerat•	horn

for•	carry
fragm•1	break
fragm•2	wall
ftor•	damage
fyk•	seaweed
fys•1	balloon
fys•2	inflation
fyt•	plant
galg•	chicken
gam•	marriage
gastr•	belly
gen•	product
ger•1	carry
ger•2	old
geton•	neighbour
graf•	design
gram•	drawing
helv•1	revel
helv•2	nail
hemi•	half
hevl•1	bog
hevl•2	wart
hidr•1	water
hidr•2	sweat
hol•	all
hydn•	truffle
hyf•	filament
hystr•1	womb
hystr•2	recent
ixtj•	fish
iz•	equal
kalyks•	chalice
katl•	dish
meg•	big
melan•	black
mely•	honey

kerk•1	tail
kerk•2	shuttle
klad•	branch
klavj•1	bludgeon
klavj•2	bolt
klemat•	branch
klype•	shield
koel•	cavity
kokts•	berry
koris•	bug
krypt•1	bury
krypt•2	cover
ksif•	dagger
kykl•	wheel
kyn•	dog
lani•	kill
lar•1	gull
lar•2	agreeable
lasi•	bristling
laxn•1	fluff
laxn•2	burrow
legn•	fringe
lekš•	read(ing)
lekt•1	bed
lekt•2	idiom
lemf•	glanders
lepid•	bast
lept•1	slender
lept•2	trifle
lews•	flat
lit•	stone
lokl•	chamber
lyk•	wolf
ort•1	square
ort•2	correct
pagos•1	freeze

mer•1	part
mer•2	shinbone
meta•1	across
meta•2	less water
mikr•	small
mirj•	multitude
mitj•	sweet
mona•	one
mulg•	milk
myk•	mushroom
myš•	closed
najv•	sign
ne•	new
nefr•1	kidney
nefr•2	horrible
neks•1	proportion
neks•2	knotted
nemt•	thread
nez•	island
od•	direction
ofi•	serpent
olog•1	phenomenon
olog•2	knowledge
omat•	eye
omfal•	navel
onim•	name
ope•	needle
opš•1	appearence
opš•2	examine
orb•1	circle
orb•2	ball
ornit•	bird
pyr•2	grain
pyrg•	tower
rafj•1	needle
rafj•2	seam

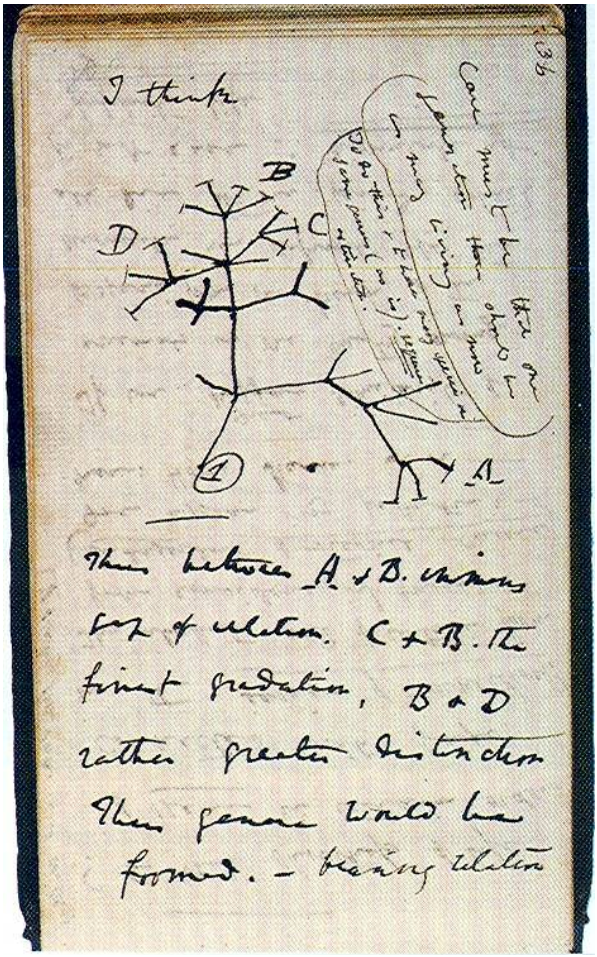
pagos•2	hill
para•1	beside
para•2	obligatory
pelts•	protection
perdn•1	bladder
perdn•2	fart
pern•1	thigh
pern•2	nail
pfak•	freckle
pfal•	penis
pikr•1	bitter
pikr•2	sharp
pirn•	gist
plagj•1	slanting
plagj•2	steal
platy•	flat
plei•	augment
pleks•1	net(work)
pleks•2	basket
pod•	foot
podits•	arse
poly•	many
potam•	stream
prot•	original
protsel•	gale
psam•	sand
psewd•	apparent
psitak•	parrot
psor•	eczema
pter•	wing
pters•	fern
pyr•1	fire
strats•2	army
strong•	tube
sxiz•	split
syn+	together

rag•1	cleave
rag•2	berry
ramf•	beak
rej•1	flow
rej•2	juice
ridz•	root
rin•1	nose
rin•2	leather
rjod•1	rose
rjod•2	splash
rynx•	snout
sagit•	arrow
sapr•	putrefy
sarx•	flesh
saxar•	sugar
šet•	tail
sfen•	wedge
sfint•	compressed
sifn•	mole
silv•	forest
sklop•	mole
skutl•	lozenge
špil•1	stain
špil•2	cape
steg•	roof
sten•1	narrow
sten•2	intense
stet•	breast
stikt•	point
stom•	mouth
strats•1	echelon
ustil•	rust
uvr•	tail
valr•	eagle
xaen•	yawn
xaradr•	abyss

tafr•	furrow
takts•1	diligent
takts•2	arrange
tatr•	bogey
telj•1	nipple
telj•2	skin
telm•	marsh
terj•	animal
tremt•	perforation
trix•1	hair
trix•2	cotton
trogl•	cavern
trox•	disk
try•	three
trybl•	plate
tsamp•1	meander
tsamp•2	caterpillar
tseps•	head
tset•	whale
tsin•	move
tšol•1	dwell
tšol•2	hill
tsyf•	hump
turš•	shuttle
tyr•1	door
tyr•2	cheese
tyrs•1	bush
tyrs•2	window
ungl•	hoof
ured•1	burn
ured•2	coal
xlor•2	fresh
xom•	equal
xomr•	nearby
xytr•	box
zo•	animal

xers•	desert
xlid•	impose
xlor•1	green

-edj	small
-isk	tiny
-ojk	period



Sketch by Darwin

"If it cannot be accomplished in the coming decades that the tools of terminology (terminological principles, methods and formats) are fully applied on both national and international levels, so that terminologies become reliable, then serious difficulties in regard to subject communication can occur, and even a complete breakdown can be expected. This situation is mainly due to the rapid progress achieved in all areas of human activity, which caused an abundance of new concepts. These concepts, however, have to be expressed by a very limited number of terms and possible combinations of term elements in the various languages. These tremendous dynamics within term formation and evolution stand in contrast to a static stock of word elements from which terms can actually be formed. The stems that are available in the various languages amount to a few thousand, while the number of concepts known can only be expressed in millions. The limits of assigning terms to concepts in an unambiguous way will be reached very quickly if this development proceeds further at such a rate."

[Professor H. Felber, former director of UNESCO's INFOTERM, in:
Infoterm; Ten years of activities – Vienna 1982]

It is to this predicament, that the International Terminological Key and its system try to bring an efficient and radical solution, far beyond the scope and reach of any present day proposal; a solution truly tailored to the needs of the 21st Century…