

Short note

Index of unidentified ectomycorrhizae

III. Names and identifications published in 1992

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Introduction

Most of the “reference specimens” quoted below are preserved exclusively as permanent microscopical and color slides (Haug and Pritsch 1992). Reference specimens should always be referred to and be re-examined if difficulties arise in the interpretation of a species of ectomycorrhiza. This is both helpful and necessary, because the author who described that species selected the reference specimen as typical. Reference specimens thus have the same significance as type specimens of plants and fungi. Standardization of the selection, preservation and evaluation of reference specimens is necessary for comparable and verifiable characterization and consistent concepts of the species of ectomycorrhizae. When only permanent slides are preserved, no continuous studies are possible. Therefore, new mycorrhizal systems should be collected at the original collection sites and preserved in an appropriate fixative when preserved whole ectomycorrhizae as reference specimens are lacking.

In some cases, several voucher collections are listed as reference specimens, but a “reference specimen” can only be a single collection (Agerer 1987–1993; 1991). Accordingly, only one out of several listed voucher specimens (Haug and Pritsch 1992) was selected and quoted as “reference specimen selected”. TUB means: Herbarium, Institut für Biologie I, Lehrstuhl Spezielle Botanik, Universität Tübingen, Auf der Morgenstelle 1, D-72076 Tübingen, Germany.

Binomial index

Piceirhiza albofloccosa (Haug and Pritsch 1992: 36)

Reference specimen selected: Germany, Baden-Württemberg: Villingen, Schluchsee, Steinwald,

Hirschkopf, Pfalzgrafenweiler, fixation no. IH152 (TUB). A new reference specimen should be collected.

Piceirhiza argenteo granulosa (Haug and Pritsch 1992: 38)

Reference specimen: Germany, Baden-Württemberg: Villingen, fixation no. IH158 (TUB). A new reference specimen should be collected.

Piceirhiza ascosphinctrina (Haug and Pritsch 1992: 40)

Reference specimen selected: Germany, Baden-Württemberg: Villingen, Schluchsee, fixation no. IH139 (TUB). A new reference specimen should be collected.

Piceirhiza aurea (Haug and Pritsch 1992: 42)

Reference specimen: Germany, Baden-Württemberg: Villingen, Schluchsee, fixation no. IH167 (TUB). A new reference specimen should be collected.

Piceirhiza basidiosphinctrina (Haug and Pritsch 1992: 44)

Reference specimen: Germany, Baden-Württemberg: Villingen, Schluchsee, fixation no. IH151 (TUB). A new reference specimen should be collected.

Piceirhiza brunnea (Haug and Pritsch 1992: 46)

Reference specimen selected: Germany, Baden-Württemberg: Villingen, Schluchsee, fixation no. IH176 (TUB). A new reference specimen should be collected.

Piceirhiza echinata (Haug and Pritsch 1992: 48)

Reference specimen: Germany, Baden-Württemberg: Schluchsee, fixation no. KP45 (TUB). A new reference specimen should be collected.

Piceirhiza floccosa (Haug and Pritsch 1992: 50)

Reference specimen selected: Germany, Baden-Württemberg: Villingen, Schluchsee, fixation no. IH121 (TUB). A new reference specimen should be collected.

Piceirhiza glutinosa (Gronbach 1988: 89)

= *Elaphomyces granulatus* Fr.; (Haug and Pritsch 1992: 20)

Haug and Pritsch (1992) found hyphal connections between fruit bodies of *Elaphomyces granulatus* and ectomycorrhizae which were identical to *P. glutinosa*. In addition, fruit bodies of *E. granulatus* could be found in the collection sites where *P. glutinosa* was described by Gronbach (1988). Brand (1991) found similar ectomycorrhizae of *E. muricatus* Fr. on *Fagus sylvatica*. The emanating hyphae of *E. muricatus* ectomycorrhizae, however, were smooth in contrast to those of *E. granulatus* as shown by Haug and Pritsch (1992) and to those of *P. glutinosa* (Gronbach 1988).

Piceirhiza guttata (Gronbach 1988: 96)

= *Tylospora* sp.; (Haug and Pritsch 1992: 32)

Haug and Pritsch (1992) stressed that *P. guttata* is the ectomycorrhiza of *T. fibrillosa* (Burt) Donk, as already assumed by Taylor and Alexander (1991). Agerer (1993) indicated that *T. asterophora* (Bonord.) Donk could also possibly be responsible for the formation of *P. guttata*, since the fruit bodies of this species could be found at the collection sites where *P. guttata* was described by Gronbach (1988).

Piceirhiza lanuginosa (Haug and Pritsch 1992: 54)

Reference specimen selected: Germany, Baden-Württemberg: Villingen, Schluchsee, fixation no. IH109 (TUB). A new reference specimen should be collected.

Piceirhiza licheniformis (Haug and Pritsch 1992: 56)

Reference specimen selected: Germany, Baden-Württemberg: Schluchsee, fixation no. KP3 (TUB). A new reference specimen should be collected.

Piceirhiza luteomineralis (Haug and Pritsch 1992: 58)

Reference specimen selected: Germany, Baden-Württemberg: Villingen, Ziefle, fixation no. IH280 (TUB). A new reference specimen should be collected.

Piceirhiza maculata (Haug and Pritsch 1992: 60)

Reference specimen selected: Germany, Baden-Württemberg: Villingen, fixation no. IH147 (TUB). A new reference specimen should be collected.

Piceirhiza nuda (Haug and Pritsch 1992: 64)

Reference specimen selected: Germany, Baden-Württemberg: Villingen, fixation no. IH149 (TUB). A new reference specimen should be collected.

Piceirhiza parallela (Haug and Pritsch 1992: 66)

Reference specimen: Germany, Baden-Württemberg: Villingen, fixation no. IH294 (TUB). A new reference specimen should be collected.

Piceirhiza punctata (Haug and Pritsch 1992: 68)

Reference specimen selected: Germany, Baden-Württemberg: Villingen, Schluchsee, fixation no. IH146 (TUB). A new reference specimen should be collected.

Piceirhiza rosa-nigrescens (Haug and Pritsch 1992: 70)

Reference specimen: Germany, Baden-Württem-

berg: Schluchsee, fixation no. KP22 (TUB). A new reference specimen should be collected.

Piceirhiza rosea (Haug and Pritsch 1992: 72)

Reference specimen: Germany, Baden-Württemberg: Villingen, fixation no. KP18 (TUB). A new reference specimen should be collected.

Piceirhiza russuloides (Haug and Pritsch 1992: 74)

Reference specimen selected: Germany, Baden-Württemberg: Schluchsee, fixation no. IH125 (TUB). A new reference specimen should be collected.

Piceirhiza setosa (Haug and Pritsch 1992: 76)

Reference specimen: Germany, Baden-Württemberg: Villingen, Hirschkopf, Pfalzgrafenweiler, Ziefle, fixation no. IH374 (TUB). A new reference specimen should be collected.

Piceirhiza subtilis (Haug and Pritsch 1992: 78)

Reference specimen selected: Germany, Baden-Württemberg: Villingen, fixation no. IH360 (TUB). A new reference specimen should be collected.

Piceirhiza terrea (Haug and Pritsch 1992: 80)

Reference specimen: Germany, Baden-Württemberg: Villingen, mineral layer, fixation no. IH166 (TUB). A new reference specimen should be collected.

Piceirhiza testae (Haug and Pritsch 1992: 82)

Reference specimen selected: Germany, Baden-Württemberg: Schluchsee, fixation no. IH305 (TUB). A new reference specimen should be collected.

Piceirhiza viridis (Haug and Pritsch 1992: 84)

Reference specimen selected: Germany, Baden-Württemberg: Villingen, Schluchsee, fixation no. IH127 (TUB). A new reference specimen should be collected.

References

- Agerer R (1987–1993) Colour atlas of ectomycorrhizae, 1st–7th delivery. Einhorn, Schwäbisch Gmünd
- Agerer R (1991) Characterization of ectomycorrhiza. In: Norris JR, Read DJ, Varma AK (eds) Techniques for the study of mycorrhiza. Methods Microbiol 23:25–73
- Agerer R (1993) Index of unidentified ectomycorrhizae. II. Names and identifications published in 1991. Mycorrhiza 2:183
- Brand F (1991) Ektomykorrhizen an *Fagus sylvatica*. Charakterisierung und Identifizierung, ökologische Kennzeichnung und unsterile Kultivierung. Libri Bot 2:1–229
- Gronbach E (1988) Charakterisierung und Identifizierung von Ektomykorrhizen in einem Fichtenbestand mit Untersuchungen zur Merkmalsvariabilität in sauer beregneten Flächen. Bibl Mycol 125:1–217
- Haug I, Pritsch K (1992) Ectomycorrhizal types of spruce [*Picea abies* (L.) Karst.] in the Black Forest. A microscopical atlas. Kernforschungszentrum Karlsruhe
- Taylor AFS, Alexander IJ (1991) Ectomycorrhizal synthesis with *Tylospora fibrillosa*, a member of the Corticiaceae. Mycol Res 95:381–384