

THE AGARICALES OF ICELAND (ÍSLENZKIR HATTVEPPIR) V

Preliminary account of the Icelandic species of Tricholomataceae

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ABSTRACT: Sixty species of the agaric family Tricholomataceae are listed and some information is provided on habitats, frequency and distribution with occasional notes on systematic problems. The article is based on investigations and collection of the fungi in the years 1960-1971 and it is a continuation of articles published by the author in vols. 1-3 of the present journal. Twelve species are reported new to Iceland and another 24 species have only been mentioned in popular articles by the author. About 10 species, which are listed in the literature as found in Iceland, are deleted in this article, but some of them may be identical with the species treated here. Most of the specimens are kept in the herbarium of the Museum of Natural History in Akureyri.

The Icelandic agaric flora has been studied by two Danish botanists, Poul Larsen and M.P. Christiansen, in the years 1922 and 1935/1937 respectively. Their results were published in the series The Botany of Iceland in 1932 and 1941. In the treatment by P.Larsen some 130 species of Agaricales are dealt with and a similar number (137) in Christiansen's work. Altogether they recorded about 190 species of Agaricales (bolets included). Thirteen species were added by Morten Lange (1949) in a short article, thus bringing the total number of known species up to about 200.

My own studies of the agaric flora of Iceland date back to 1960 and have continued to the present day, albeit with considerable intervals. The fungi have been collected and preserved in the dry state, often with descriptions and drawings made from the living

specimens. My collections are mainly from the eastern part of North-Iceland, but they have gradually been extended to the eastern and western parts of the country, the southern part, however, has still been neglected. The collections have only partially been worked out, the white spored agarics being privileged.

In 1972 I started writing monographs on the Agaricales of Iceland. Three articles were published in the present journal in 1972-1974, under the title "Íslenzkir hattsvæppir". They were written in Icelandic and may therefore have received little attention. The following families have been treated: Amanitaceae (1972), Lepiotaceae, Gomphidiaceae, Paxillaceae, Crepidotaceae (1973) and Hygrophoraceae (1974). Besides the above mentioned monographs, I have published some popular articles on Icelandic fungi (see literature list), and one booklet, "Sveppakverið" (1979), dealing mainly with agarics.

The present account of Tricholomataceae may be considered as a continuation of the monographs previously published in this journal, but is naturally far from being as complete. Most of the species listed here have been determined by the author in the decade 1960-1970 and no revision of the material has taken place, although new literature may probably add a lot to the accuracy of the determinations and reveal several new species to the flora which must be omitted here because of lacking information. About a half of the species listed here have been recorded by the Danish scientists mentioned above, and several other species were noticed in the popular articles by the author and in "Sveppakverið". I think, however, it is appropriate to present in this article, all species of the family which can safely be stated to grow in Iceland.

The nomenclature in this paper follows with few exceptions that of Moser 1978. The brown-spored genera (e.g. *Ripartites*) are excluded from the family. The genera are listed alphabetically as are the species within a genus.

ENUMERATION OF GENERA AND SPECIES

ARMILLARIELLA Karst.

Armillariella mellea (Fr.) Karst.

Recorded by CHRISTIANSEN (1941) as *Armillaria mellea* (Vahl.) Fr. This polymorphous species is frequent in the birch woods and is often found in masses near the nurseries. (HALLGRÍMSSON 1963).

ARRHENIA Fr.

Arrhenia auriscalpium Fr.

Recorded by the present author (1965), from the mountain Kaldbakur in Eyjafjörður, 600 m alt. Also found in Vaglaskógur, July 1963. This tiny fungus grows on soil together with low mosses and lichens.

CALOCYBE Donk.

Calocybe carnea (Fr.) Donk.

Recorded by CHRISTIANSEN (1941) as *Tricholoma carneum* (Bull.) Fr. Forms of this group (i.e. *C. carneum* / *C. persicolor* / *C. ionides*) are common in grassland chiefly in the northern and eastern parts of the country, where the climate is most continental.

Calocybe naucoria (Murr.) Sing.

New to Iceland. Only found near Akureyri, June 1961, in deep moss with some *Vaccinium* (AEY 17). Another collection from 600 m alt. near Akureyri (AEY 1525) may belong to *C. chrysenteron* (Fr.) Sing.

CHRISTIANSEN (1941) further mentions *Calocybe leucocephala* (Fr.) Sing. (s.n. *Tricholoma leucocephalum* Fr.) from homefields in N- and E-Iceland and ROSTRUP (1903) reported *Calocybe gambosa* (s.n. *Tricholoma gambosum* Fr.) from Fnjóskadalur (N. Iceland), collected by C.H. Ostenfeld. The former species presumably exists in Iceland but the latter may be a *Lyophyllum* as well.

CLITOCYBE Kummer

The genus *Clitocybe* is represented by about 10-15 species in Iceland, some of which are very common both in woodlands and in open sites, and may also be found at high altitudes. As the segregation of the species is very difficult, and most species have a broad range of variability, only a few of them have been identified at the present date.

Clitocybe clavipes (Fr.) Kummer.

Reported by the author (1979). Occasionally found in N., NW. and E. Iceland. Nearly always growing in dwarf shrub heaths with thick moss cover of *Hylacomium* and other species.

Clitocybe dealbata (Fr.) Kummer.

Recorded by LARSEN (1932) and CHRISTIANSEN (1941). One of the most

common mushroom species in Iceland. It grows in mossy heathlands, with *Dryas* and *Empetrum* or *Vaccinium*, in the lowland as well as in the mountains and occasionally in birch copses. It is very variable and is perhaps rather a species complex, possibly including *Clitocybe rivulosa* and *C. ericetorum*. *Clitocybe tornata* (Fr.) Quel. which is recorded by LARSEN and CHRISTIANSEN may also belong to this group.

Clitocybe gibba (Fr.) Kummer.

Recorded by CHRISTIANSEN (1941) as *Clitocybe infundibuliformis* (Sch.) Fr. Taken in its broadest sense, this is a complex of closely related species, and I have not made any serious attempt to separate them. *Clitocybe squamulosa* (Fr.) Lange and *C. trullaeformis* (Fr.) Karst. may very likely be discovered in the Icelandic collections. *Clitocybe gilva* (Pers.) Fr. which was recorded by LARSEN (1932) and *Clitocybe* sp. (*Cl. curtipes* Fr.?) which is mentioned by CHRISTIANSEN (1941) belong probably also to this group. The species complex is very common throughout the country, mainly in heathlands and grassy slopes, up to about 500 m altitude.

Clitocybe inornata (Fr.) Gill.

New to Iceland. Seems to be rare. Found in Akureyri, August 1961 (H. Kristinsson leg.), at Mývatn, Sept. 1962, and in Hallormsstaður (E. Iceland), Sept. 1961. In woods and heathlands with moss cover.

Clitocybe lateritia Favre.

Recorded by the author (1965 and 1979). The Icelandic specimens referred to this species do not match very well with the description given by Favre (1955). It is rather common in the mountain heaths, often found with *Dryas* and *Empetrum* but also in moss carpets.

Clitocybe odora (Fr.) Kummer.

Recorded by LARSEN (1932) and CHRISTIANSEN (1941) as well by the present author. The species is very common in woodlands all around the island.

Clitocybe phyllophila (Fr.) Quel.

Recorded by the author (1979), as *C. cerussata*. This species or near related forms, seem to be rather common in dwarf shrub heaths and woodlands with thick moss cover of *Hylocomium*, *Rhytidiadelphus*, *Pleurozium* et al.

CLITOPILUS Kummer

Clitopilus prunulus (Fr.) Kummer.

Recorded by CHRISTIANSEN (1941), from Reykir, SW. Iceland. I have found it in Vaðlaskógur and Aðaldalshraun, N. Iceland, and in Langaðal, Ísafjarðardjúp, NW. Iceland. (AEY 1670, 5203, 6160).

COLLYBIA Kummer

Collybia cirrhata (Fr.) Kummer.

Reported by the author (1979). Common in birch woods and copses in

all parts of the country. Often with a yellow sclerotium (i.e. *C. cookei* (Bres.) J.D. Arn. Grows on decaying remnants of other mushrooms chiefly *Leccinum* and *Suillus*.

Collybia dryophila (Fr.) Kummer.

Recorded by CHRISTIANSEN (1941) and by the author (1979). It has proved to be common in most of the woodlands investigated for fungi, often growing gregariously in mossy floors, and is one of the earliest fungi to appear in the woodlands.

Collybia obscura Favre.

Recorded by the author (1979). Seems to be common in all regions where fungi have been collected. It grows in mossy dwarf shrub heaths, in the mountains preferably with *Dryas* up to an altitude of 650 m in the Eyjafjörður area. Variable in habitus but rather uniform in microscopic characters. The closely related *Collybia fuscopurpurea* (Fr.) Kummer may be present in collections from Hallormsstaður (E. Iceland).

Collybia tuberosa (Fr.) Kummer.

Recorded by the author (1979). Found in similar habitats as *Collybia cirrhata*, but seems to be less frequent.

In addition to the listed species, *Collybia butyracea* (Fr.) Quel. has been recorded by CHRISTIANSEN (1941) from Hallormsstaður.

DELICATULA Fay

Delicatula integrella (Fr.) Fay.

Recorded by the author (1979). Found in the woods of Hallormsstaður, E. Iceland, Sept. 1970, Heydalur in Mjóifjörður, NW-Iceland, Sept. 1971, and in Vaglaskógur, N. Iceland, Sept. 1968. (AEY 6928, 7599, 5461). Grows on dead stems of different plants on mossy floor in the woods.

GERRONEMA Singer

Gerronema fibula (Fr.) Sing.

Recorded by the author (1979). The species has been found in several localities in North-Iceland, 1962-1968, and in Hveragerði, S. Iceland (M. Lange leg. 1959). Grows among mosses at the borders of bogs and springs, also in lava fissures at Mývatn.

Gerronema pseudogrisella (Smith) Gulden & Lange.

Recorded by the author (1973). It is frequent on river banks at least in Eyjafjörður, probably always connected with the liverwort *Blasia pusilla*, which in turn is symbiotic with *Nostoc* spp.

Gerronema setipes (Fr.) Sing.

First record from Iceland. Seems to have a similar distribution as *G. fibula* and is often found in the same localities.

LACCARIA Berk. & Br.*Laccaria laccata* (Fr.)Bk.& Br.Recorded by P.LARSEN (1932) and CHRISTIANSEN (1941) s.n. *Russulopsis laccata*(Scop.)Fr. var. *rosella*(Batch.) f. *pusilla* Larsen)

This is probably the most common agaric species in Iceland. It can be stated to grow almost everywhere e.g. in woodlands, heaths, gravelly planes and boggy areas. It is very common in the mountains up to an altitude of 1000 m, especially in snow patches, where it attains the greatest size. It is evidently very variable and could surely be divided into several varieties or subspecies.

Laccaria tortilis (Bolt.)S.F.Gray.

New to Iceland. I have referred two collections (AEY 219,8648) to this species. They were collected in Akureyri on almost bare and wet soil ("flag") in woodlands with planted trees.

It is very likely that also *Laccaria altaica* Sing. is present in the mountains.

LENTINELLUS Karst.*Lentinellus omphalodes* (Fr.)Karst.

Recorded by the author (1979). Frequent in the woodlands of NE-Iceland, growing on decaying stumps and sticks in the wood floor. Some collections seem to be near to *L.bisus* Quel., which is considered as a synonym by some authors.

*LEPISTA**Lepista luscina* (Fr.)Sing.

Reported by LARSEN (1932) and CHRISTIANSEN (1941) as *Tricholoma panaeolum* Fr. I have found similar specimens in grassy clearings in the woods of N.Iceland.

Lepista nuda (Fr.)Cooke.

Reported by M.LANGE (1949) as *Rhodopaxillus nudus* var. *lilaceus* from a garden in Reykjavík. I have not found this species.

LEPTOGLOSSUM Karst.*Leptoglossum acerosum* (Fr.)Moser.

New to Iceland. Found by the author at Víkurbakki and near Dalvík in Eyjafjörður (N.Iceland) (AEY 6991,8472), Sept. 1968. Collection AEY 1908 from Botnsdalur, SW.Iceland may represent this species or the related *L.tremulum* (Fr.)Sing. In depressions with low vegetation, preferably on sheep paths.

Leptoglossum lobatum (Fr.)Karst.

Recorded by ROSTRUP (1903) (s.n. *Cantharellus lobatus* (Pers.)Fr.) from Hofsfjall, Eyjafjörður (Ó.Davíðsson leg.) and by LARSEN (1932) (s.n. *Leptotus lobatus* (Pers.)Karst.) and by the author (1965,1979).

This species is quite common in all parts of the country and may be found at high altitudes, up to 1000 m in the Eyjafjörður area. It grows in wet habitats, preferably by springs, attached to various mosses such as *Philonotis fontana*, *Pohlia wahlenbergii* and *Cratoneuron commutatum*.

Leptoglossum muscigenum (Fr.) Karst.

Found by P. Larsen at Hallormsstaður, E. Iceland, 1922, and by D. Jakobsdóttir 1979 in Reykjavík, on the moss *Schistidium apocarpum* at a stone wall.

LYOPHYLLUM Karst.

Lyophyllum connatum (Fr.) Sing.

Recorded by the author (1969 and 1979). This ruderal mushroom is frequent in all lowland regions, growing gregariously at roadsides and on the soil-mounds beside new drainage ditches.

Lyophyllum fumosum (Fr.) Kühner & Romagnesi.

Recorded by E. ROSTRUP (1903) (s.n. *Tricholoma aggregatum* (Schaeff.)) and by M. LANGE (1949) as *Clitocybe aggregata* var. *ovispora* J. Lange.

It is strictly ruderal as the preceding species, often growing in compact clusters at the edge of new drainage ditches and roadsides, also in new grass fields, sometimes in great quantity. It is very variable in habitus but uniform in ecological respect.

MARASMIUS Fr.

Marasmius androsaceus Fr.

Recorded by G. KJARTANSSON (1948), after Jan Smarda from Hvalfjörður, and by the present author (1979). I have found it in Aðaldalur, NE. Iceland, Sept. 1968 (AEY 5188, 5142) on decaying needles and branchlets of *Juniperus communis* in a thick moss carpet, also in Ásbyrgi, NE-Iceland, July 1971, on *Juniperus*-needles, and in Vatnsdalur, NW. Iceland, August 1971 on stems of different plants in a birch copse.

Marasmius epidryas Kühn.

Recorded by the author (1965 and 1979). Common in all regions of the country. Seems to be strictly associated with *Dryas octopetala* often growing on the half-buried stems of it. Found up to an altitude of 600 m in Eyjafjörður district.

Marasmius tremulae Vel.

First record from Iceland. Only found at Grund in Eyjafjörður, August 1961, on decaying leaves of *Populus tremula* which was transplanted from Denmark about 1900. (AEY 111)

ROSTRUP (1903) reports further two species of *Marasmius* viz *M. insititius* Fr., from Hof in Eyjafjörður (Ó. Davíðsson leg.) and *M. vaillantii* Fr. from NW. Iceland. The last named species is also mentioned by C. H. CHRISTIANSEN (1941) from Lón, SE-Iceland, without description. These two species have not been recognized by later authors and might well belong to the species listed here.

MELANOLEUCA Pat.

Mushrooms of this genus are rather frequent in Iceland especially in open land with grasses and mosses, also in bogs. Even though only two species are mentioned in the older literature, there are reasonably about ten species native in Iceland. Most of them are very variable and difficult to identify, therefore only a few of them will be treated here.

Melanoleuca brevipes (Fr.) Pat.

Recorded by CHRISTIANSEN (1941) as *Tricholoma brevipes* (Bull.) Fr. It is rather common in the regions of N. and E. Iceland, where the climate is relatively continental, growing in dry habitats, often in *Dryas*-*Empetrum* heaths. The name '*M. oreina* Kühn & Mre probably fits better to some of the Icelandic specimens.

Melanoleuca cognata (Fr.) K. & M.

Recorded by P. LARSEN (1932) as *M. cognata* v. *elatior* Larsen, from Hallormsstaður, E. Iceland, and by CHRISTIANSEN (1941) from Laugar, NE. Iceland, growing in grassland. I have not found this species even though it should be easy to recognize.

Melanoleuca grammopodia (Fr.) Pat.

Recorded by the author (1979). Frequent in the same area as *M. brevipes*. It grows in rather wet meadows and borders of mires. Some of the Icelandic specimens may as well belong to *M. melaleuca*.

MYCENA (Fr.) S.F. Gray

There have been remarkably few records of this genus in Iceland, which is perhaps due to the ephemeral character of the carpophores and their dependence on weather conditions for growth. Besides my own collections I have studied some specimens collected by Morten Lange in the vicinity of Hveragerði, S. Iceland in 1959 which he kindly brought to my disposal.

Mycena aetites (Fr.) Quel.

Recorded by M. LANGE (1949) s.n. *M. ammoniaca* (Fr.) Quel. sensu Lge. from Reykjavík, and by the present author (1979). It has been found in several localities in the North and East of Iceland growing among grasses, generally outside the woods.

Mycena alcalina (Fr.) Kummer

Recorded by the author (1979). Only known from an old nursery garden (Gróðrarstöðin) in Akureyri growing on stumps and in the needle-bed of a plantation with *Larix* and *Picea*.

Mycena chlorinella (Lge.) Sing.

Recorded by CHRISTIANSEN (1941) as *M. leptcephala* Pers. from Mývatn and Vaglaskógur, NE. Iceland. Apparently frequent in the woodlands at least in the northeastern part of the country.

Mycena citrinomarginata Gill.

Recorded by the author (1979). First collected in Iceland by M. Lange in several localities around Hveragerði, S. Iceland.

It seems to be frequent in the birch woods of North-Iceland and in conifer plantations, growing on the forest floor in moss or decaying material. Also found in NW. and E.Iceland.

Mycena concolor (Lge.)Smith.

First record in Iceland. Found in Víkurbakki, Eyjafjörður, N.Iceland, Oct. 1967 and Sept.1968 (AEY 2800, 5426). Specimens from Vaglaskógur and Laxárdalur, NE-Iceland (AEY 5473, 673) have also been referred to this species but might as well belong to *M.cinereella* Karst. M.LANGE (1949) reports *M.pseudopicta*(Lge.)Kühn. from Reykjavík, which might be near related.

Mycena epipterigia (Fr.)S.F.Gray.

First recorded by the author (1979). Collected by M.Lange in Hveragerði, S.Iceland in 1959 (ML 695, 696). I have frequently found this species in and outside woodlands, generally in thick moss carpet (*Hylocomium*, *Rhytidiadelphus*, *Sphagnum*). Some of the specimens are close to *var. badiceps* M.Lange, which has been raised to specific rank by Horak s.n. *M.griseogilva*. (Horak 1963).

Mycena filopes (Fr.)Quel. sensu latu.

Mentioned by CHRISTIANSEN (1941) in a field note from Hallormsstaður, E.Iceland. Specimens of this group seem to be common in all regions of Iceland, generally outside the woods and some are collected in wet habitats, even among *Sphagnum*. They may include such species as *M.urania* (Fr.)Quel. and *M.vitrea*(Fr.)Quel.

Mycena galericulata (Fr.)Quel.

Recorded by the author (1979). First found in Hallormsstaður, E. Iceland, Sept. 1960 (AEY 12c) and later also in the woodlands of Egilsstaðir, E.Iceland, Aðaldalshraun and Vaglaskógur, N.Iceland. It grows on stumps of birch and in the leaf litter. Some of the specimens may be referred to *M.niveipes* Murr. or *M.parabolica* Fr.

Mycena praecox Vel.

Recorded by the author (1979). This is a preliminary determination for a species in the *alcalina*-group, which is common on stumps and dead branches in the birch woods of NE-Iceland.

Mycena psammicola Berk.& Curt.

New to Iceland. This tiny fungus is habitually very similar to a small *Galerina*. It was first collected by M.Lange 1959 near Hveragerði, S.Iceland, in *Racomitrium*- heath, up to an altitude of 600 m. (Determined as *M.galericolor* Favre). I have found it in some localities in North- and NW-Iceland (Vestfirðir) mainly in snow-patches with *Salix herbacea*, but also in mossy heaths and wetland borders. It is preferably a mountain plant, ascending to 500 m altitude.

Mycena pura (Fr.)Quel.

Recorded by the author(1969, 1979). This easily recognizable and pretty species is without doubt the commonest of the genus in Iceland and has been found in all regions. It grows mainly in woodlands, but is also frequent in dwarf shrub heaths. A common feature of its habitats is a thick moss carpet. The color of the pileus and stipe is variable depending on the amount of light available.

Mycena rubromarginata (Fr.) Gill.

New to Iceland. First found by the author in the woods of Fnjóskadalur, Sept. 1962. Since then it has been collected in many localities in all regions, except S.Iceland, but it is generally rather infrequent. It grows on rotten stumps and sticks in the birchwoods.

In addition to the species mentioned here P.LARSEN (1932) reported *Mycena avenacea* (Fr.) Quel from Seyðisfjörður, E.Iceland, which is possibly identical with *M.rubromarginata*. M.LANGE (1949) recorded *M.pseudopicta* (J.Lge.) Kühn. from Reykjavík and *M.sp.ad vitilis* from the neighbourhood of Hekla. Lange has also collected *Mycena sp.* near Hveragerði which he has labelled as *M.stylobates* but the specimen does not allow a definite conclusion.

MYCENELLA (Lge.) Sing.

Mycenella lasiosperma (Bres.) Sing.

New to Iceland. Only found in one locality, Botnsdalur, SW-Iceland, Sept. 1962 (AEY 1883) on mossy ground (*Rhytidiadelphus*). The specimen might as well belong to *M.bryophila* (Vogl.) Sing., since the cystidia are unbranched.

OMPHALINA Quel.

Some species of this genus are very common and widespread in Iceland especially in poorly vegetated localities and mountain habitats. A few of the species are known to form the so called basidion-lichens with green alge of the genus *Coccomyxa*. The identification of species is not easy, as microscopic characters are few and vague.

Omphalina ericetorum (Fr.) M.Lange.

Recorded by ROSTRUP (1903) from Hof in Hörgárdalur (Ó.Davíðsson leg.), also by P.LARSEN (1932) and CHRISTIANSEN (1941), s.n. *Omphalina umbellifera* (L.) Fr. I have found specimens of this kind in Akureyri and a few other localities in North-Iceland, growing in wet sand or mud at river sides. It has probably been confused with *Gerronema pseudogrisella*, which is frequent on river-banks.

Omphalina luteovitellina (Pil. & Nannf.) M.Lange.

New to Iceland. First found in Hlíðarfjall near Akureyri, ca. 500 m alt., Aug. 1962 (AEY 1504). Since then it has been collected in several localities in North- and NW-Iceland, growing on rather wet soil with sparse vegetation of mosses, on knolls in mires and even in (new) thermal areas (at Krafla, NE-Iceland). It is apparently always lichenized, forming a green mat of small globules (*Botrydina vulgaris* Bréb.) on the soil around the carpophores.

Omphalina onisca (Fr.) Quel.

Recorded by P.LARSEN (1932) and CHRISTIANSEN (1941) from several localities. It grows on swampy ground, among mosses, often with *Sphagnum*, and is probably rather frequent in all parts of Iceland. Some of the specimens might be referred to *O.philonotis* (Fr.) Quel.

Omphalina pyxidata (Fr.) Quel.

Recorded by CHRISTIANSEN (1941) and probably also by LARSEN (1932) as *Omphalia hepatica* (Batsch) Fr. This species is very common in all regions of Iceland, also at high altitudes up to 1000 m. Its main habitats are rather wet (at least temporarily) sandy and gravelly river sides and along rivulets and drainage channels in the mountains, also in wet moss around springs etc. It grows often gregariously and in great quantities.

Omphalina rustica (Fr.) Quel.

Recorded by CHRISTIANSEN (1941). This is one of the commonest gill fungi in Iceland, found in all regions of the country and reaching high altitudes in the mountains (850 m). It prefers damp ground sparsely vegetated with low mosses and lichens, but is also frequent on bare soil (flag) and on gravel flats (melar). In the mountains it is frequently met with in snow-patches, both with and without a vegetation cover, and this may perhaps be a distinct species, *O. obatra* Favre.

TEPHROCYBE Donk.

Tephroclybe tylicolor (Fr.) Moser.

New to Iceland. Only known from one locality, Hóll near Dalvík in Eyjafjörður, N. Iceland, Sept. 1968 (AEY 5445). It grew in a depression (snow-patch) mainly on sheep paths, sparsely vegetated by *Gnaphalium supinum* and *Racomitrium canescens*.

TRICHOLOMA (Fr.) Donk.

Several species of *Tricholoma* have been reported from Iceland (ROSTRUP, LARSEN, CHRISTIANSEN), but according to the modern systematics they do all belong to other genera, i.e. *Melanoleuca*, *Calocybe*, *Lepista* and *Lyophyllum*. In the last decades, however, some few species of *Tricholoma* sensu strictu have been discovered mainly in the woodlands of North-Iceland.

Tricholoma album (Fr.) Quel.

Reported by the author 1969 and 1979. First found in Vaglaskógur, N. Iceland, August 1967 (AEY 2880), then in some other birch woods in North-Iceland, and occasionally also in dwarf shrub heath. It has also been collected at Reykhólar, NW. Iceland. Always associated with birch (*Betula* spp.).

Tricholoma flavobrunneum (Fr.) Kummer.

Reported by the author 1969 and 1979. First found in Vaglaskógur, and in some other woodlands in the eastern part of North-Iceland, August-Sept. 1961. Also collected at Hallormsstaður, E. Iceland; in Botnsdalur, SW. Iceland, and at Skógar in Þorskafjörður, NV. Iceland. Only found in woods and scrubs, always connected with birch as the preceding species.

Tricholoma scalpturatum (Fr.) Quel.

Previously reported by the author (1979) as *T. terreum* (Fr.) Kummer. First found in Gróðrarstöðin in Akureyri, August 1960, then in

several localities in North- and East-Iceland. Seems to prefer young plantations with birch and conifers, but occurs also in native woods and in dwarf shrub heaths. Some of the collections might be referred to *T. terreum*, especially those from conifer plantations, but the distinction between these species is not very clear.

XEROMPHALINA R.Mre.

Xeromphalina caulicinalis (Fr.) Kühn. & Mre.

First reported by the author 1979. Found in the wood of Vaglaskógur already in August 1961, and frequently since then in the same wood. Also collected in Aðaldalshraun, N.Iceland, in woodland. It grows always in a thick moss carpet of *Hylocomium splendens* and *Rhytidiadelphus triquetrus*, often in great crowds.

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ÁGRIP Á ÍSLENZKU:

YFIRLIT UM ÍSLENZKAR TEGUNDIR AF SKALLSVEPPAÆTT

(ÍSLENZKIR HATTSVEPPIR V)

Á árunum 1960–1974 fékkst höfundur töluvert við athuganir á íslenzku stór - sveppum og söfnun á þeim. Var aðallega safnað á austanverðu Norðurlandi, en líka nokkuð á Austurlandi, Vesturlandi og Vestfjörðum. Sveppasafn þetta er nú hluti af grasasafni Náttúrugripasafnsins á Akureyri. Tegundir voru nafngreindar jafnóðum og þeim var safnað, eftir því sem tók voru á, en skortur á greiningar- bókum háði því starfi mjög fyrstu árin. Veturinn 1962–1963 voru endurskoðaðar allar greiningar á tegundum af skallsveppaættinni og skrifað bráðabirgðayfirlit um þær. Árið 1967 var atkvísilin *Mycena* einnig endurskoðuð sérstaklega, og sett saman grein um hana sem þó var ekki birt, fremur en hitt yfirlitið, enda var þess jafnan vænt að betur yrði hægt að gera á næstu árum.

Árið 1972 hóf ég aftur vinnu við greiningar á sveppasafninu, og voru þá teknar fyrir reifasveppaett (Amanitaceae), skermsveppaett (Lepiotaceae), vaxfönungaett (Hygrophoraceae) og nokkrar fleiri. Var greint frá niðurstöðum þeirrar rannsóknar í þremur ritgerðum, sem birtust í þessu tímariti 1.-3. árg. 1972–1974 undir fyrirsögninni Íslenzkir hattsvæppir (I-IV).

Ætlunin var að taka skallsveppaættina fyrir á sama hátt, en hvorttveggja er, að tegundafjöldi er þar meiri en í öðrum ættum íslenzkra hattsvappa, og ekki hefur gefist tími til að gera henni nein viðhlítandi skil. Á hinn bóginn hefur allmargra nýrra tegunda (fyrir landið) verið getið í ritsmíðum höfundar sem fyrst og fremst eru ætlaðar almenningi, einkum í "Sveppakverinu", sem út kom árið 1979 (16 tegundir nýjar af skallsveppaætt), og fyrirremurum þess (Sveppir til matar, 1967 og Íslenzkir matsveppir, 1969). Því taldi ég rétt að koma hér á framfæri þeim upplýsingum sem þegar liggja fyrir um íslenzkar tegundir af skallsveppaættinni og teljast mega nokkuð ábyggilegar, þótt vonandi verði hægt að birta mun ýtarlegri greinargerð síðar, þegar öll safneintök af ættinni hafa verið tekin til nákvæmrar endurskoðunar.

Í greininni sem hér birtist eru tilfærðar 59 "aðaltegundir" af skallsveppaætt. Af þeim hefur 23 tegunda verið getið héðan áður en höfundur hóf athuganir árið 1960. Um 24 tegundir aðrar hefur höfundur getið í fyrri ritgerðum sínum, en hinar 12 sem á vantar eru nú skráðar hér á landi í fyrsta skipti, þ.e. tegundirnar Calocybe naucoria, Clitocybe inornata, Gerronema setipes, Laccaria tortilis, Leptoglossum acerosum, Marasmius tremulae, Mycena concolor, Mycena psammicola, Mycena rubromarginata, Mycenella lasiosperma, Omphalina luteovitellina, og Tephrocybe tylicolor.

Á hinn bóginn hefur höfundur felld niður um 10 tegundir (eða tegundanöfn), sem getið er í eldri heimildum héðan, þ.e. Calocybe leucocephala, Calocybe gambosa, Clitocybe gilva, Clitocybe curtipes, Clitocybe tornata, Lyophyllum conglobatum, Marasmius insititus, Marasmius vaillantii, Mycena avenacea, Mycena pseudopicta, og Omphalina hepatica, þar sem eintök af þeim eru ekki fyrir hendi og ekki var hægt að fá þær staðfestar á annan hátt. Sumt af þessum "tegundum" kunna þó að reynast samnefni á þeim tegundum sem hér eru taldar fullgildar.

Loks er svo getið um 20 annara tegunda í greininni, sem miklar líkur eru til að vaxi hér á landi, og nánari rannsókn á sveppasafninu mun trúlega leiða í ljós, en nokkrar þeirra eru þó að líkindum samnefndar "aðaltegundunum".

Í ættkvíslunum Clitocybe, Melanoleuca, Mycena og Omphalina er fullvíst að til eru fleiri tegundir íslenzkar en hér eru nefndar og munu væntanlega koma í leitirnar síðar meir. Má því ætla að heildartala íslenzkra tegunda af skallsveppaættinni sé eitthvað í kringum 80-90.

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