

Notes on Finnish Agaricales.

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I. Remarks on our representatives of the genus *Leccinum* (Boletaceae).

The genus *Leccinum* S. F. Gray em. Snell (*Krombholzia* Karst., *Trachypus* Bat., *Krombholziella* Maire) is known as a polymorphous and notoriously difficult group. Our *Leccinums* have usually been treated traditionally, following Karsten (1876, 1889), as two species called *Boletus scaber* and *B. versipellis* (or *rufus*). This grouping of the forms is (with the exception of the characteristic species *L. duriusculum* sensu Sing.), in fact, quite natural, but it lumps a number of interesting types together. A more detailed study of the genus in Finland has seemed desirable. The following remarks on the Finnish *Leccinums* do not pretend to be more than a first step in this direction, being based on somewhat superficial studies without detailed microscopical and chemical analysis. — The nomenclature followed is that of Singer (1947, 1951).

1. *Leccinum duriusculum* (Schulz. in Fr. sensu Sing.) Sing.

Syn.: *Boletus pseudosaber* Kallenb., non Secr., *B. nigrescens* Huber, non Rich. & Roze, *B. Carpini* (R. Schulz) Pears., *B. rugosus* Fr. sensu Pilát, etc.

Apparently rare and southern, found only quite recently in two localities in southernmost Finland, in both places in the vicinity of *Corylus*, *Quercus*, and *Betula* (presumably dependent of *Corylus*): — V. Bromarv, Framnäs, Sept. 6th 1952 (R.T.). — U. Espoo, Bodom, Aug. 11th 1952 (R.T.).

2. *Leccinum scabrum* (Fr.) S. F. Gray.

Syn.: *Boletus scaber* Fr., *Krombholzia scabra* (Fr.) Karst., *Boletus leucophaeus* Pers. according to some (French) authors, *Trachypus leucophaeus* (Pers.) Favre, etc.

The collective *Leccinum scabrum* is very common under birches (*Betula*) throughout the country. It shows a wide range of variation in cap colour from almost white to blackish-grey. The whitish form, called *Krombholzia scabra* var. *nivea* by Karsten, is nowadays often treated as a separate species (*Boletus holopus*

Rostk.) or as a subspecies (*Leccinum scabrum* ssp. *niveum* (Fr.) Sing.). So far as I am aware, it shows the same color reactions as the common forms with brownish cap: the flesh of the cap remains unchanged or takes only a faint rufous tint when exposed to the air, and turns pale greyish-blue with FeSO_4 ; in old specimens parts of the flesh are usually greyish-green, and become brownish blood-red with KOH. The white form is apparently widely distributed in the Finnish area and quite common on suitable habitats, such as bogs, bog margins, boggy and swampy woodlands, etc. All I can say concerning its taxonomic status, is that it seems not to be a mere habitat form produced by differences in external conditions but probably genotypically distinct from the commoner forms with a brownish cap, judged from the fact that it often grows side by side with these on seemingly identical habitats.

There is a *scabrum* type which seems to be more distinct than the white one. It has a grey, fuscous or blackish pileus (often with lighter coloured dots or stripes in places which have long been covered by fallen leaves, grass, etc.) and blackish or grey scales on the stem, sometimes arranged in rows forming an indistinct elongated network. The flesh of the cap is perhaps somewhat firmer than in the other forms of *L. scabrum*, and does not in old specimens show any marked tendency to turn greyish-green nor to become tinged blood red when tested with KOH. What makes this type of special interest is the colour change of its flesh which, in not too old specimens, becomes distinctly pink (bluish with FeSO_4), except at the base of the stem where it often changes to green or bluish-green (which colour turns bright yellow with KOH). Damaged (slug-eaten, etc.) parts of the stem base usually show the blue-green colour. In old specimens the colour changes are not so marked as in young ones, and such specimens are not always easy to distinguish from more typical forms of *L. scabrum*. In dried specimens

the discoloration has disappeared, and the flesh is greyish-white (not brownish-white as in typical *scabrum*).

This variety is not unlike some forms of *Boletus pseudoscaber* as depicted by Kallenbach (1935), i.e. *Leccinum duriusculum* sensu Singer, but it differs in the cuticle of the cap, which is of the same type as in other forms of the collective *L. scabrum* (only differently coloured) and thus without sphaerocysts, and also in the flesh which does not blacken. *Krombholzia scabra* var. *coloratipes* Sing. is described by its author as having light coloured scales on the stem and the stem becoming dotted with yellow or blue; no mention is made of the blackish-grey colours so characteristic of our variety. In an earlier paper (1950) I referred to this variety as "*Boletus* sp.", assuming that it will probably prove to deserve recognition as a special taxonomical entity more than the other *scabrum* forms. With some hesitation I now try to identify it with Singer's (1942, p. 36) *Krombholzia scabra* var. *roseofracta*, admitting that the relation with other types, especially *Leccinum oxydabile* (Sing.) Sing., is still obscure to me.

Leccinum scabrum var. *roseofractum* is not rare, at least not in the southern half of Finland where it is found under birches on the same habitats as the "typical" *L. scabrum* and the variety *niveum*, especially in boggy forest land among *Sphagnum*. Singer has collected his var. *roseofractum* near our area in the Lenin-grad district of USSR growing "in sphagnösen Waldschneisen", and says of it: "Falls konstant, eine besondere Subspecies". I have repeatedly seen it growing together with the brown and white forms of *L. scabrum* and, as it seems, always distinct from these. It apparently also occurs elsewhere within the area of *L. scabrum*.

3. *Leccinum testaceo-scabrum* (Secr.) Sing.

Syn.: *Boletus rufescens* (Secr.) Konr., etc.

The collective "*Boletus versipellis*" is anything but homogenous, and its division into two species is wholly justified and commonly accepted. The commonest of the two in Finland is *Leccinum testaceoscabrum*, better known as *Boletus rufescens* or *Krombholzia rufescens*. It differs from the other species (*L. aurantiacum*), both in the more yellow colours of the cap, beautifully contrasting with the colour of the stem which has, even in young specimens, black scales on white ground, and also by the dingy olive grey pores in the young carpophores.

L. testaceoscabrum is very common every-

where within our area in the vicinity of birches (*Betula*). I have observed it in numerous localities from the south coast to northernmost Finnish Lapland (Inari, Utsjoki, Enontekiö) and to Finmarken in northernmost Norway. According to the literature it is a circumpolar species with a range extending to the Arctic tundra, and seems to be on the whole more northern than *L. aurantiacum*. I have seen it in some places in Newfoundland.

L. testaceoscabrum is not very variable in Finland. Wholly white forms probably belonging to this species are occasionally observed, and it is not quite clear whether the forms with brown cap and black scales on the stem (see under *L. aurantiacum*, p. 28) really belong to *L. aurantiacum* or rather to *L. testaceoscabrum*.

4. *Leccinum aurantiacum* (Roqu.) S. F. Gray.

L. aurantiacum differs from the last mentioned species e.g. in colour, the cap being usually more orange or reddish, and the young pores being whitish or creamy. The species occurs here in at least three colour races which appear remarkably constant.

a) "The white-stemmed form". Stem, including the scabrosities, white, these becoming rufous in old specimens, cap lighter coloured than in the other varieties. This race seems to be common in the southern half of the country, where it has been observed in several localities, apparently exclusively in the vicinity of aspens (*Populus tremula*).

b) "The brown-scaled form". Scabrosities of the stem almost from the start dark reddish brown, cap of the same colour. Not rare, at least not in the southern parts of Finland, mostly, if not always, together with aspen (*Populus tremula*).

c) "The black-scaled form". Scales of the stem greyish-white in quite young specimens only, soon turning darker grey to black in exposed parts of the stem (the whitish-grey colour remains long visible in the more protected parts, especially in the extreme base and tip), cap dark red. Occurs in the whole country in heathy or mossy pine (and spruce?) woods, also where birches, aspens, and all other deciduous trees are totally absent. The fungus is of the size and stature of *L. testaceoscabrum*, and the scales of the stem are greyish-black in old specimens, much as in that species. The pores in young specimens are, however, not dull olive as in *L. testaceoscabrum*, but creamy-whitish or pallid as in *L. aurantiacum*. The darker, more

reddish colour of the cap, which is due to a bright pigment in the hyphae of the cuticle, points definitely to *L. aurantiacum* and not to *L. testaceoscabrum*.

This pine wood *aurantiacum* I have found mostly in North Finland, viz. in 2 localities in Rovaniemi (PP), 4 in Kuusamo (Ks), and 1 in Inari (InL), and in only 2 localities in South Finland, viz. 1 near Helsinki (U) and 2 in Sipola (EK). Some observations of Dr. P. Kallio, Dr P. Mikola, and others, seem to indicate that it is not uncommon on suitable habitats in South Finland also. Dr. Kallio sent me a colour photo of what is apparently same fungus found in the neighbourhood of Turku (V). Also he had been struck by differences between this type and both *L. testaceoscabrum* and the ordinary forms of *L. aurantiacum*, and by the absence of birches and aspens in the vicinity. Dr Mikola tells me that he has observed a similar fungus in pine woods in Tuusula (U). This race thus seems to occur throughout the country, ranging as far north as do the pine woods. The ground vegetation in some of its habitats in North Finland consists of lichens (*Cladina* spp., *Opisteria arctica*, etc.), mosses (*Pleurozium Schreberi*, *Dicranum fuscescens*, *D. undulatum*, *D. Bergeri*), *Vaccinium myrtillus*, *V. vitis-idaea*, *Empetrum hermaphroditum*, *Ledum palustre*, etc. This *aurantiacum* gives the impression of a constant type (mycoecotype according to Singer's terminology), analogous to the ssp. *pinicola* of *Boletus edulis*. The two other colour races of *L. aurantiacum* have not thus far been observed in North Finland.

With these three types the variability of *Lecaninum aurantiacum* is by no means exhausted. In some places in South Finland one finds forms coloured like *L. scabrum* (with brownish cap,

and blackish scales on the stem), but with the flesh changing colour as in the group "*versipellis*". These forms are not unlike the ones called *Boletus duriusculus* by some authors (not Singer). My experience of these types is too fragmentary to allow more than this mention of the matter.

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II. Cone-dwelling agarics.

Two species of agarics growing on old fallen conifer cones were known to Karsten (1889, p. 102—103) from Finland, viz. *Marasmius conigenus* (*Collybia conigena*) and *M. esculentus* (*Collybia esculenta*). To these I can add three species: one *Mycena* and two segregates of the collective "*Marasmius esculentus*".

I. *Mycena strobilicola* Favre & Kühner.

Syn. (sec. Singer 1951, p. 361): *Mycena vernalis* Lundell, non Velen. — *Mycena majalis* Lundell in Lund. & Nannf.

Lundell 1937, p. 187—189, Kühner 1938, p. 461—463.

Mycena strobilicola has been found by me in two localities in South Finland: - V. Vihti, Moksijärvi, May 15th 1952. — U. Espoo, Bodom, April 27th 1952. The species grows on the ground in woods, emerging from old spruce cones. In both places it was found together with *Pseudohiatula tenacella*, the two species on separate cones. On April 27th the ground was still moistened by water from nearby patches of melting snow.

On May 15th the carpophores were already overripe.

Lundell (l.c., as *M. vernalis*) enumerates several localities from the surroundings of Upsala and Stockholm in Sweden. As he points out, the agarics occurring early in spring are considerably neglected by mycologists, hence *M. strobilicola* will probably prove to be rather common with us also, when searched for in April and May. According to Kühner (l.c.) the species is common in the Alps and the Jura mountains between 1000 and 1400 m. Moser (1950, p. 109) records it from Tyrol, and Singer records apparently the same species from the surroundings of Leningrad, USSR.

Pseudohiatula tenacella (Fr.) Métrod.

Syn.: *Agaricus tenacellus* Fries. — *Marasmius esculentus* (Fr.) Karst., p.p. — *Collybia tenacella* (Fr.) Quél., p.p.? — *Marasmius conigenus* Pat., non Fr.) Favre ssp. *esculentus* (Fr., sensu Favre) Favre. — *Marasmius tenacellus* (Fr.) ssp. *esculentus* (Fr., sensu Favre) Konr. & Maubl. — *Pseudohiatula esculenta* (Fr.) Sing. ssp. *typica* (Sing.) Sing. — *Pseudohiatula esculenta* (Fr., sensu Favre) Métrod.

Favre 1939, p. 178—180.

This species is characterized especially by the cystidia, which usually have distinctly thickened walls and are attenuated to a rounded and somewhat capitate tip, more or less crested with rather coarse crystals, also by the habitat (on old, often deeply buried spruce-cones) and by seasonal appearance (from late autumn to early spring).

In the Jura the species is, according to Favre (l.c., as *Marasmius conigenus* ssp. *esculentus*) "vernal-subnival à la montagne, hiémal en plaine", occurring at lower altitudes especially from late November to March. Morten Lange (1948, Tab. II, as *Collybia tenacella*) reports it having been found at Maglemose in Denmark from September to April (occasionally also in August). In Finland round Helsinki it is very common in late autumn (my earliest autumn date is Sept. 15th), during snowless warm periods in winter (see Malmström 1933, as *Collybia tenacella*), and is especially abundant in spring (April and May, occasionally to June). No doubt this is the *Agaricus tenacellus* of Fries, since he reports (1821, p. 132) his species growing from September to November, and further says of it (1836—1838, p. 92): "in

hiemem usque persistens", and (1854, p. 21): "in silvis, praecipue pinetis¹, raro frondosis, autumno seriori ubique vulgatus, saepe in ver persistens".

Pseudohiatula tenacella is perhaps common in most of the Finnish area, though specimens exist only from the following localities in South Finland: — Vihti (R.T.). — U. Espoo (R.T.). Kauniainen (W. Nyberg). Helsinki (P. A. Karsten, N. Malmström, etc.). Porvoo (W. Nyberg). — EK. Viipuri (A. Thesleff). — EH. Tammela, Mustiala (P. A. Karsten).

Pseudohiatula esculenta (Fr., sensu Rick.) Sing., s. str.

Syn.: *Agaricus esculentus* Fr., p.p. — *Collybia esculenta* (Fr.) Quél., sensu Rick. — *Marasmius esculentus* (Fr.) Karst., p.p. — *Agaricus (Collybia) conigenus* Pat., non Fr. — *Marasmius conigenus* (Pat., non Fr.) Favre, non Karst., Rea. — *Marasmius tenacellus* Fr., s. lat., ssp. *conigenus* (Pat., non Fr.) Konr. & Maubl. — *Pseudohiatula esculenta* (Fr.) Sing. ssp. *Pini* (Sing.) Sing. — *Pseudohiatula conigena* (Pat., non Fr.) Métrod.

Favre 1939, p. 164—166.

Grows on old fallen pine-cones. The cystidia are broad, with scarcely thickened walls, and with a broadly rounded tip. The protruding parts of the cystidia are usually to a large extent imbedded in a thick layer of granulous mass.

In the Jura mountains this species is a vernal fungus, Favre records it (l.c., as *Marasmius conigenus*) from March 15th to the end of May. In Finland, it has mostly been collected in May and in the first half of June (from April 26th to July 13th).

This agaric cannot be identical with *Agaricus conigenus* Fr., an autumnal species with very small spores, as described firstly by Karsten (1876 p. 69, see also M. Lange 1948, p. 129—130). — *Agaricus esculentus* is mentioned by Fries (1854, p. 22) as a spring species growing e.g. in pine woods: "in pascuis montanis, pinastretis siccioribus² etc., primo vere abundans".

Pseudohiatula esculenta is presumably common almost throughout the country in Finland, though poorly represented in the herbariums: — V. Bromarv (R. T.). Vihti (R. T.). — U. Tvärminne (R. T.). Helsinki (L. Fagerström, R. T.). Porvoo (W. Nyberg). Pernaja (R. T.). — EK.

¹ With "pineta" Fries means coniferous woods, and not pine woods only.

² "Pinastreta sicciora" in Fries means (dryish) pine woods.

¹ In the original sense, i.e. not that of Schröter, Favre and Métrod. See Article 65 of International Code of Botanical Nomenclature (1952).

Sippola (R. T.). — St. Rauma (P. A. Karsten).
Kokemäki (R. T.). — EP. Vaasa (P. A. Karsten).
— PS. Kuopio (O. Lönnbohm). — PK. Pielisjärvi (R. T.). — InL. Ivalo (C. Cedercreutz).

Pseudohiatula Favrei nom. nov.

Syn.: *Agaricus tenacellus* Schröter (sec. Favre), non Fr. — *Marasmius tenacellus* (Fr., sensu Schröt.) Favre. — *Pseudohiatula tenacella* (Fr., sensu Schröt., Favre) Métrod.

Favre 1939, p. 166—168.

Distinguished from the two other species by its narrower, thin-walled, acute cystidia, narrower, slightly curved spores, bitterish taste, and often more greyish coloured pileus.

The species grows on old buried pine-cones. Favre records it (i.c., as *Marasmius tenacellus*) from March 20th to May 10th. In Finland, it is observed from June 7th to July 2nd, and once as late as Aug. 11th.

For reasons indicated above under *P. tenacella* this species can hardly be the *Agaricus tenacellus* of Fries which, according to him, occurs also in late autumn and in winter.

Pseudohiatula Favrei seems to be rarer and less abundant in Finland than the two other species of the genus, and is known only from the following localities: — U. Tvärminne (R. T.). Espoo (R. T.). Helsinki (R. T.). Porvoo (W. Nyberg). — St. Kokemäki (R. T.). — PS. Kuopio (O. Lönnbohm).

Baeospora myosura (Fr.) Sing.

This is the *Agaricus conigenus* of Fries, or *Collybia conigena* (*Marasmius conigenus*) of Karsten, J. Lange, and others. It is easily separated from the *Pseudohiatula* species by its minute amyloid spores, totally different epicutis of the cap (not hymeniform, as in *Pseudohiatula*, but consisting of repent hyphae), smaller and not crested cystidia that are more concentrated at the edges of the lamellae, etc. It grows on pine and spruce cones in autumn, according to Karsten (1879, p. 151, as *Collybia conigena*) from August to November. Thesleff (1920, p. 42, as *Collybia conigena*) mentions finding it from Aug. 5th to Nov. 1st. Our herbarium dates are from Aug. 15th to Nov. 24th. In Denmark, M. Lange (1948) Tab. II, as *Collybia conigena* observed the species at Maglemose from September to December, and Favre (i.c.) mentions it occurring in the region of Geneva in Switzerland from Nov. 15th to Febr. 15th.

According to Karsten (1889, p. 102, as *Marasmius conigenus*) the species occurs here

and there from southernmost Finland north to Vaasa (EP). It is poorly represented in our herbariums; I know it only from the following localities: — V. Turku (R. T.). — U. Espoo (R. T.). Helsinki (R. T.). — EK. Viipuri (A. Thesleff). — St. Tyrvää (P. A. Karsten). — EH. Tammela (P. A. Karsten). Loppi (R. T.). — KP. Pietarsaari (P. A. Karsten).

It is impossible to decide what the *Marasmius myosurus* from Turku, referred to by Karsten (1889, p. 102), may have been, since there are no specimens of it in his herbarium. According to the specimen (collected in coniferous wood at Liimatta near Viipuri, Nov. 1st, 1892) Thesleff's (1920, p. 42) *Collybia myosurus* is *Pseudohiatula tenacella*.

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III. *Stropharia aeruginosa* and *Stropharia cyanea*.

Already some pre-friesian authors, Bolton, Schumacher, and Michelius (according to Fries 1821, p. 287), and then some contemporaries of Fries, such as Secretan (1833) and Krombholz (1843), described two or more species of what is nowadays usually called *Stropharia aeruginosa*. Fries, however, did not see any constant differences between these species ("limites reperio nullos", Fries 1836—1838, p. 219; see also Fries 1857, p. 411), and accordingly united them into one polymorphic species. Most of the subsequent authors have but followed him in his treatment of the complex.

In Finland, two distinct types of "*Stropharia aeruginosa*" occur. The differences between them seem definitely too numerous, too great, and too constant to allow treatment of them as mere varieties or even subspecies of one species. I have not seen any true intermediate forms connecting them, but of course there may be independent segregates of the group elsewhere which may simulate intermediate forms.

The one, a silvicole species with more greenish colours, heteromorphous gill edge, and well developed annulus, I call *Stropharia aeruginosa*, and the other, a rudericole species with more bluish colouring, not distinctly bordered lamellae, and spurious annulus, I call *S. cyanea* in accordance with a.o. Secretan and Krombholz. The nomenclature thus adopted is perhaps somewhat provisory, and it is to be hoped that the mycologists who are better provided with material and with the classical mycological literature will finally settle these problems. As to *S. cyanea* I feel on more solid ground, but which species is the "true" *S. aeruginosa*, is not quite clear. The fact that Fries (1857, p. 411) apparently considered the silvicole species, as the "best developed", to be the typical *S. aeruginosa*, is not decisive, since he did so merely on "typological" grounds, and not on the base of nomenclatorial priority. It is possibly that the true *S. aeruginosa* will prove to be a third species, at present unknown to me. — The more white coloured *S. albonitens* with its well developed annulus, distinctly bordered gills, rather strong smell ("of cauliflower"), and disagreeable ("alkaline") taste, is a nearer relative of my *S. aeruginosa* than of *S. cyanea*.

Stropharia aeruginosa (Curt. ex Fr.) Quél., s. str.

Young cap covered with thick slimy coating, umbonate, with whitish squamules especially

towards the edge, and often with brownish spots in the centre, bluish-green, becoming more or less yellow with age. Stem in the apical part glaucous blue, below the annulus yellowish-green, or, especially at the base, greenish-yellow, clad with distinct yellowish-white squamules; annulus well developed, persistent, membranaceous, spreading to reflexed, glaucous beneath. Gills broad, becoming blackish-brown from the spores with age, with a distinct heteromorphous edge of broadly clavate cells which is clearly visible in dried samples as a lighter coloured border. Spores $7.4-8.8 \times 4-5 \mu$. Smell faint, but distinct, taste somewhat alkaline. Solitary to subgregarious in woods.

The following illustrations seem to refer to the "typical" *S. aeruginosa*: — Flora Danica, fasc. 23 (1808) (*Agaricus aeruginosus*). — Nees von Esenbeck 1818, tab. 24, fig. 196 (*Agaricus Pratella aeruginosa*). — Cooke 1884—1886, Pl. 555/551 lower fig. (*Stropharia aeruginosa*). — Ricken 1915, Taf. 63, fig. 4 (*Str. aeruginosa*).

S. aeruginosa is apparently common in woods, f.ex. in mossy spruce woods at least in the southern half of Finland. I have seen it from following localities: — A. Eckerö, Överby (C. Cedercreutz). — V. Parainen, Alö (M. Laurila). Bromarv, Solböle and Framnäs (R.T.). — U. Inkoo, Fagervik (E. Hisinger). Espoo (R.T.). Helsinki, common (R.T.). Porvoo (W. Nyberg). — EK. Viipuri, Liimatta (A. Thesleff). — St. Huittinen (P. A. Karsten). — EH. Tammela, Mustiala (P. A. Karsten). Loppi (R.T.). — LK. Sortavala (R.T.).

Stropharia cyanea (Bolt. ex Secr.) n. comb?

Agaricus cyaneus Bolt ex. Secr. 1833, p. 108.

Cap 4—6 cm broad, campanulate, almost without white squamules, not spotted, surface less glutinous than in *S. aeruginosa*, glaucous blue¹, with porcelain green centre, becoming somewhat mustard yellow (centre often darker, towards edge more greenish) with age. Stem 4—8 cm long, about 5 mm thick, in the apical part bluish to bluish-white, below the annulus at least in young specimens glaucous blue (not green or yellow) and clad with rather feeble glaucous white squamules. Annulus poorly developed, incomplete, erect patent, split in fringes,

¹ The colours of *S. cyanea* are given according to Maerz & Paul 1950.

often absent. Gills light brownish, not turning very dark with age, without a distinct, lighter coloured, sterile edge; cheilocystids ventricose, broadly fusiform to somewhat bottle-shaped, not clavate. Spores 8—10×4.4—5.6 μ . No marked smell or taste. Subcaespitose to densely clustered, in gardens, composts, etc.

The following illustrations seem to depict *S. cyanea* rather than *S. aeruginosa* s. str.: — ? *Flora Danica*, fasc. 21 (1799), tab. 1248, fig. 2 (*Agaricus politus*). —! Krombholz 1843, Taf. 62, Bild 11—12 (*A. cyaneus*). —! Gillet 1878, tab. nr. ? (*Stropharia aeruginosa*). — Patouillard 1883—1886, nr. 231 [*Agaricus (Stropharia) aeruginosus*]. — ? Bresadola 1931, Tab. 835 (*S. aeruginosa*). — Lange 1939, Tab. 140 A (*S. aeruginosa*). — ? Maublanc 1939, Pl. 41, II (*S. aeruginosa*).

S. cyanea is not uncommon in parks, gardens, manured pastures, composts, among rubbish-heaps, decaying straw, etc., often under *Urtica dioica*, sometimes in dense compact clusters of tens of carpophores. I know it from some localities in the southern half of the country: — U. Espoo and Helsinki, common (N. Malmström, R. T., etc.). — EK. Viipuri, Liimatta (A. Thesleff). — EH. Tammela, Mustiala (P. A. Karsten). Loppi, Sajaniemi (R.T.). — ES. Kuopio (leg. ?).

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