

The general appearance recalls *Unciniella Laricionis* var. *phaeotricha*, and the mountain form of *Cistella pinicola*, but microscopically the fungus is highly distinctive due to the peculiar, elegant hairs.

We have found it only once (cfr below), and the above description is based upon this (rather scanty) material. It agrees, however, very well with the type. The only noteworthy difference is that the hairs are rather heavily roughened in the Californian fungus, but smooth (or very nearly so) in ours.

Harkness' type material is preserved in NY and consists of two packets: 1) with the number 351-382, locality "California", contains several pine needles and one fragment of wood (oak?). The *Peziza uncinata* is found on the needles as well as on the wood, *mirabile dictu!* 2) numbered 3514, with locality "Blue Canon Cal", contains only pine needles, with the same fungus as 1).

Dennis (1963 p. 372) examined the type material, and described it, particularly stressing the peculiar hairs. Thanks to his notice our attention was drawn to Phillips's species. Dennis referred it to *Unguiculella*, which must have been a kind of emergency solution. In our opinion its place is in *Unciniella*, as it is closely related to *U. Laricionis* var. *phaeotricha*, differing mainly by the peculiar one-sided thickening of the hairs.

NORWAY: STrd. Oppdal, near lake Gjevilvatnet, about 900 m s.m., reg. alp. 23. VIII. 1973, 92e.

## Dermateaceae

### Haglundia sp.

Apothecia scattered or ± aggregate, superficial, in-rolled and somewhat reddish brown when dry; cupulate, up to 0.5 mm diam., with a watery brown hymenium when wet.

Excipulum brown, mainly of textura angularis, cells c. 10-12(-15) μ with dark walls; at the margin profusely clothed with hairs, ad 70×5 μ, 2-4-septate, brown with hyaline tips, smooth.

Asci cylindrical, almost sessile, 45-50×7-9 μ, 8-spored, J-.

Spores fusiform, 1-celled, hyaline, 8-10×3-3.5 μ.

Paraphyses as long as the asci, thread-like, not apically inflated.

On decorticated old wood or in decaying cortex of juniper.

Fig. 10 e.

We have two collections of this fungus, which probably represents an undescribed species. It is no doubt a close ally of *Haglundia perelegans*, the generic type, but plainly distinct, i.a. by the considerably broader spores. It is quite possible that it occurs on other conifers, too, though so far no *Haglundia* is known from softwood. Due to the restricted material at hand we refrain from publishing a new name.

SWEDEN, Hrj, Tännäs par.: Mt Hamrafället, c. 900 m, 27. VI. 1975, 619a. Mt Malmagsvålen, c. 975 m, 28. VI. 1975, 625a.

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### *Mollisia juniperina* K. et L. Holm n. sp.

Apothecia sparsa vel aggregata, superficialia, subsessilia, in sicco involuta, in humido plana, 150-900 μ diam., hymenio griseo-albido, excipulo fuscobrunneo.

Excipulum c. 30 μ crassum e textura angulari-subglobosa, e cellulis fuscobrunneis, sat crassitunicatis, 7-14 μ diam.; ad basin hyphis crassis sparsim instructum, margine in pilis brevis subasperulatis, apice rotundatis, 25-40×4-7 μ, saepe uni- vel biseptatis, transiens.

Asci cylindrico-clavati, subsessiles, apice subacuti pariete paullo incrassato, 55-70(-80)×7-10 μ, J+, octospori.

Ascosporae fusiformes vel subnaviculatae, hyalinae, guttulatae, postremo uniseptatae, 8-12×2.5-3.5 μ, mature tubulis vel microconidiis germinantes.

Paraphyses ascos subaequant, filiformes, apice paullo ad 3 μ incrassatae, non vel sparsim septatae.

Typus: NORVEGIA: STrd, paroecia Opdal, pr. lacum Gjevilvatnet, reg. subalp., alt. c. 660 m, in ramunculis emortuis Juniperi communis. 23. VIII. 1973, K. & L. Holm 96a.

Fig. 2 f, 8 f-i.

This species is characterized i.a. by the early spore germination, often taking place in the asci already. Numerous germinating spores are found on the hymenium; the long germ tubes might easily be taken for paraphyses. Germination often occurs also with microconidia, formed endogenously in a collarete on the spores, or even on the germ tubes.

*Mollisia juniperina* is not typical *Mollisia*, deviating i.a. by the conspicuous, ± asperulate marginal hairs, reminiscent of *Belonium*. It seems to be a common fungus in the Scandes, and probably the most common discomycete there, next to *Lophodermium juniperinum*, though small-sized specimens are easily overlooked. *M. juniperina* always grows on dead twigs, generally among or just below the oldest still attached needles—sometimes mixed with the mountain form of *Cistella pinicola*, and the two are apt to be confused.

We have 20 collections: from Sweden (Hrj, Jmt, Ång, TL), and Norway (STrd). All the finds are from the mountain area, except one from Ång, Nordmaling parish, 1 km E of Salsåker, near the sea, 20. VIII. 1969, 14a-69.

### *Mollisia* sp., cfr *caespiticia* Karst.

A few times we have come across a true *Mollisia* which seems to be mainly fungicolous, growing on old fruit bodies of various ascomycetes on needles. As our material is rather scanty we refrain from an exact determination, but it seems close to *M. caespiticia* Karst.

The apothecia are as a rule single, sometimes a few together, almost sessile, 120-720 μ diam., outside dark brown, hymenium greyish with a tint of yellow.

Excipulum of textura globulosa, of cells about 10 μ diam., margin with a fringe of short, faintly pigmented, apically swollen emergences.

Asci almost cylindrical, 30-35×3.5-4 μ, tip rounded, J+, 8-spored.

Spores obliquely uniseriate, hyaline, 1-celled, clavate, 7-9×2 μ.

Paraphyses filiform.

Fig. 2 c.

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On more or less dead needles, especially on dead fruit bodies (*Lophodermium Juniperi*, *Cytospora* sp., *Sclerophoma* sp.). So far we have found it in 6 collections, from Sweden (Vg, Dlr, Vb) and Norway (VAgd, AuAgd, Tel).

We have also found, partly in the same material, an imperfect fungus which very probably is connected with the *Mollisia*. It is an excipulaceous fungus, which looks very similar to the *Mollisia*, and seems to be strictly mycophilous, 4 collections on *Lophodermium*, from Sweden (Hrj, Jmt) and Norway (VAgd, AuAgd) and one on a *Nectria*, on a twig, from Sweden, Vb. This imperfect is decidedly scolecosporous, with conidia  $30-40 \times 1-1.5 \mu$ , hyaline, 3-5-septate, cfr Fig. 2 d.

**Propolis versicolor** Fr., Summa Veg. Scand. 372. 1849.

*Stictis versicolor* Fr.

This polyphagous lignicolous fungus has so far not been reported on *Juniperus*, and is apparently not common on this host, as we have seen three collections only. Two of them have a greenish hymenium and thus represent the form called *P. viridis* (Fr.) Fr., which perhaps deserves some taxonomic rank.

SWEDEN: Sm, Jungfrun, 25.V.1917, G. E. Du Rietz ("viridis"). Dlr, Vika, Lövhult, 22.IV.1973, 105r.

NORWAY: VAgd., Søgne, 26.VIII.1970, 11a-70 ("viridis").

**Stegopeziza juniperina** (E. Müller) Dennis n. comb.

*Psilachnum juniperinum* E. Müller, Sydowia 21: 146. 1967 — Type: SWITZERLAND: Wallis, Aletschwald, 1900 m s.m., on dead twigs of *Juniperus communis* ssp. *nana*, 20.IX.1965, E. Müller (UPS, iso!).

Apothecia subsessile, 0.5-1 mm diam., solitary or a few together, erumpent on needles, superficial on twigs.

Excipulum with a velvety surface, at first light brown, darkening with age and finally almost black, below about  $60 \mu$  thick, laterally thinner, composed mainly of *textura angularis*, of cells up to  $12 \mu$  diam., inwards passing into *textura porrecta-textura intricata*. Outside the excipulum is clothed by hyaline or finally faintly brownish clavate hairs,  $5-10 \times 3-5 \mu$ : at the margin these are more cylindrical and up to  $15 \mu$ .

Hymenium at first greyish yellow, later with a tinge of apricot.

Asci cylindrical  $30-40 \times 3.5-5 \mu$ , almost sessile, rounded at tip, J+, 8-spored.

Spores finally uniseriate, fusiform to slightly clavate, hyaline,  $6-8 \times 1.5-2 \mu$ .

Paraphyses  $45-55 \times 3-4 \mu$ , acuminate, generally 2-septate, over-topping the asci.

Fig. 2 e, 11 a-b.

A quite characteristic species, easily recognized by its velvety excipulum with a somewhat silvery surface, due to the hairs; with age the surface turns darker and more granulous. Microscopically *S. juniperina* is unique among all fungi on *Juniperus*, on account of the long, acuminate paraphyses.

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This species was first discovered by E. Müller in the Alps. We can confirm his description in all essentials, except for the paraphyses which are generally septate. But we can not agree with his placing the fungus in the *Hyaloscyphaeae*. Its true affinities were doubtful to us, until Dr. Dennis (in litt.) suggested *Stegopeziza*. This genus, based, on *S. Lauri* has so far been monotypic. We have examined the type species and found a close agreement in most of the essential characters: the general appearance is very similar, as are also spores, asci, and paraphyses—the latter are septate even in *S. Lauri*. The only important difference is that the hairs are tipped by crystals in the laurel fungus, but otherwise the hairs are much alike. The presence or absence of crystals is hardly a generic character—cfr *Dasyscypha*. According to Sutton and Pirozynski (1963 p. 519) "*Stegopeziza* is closely related to *Hysterostegiella*, and possibly congeneric".

So far this species was known only from the type locality in the Swiss Alps, and perhaps it is boreo-alpine. We have 20 collections from Sweden, Norway, Finland, and Iceland. In 1971 it was evidently frequent in Iceland (mostly found on needles), and in 1973 we found it several times in the Oppdal area, in the Central Norwegian mountains. The Finnish find is from Kevo, in Finnish Lapland. In Sweden we have collected it in Hrj, Tännäs, but also made some very scanty finds in the lowlands (Upl, Vsm, Dlr, Vb).

## Hypodermataceae

**Colpoma Juniperi** (Karst.) Dennis, Kew Bull. 1957 p. 401.

*Coccomyces Juniperi* Karst., Mycol. Fenn. 1: 254. 1871 — Lectotype: Finland, Merimasku, in cortice *Juniperi* (F. fenn. exs. 399; UPS, iso!) — *Clithris Juniperi* Rehm, Disc.-Fl. p. 102 — *Pragmoparopsis Juniperi* von Höhnel, Ann. Mycol. 15: 320. 1917 (nom. nud.).

*Colpoma juniperinum* Rehm, Ver. Nathist. Ver. Augsburg 26: 69. 1881 — Type: Austria, "Auf der Rinde absterbender Aeste und Stämmchen von *Juniperus nana* im Längenthal bei Kühteil (Oetz) in Tyrol. c. 6200" (Rehm, Asc. 272; UPS, iso!).

*Clithris crispa* (Pers. ex Fr.) Rehm ssp. *juniperina* Starbäck, Bih. K. Sv. Vet.-Akad. Handl. Bd 15: 3 No. 2: 21. 1889 — Type: Sweden, Ög, Duvhult, "ad ramos fere decorticatos *Juniperi communis*", sine dato, leg. E. Haglund (S!).

*Godronia Juniperi* Rostrup, Meddel. Grønland 3: 611. 1891 — Type: Greenland, Igdlorsuit, Tunuarmiut, on branch of *Juniperus*, leg. K. Rosenvinge (C!).

Fig. 1 c, 12 g.

Exs.: Karst., F. fenn. 399 — Petrak, Myc. carp. 211 — Rehm, Asc. 272 — Sacc., Myc. ital. 880.

Distribution: Sweden, Norway, Finland, Iceland, Greenland, Switzerland, Austria, Czechoslovakia, Italy, USA, N. Y. (fide Ellis & Everhart 1892 p. 723).

This corticolous species is recognized already by its size. It is one of the largest fungi on juniper, the fruiting bodies generally being 1-2 mm long, not

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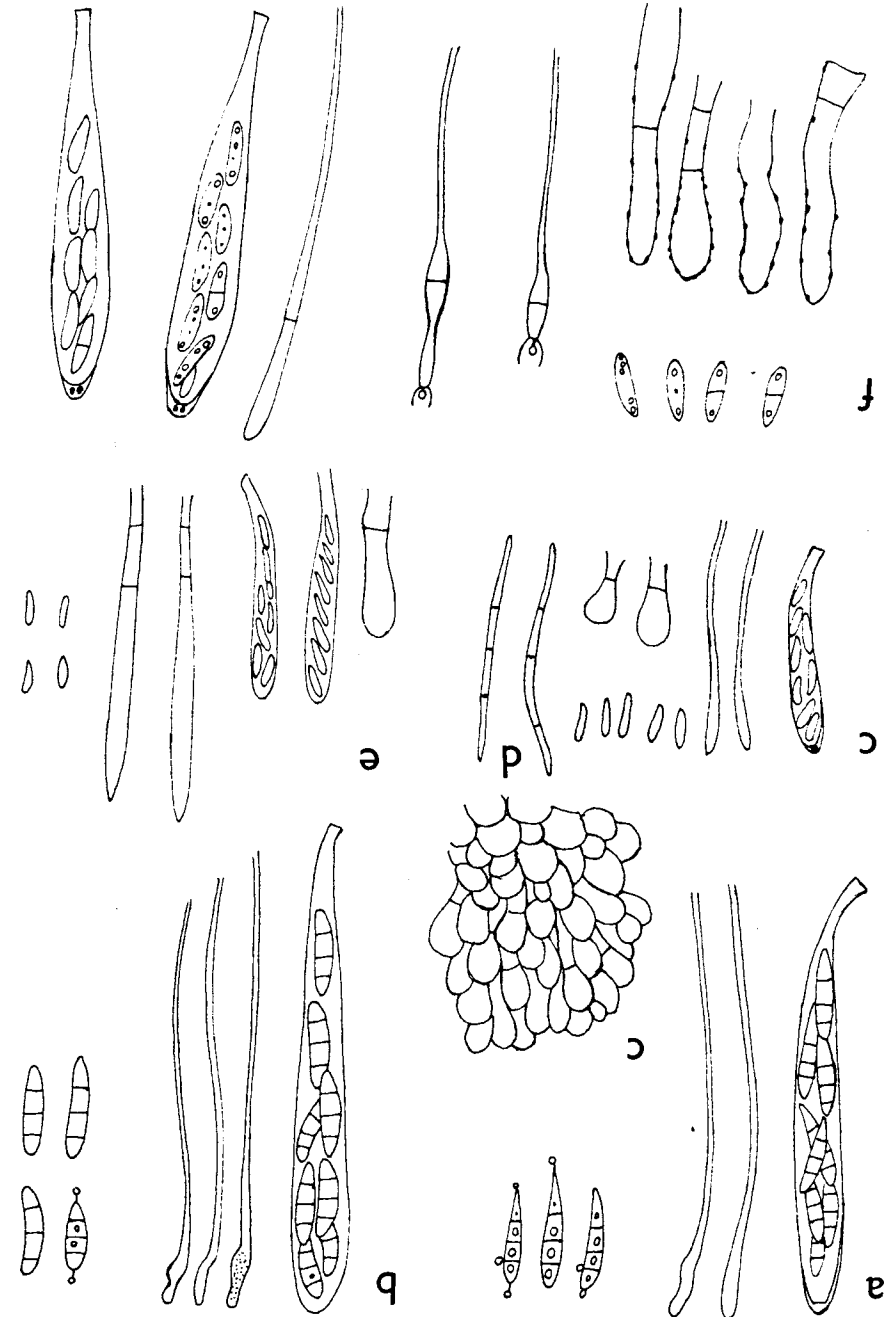


Fig. 2 a) *Gremmentella juniperina*: ascus, paraphyses, germinating spores. b) *Mollisia cf. caespiticia*: ascus, paraphyses, and spores. c) *Stegopeziza juniperina*: marginal hair, ascus, paraphyses, and spores. d) *Fungus imperfectus*: conidia. e) *Mollisia juniperina*: marginal hairs, spores—two of them germinating with phalocoidia at one end and with germ tube at the other—paraphyses, and ascus. — All c.  $\times 840$ .

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Juniper-  
v ( $\times 25$ ),  
l, ascus,