# Roridomyces appendiculatus and comments on the genus Roridomyces (Tricholomataceae, Agaricales)

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Accepted 28. 6. 2008

**Key words:** Basidiomycetes, Agaricales, Tricholomataceae, Mycena sect. Roridae, Roridomyces, Roridomyces appendiculatus. – Taxonomy, new combination. – Mycoflora of Italy.

**Abstract:** A detailed description, microscopical drawings and a colour plate of the extremely rare species *Roridomyces appendiculatus* is given based on an Italian collection. Further, the new combination *Roridomyces mauritianus* is proposed.

**Zusammenfassung:** Auf Basis eines Fundes aus Italien werden eine detaillierte Beschreibung, Mikrozeichnungen und eine farbige Abbildung der extrem seltenen Art *Roridomyces appendiculatus* gegeben. Weiters wird die Neukombination *Roridomyces mauritianus* vorgeschlagen.



Fig. 1. Roridomyces appendiculatus (WU 25336). - Phot. A. HAUSKNECHT.

Mycena rorida (SCOP.: FR.) QUÉL. was excluded from the genus Mycena by MAAS GEESTERANUS (1989: 346, 1991: 565) because of the entirely different hymeniform pileipellis structure. However, he did not erect a new genus for it. In his thesis REXER (1994: 132) created the new genus Roridomyces with Mycena rorida as type. He recombined several tropical species from this relationship in Roridomyces and published the new European species, Roridomyces appendiculatus REXER. At that time in the International Code of Botanical Nomenclature PhD theses were mostly considered as indelible autographs (GREUTER 1994). According to the code (GREUTER 1994, 2000) taxonomic novelties in indelible autographs produced after 1 January 1953 are not effectively published. Indelible autographs were handwritten material reproduced by some mechanical or graphic process (such as lithography, offset, or metallic etching). The status of Ph.D. theses reproduced by a commercial printer remained somewhat unclear. In the following HORAK (2005: 509) considered the taxa erected by REXER (1994) as not effectively published and proposed the new genus Roridella. This situation was rendered more precisely in MCNEILL & al. (2006: 56) in article 30: "30.5. Publication on or after 1 January 1953 of an independent non-serial work stated to be a thesis submitted to a university or other institute of education for the purpose of obtaining a degree is not effectively published unless it includes an explicit statement (referring to the requirements of the Code for effective publication) or other internal evidence that it is regarded as an effective publication by its author or publisher." and explicitely in Example eight: "Ex. 8. The dissertation 'Die Gattung Mycena s.l.' by Rexer, submitted to the Eberhard-Karls-Universität Tübingen, was effectively published in 1994 because it bore the statement 'Druck: Zeeb-Druck, Tübingen 7 (Hagelloch) ', referring to a commercial printer. The generic name Roridomyces REXER, typified by Agaricus roridus SCOP., and combinations in Mycena are therefore validly published. The generic name Roridella E. HORAK (Röhrlinge und Blätterpilze in Europa: 509. 2005), also published with A. roridus SCOP. as type, is illegitimate (Art. 52.1)."

In his monographic study of the genus *Mycena* in Europe ROBICH (2003) maintains section *Roridae* KÜHNER with some doubt as well as its type species *Mycena rorida* (SCOP.: FR.) QUÉL. in the genus *Mycena*. Stating that up to now no suggestions were made for a new placement of *M. rorida* or for a new genus, ROBICH (2003) obviously was not aware of REXER (1994). In ROBICH & HAUSKNECHT (2001) a worldwide key to section *Roridae* (12 species) is presented. Of these species only a minor part has been transferred to *Roridomyces* as yet (REXER 1994). As it has now been clarified that the genus *Roridomyces* is effectively published, it would be necessary to recombine the remaining taxa. Nevertheless, we only transfer *Mycena mauritiana* ROBICH & HAUSKN., which was collected by the first author of the present paper in Mauritius.

Roridomyces mauritianus (ROBICH & HAUSKN.) HAUSKN. & KRISAI, comb. nova Basionym: Mycena mauritiana ROBICH & HAUSKN. 2001, Österr. Z. Pilzk. 10: 75.

A collection from Italy in WU was determined by E. HORAK as *Roridella appendiculata*. This species is almost unknown in European literature (except GRÖGER 2006: 335). Further, the collection from Italy deviates slightly from the original description (REXER 1994) in some respects, therefore we present a detailed macro- and microscopical documentation including a colour photograph.



Fig. 2. Roridomyces appendiculatus. a spores,  $\times$  2000, b basidia,  $\times$  800, c cheilocystidia,  $\times$  800, d caulocystidia,  $\times$  800, e pileipellis,  $\times$  800.

## Roridomyces appendiculatus REXER (Fig. 1, 2)

#### Characters:

Pileus: 3-7 mm wide, up to 5 mm high, flat convex, conical-convex, later also centre applanate, margin crenate, plicate-sulcate; white, hyaline white, centre weakly yellowish, hygrophanous, slightly striate when very moist; surface smooth, pileus centre minimally pruinose, slightly shining, but not slimy or sticky.

Lamellae: decurrent, thickish, distant, slightly ventricose, with lamellulae, white, lamellar edge indistinct.

Stipe: 5-12 mm long, 0.7-1 mm thick, filamentous, base slightly enlarged, but not bulbous, pure white, hyline white, base only with faint yellowish hue, entirely fine granulose.

Context: thin, brittle, hyaline white, smell indistinct.

Spores:  $10\text{-}13 \times 4\text{-}5 \mu m$ , mean  $11.3 \times 4.3 \mu m$ , Q = 2.1-3.0, elongate-ellipsoidical, elongate-lacrymoid, partly slightly constricted, apex rounded, hyaline, distinctly amyloid.

Basidia: 2-(3-, 4-)spored,  $18-23 \times 6-9 \mu m$ , sterigmata 4-10  $\mu m$  long.

Clamp connections: everywhere frequent.

Cheilocystidia:  $20-45 \times 5-8 \mu m$ , fusiform, lanceolate, cylindrical, often indented, rarely apically slightly capitate, hyaline, thin-walled, lamellar edge sterile.

Pleurocystidia: absent.

Caulocystidia:  $30-70 \times 4-7 \mu m$ , lanceolate, cylindrical, very often diverticulate to knobbily branched, covering the whole stipe.

Trama: everywhere distinctly dextrinoid.

Pileipellis: hymeniform consisting of spheropedunculate elements (22-45  $\times$  8-18  $\mu$ m), some with rostellate to digitiform excrescences or also constricted, excrescences up to  $10 \times 2 \mu$ m.

Habitat: on dead Rubus-twigs.

Collection examined: Italy: Marche, Pesaro e Urbino, Serravalle, Monte Nerone, 13. 10. 2004, leg. P. PRINTZ (WU 25336).

### Comments:

The Italian collection deviates slightly macroscopically from the description by REXER (1994: 132). The basidiocarps are more tender, the stipe is shorter, the pileus is almost white, only the centre being weakly pigmented, and despite humid weather conditions no slimy layer could be observed on the much lighter stipe. Obviously the basidiocarps were weaker developed, not on twigs of deciduous trees in riverine forests but on *Rubus*-twines at a moderately humid site in mixed deciduous forest (predominantely *Quercus*). Also microscopically there are slight differences: the excrescences of the pileipellis cells are rarer, also shorter, the cheilocystidia hardly capitate, without excrete, and the caulocystidia longer and much more diverticulate.

Roridomyces appendiculatus has as yet only been known from two different localities in Baden-Württemberg, Germany. Whether the minor differences have an infraspecific taxonomic value at all can only be cleared after further finds from more sites.

We thank E. HORAK for determination of our collection as well as H.-O. BARAL and K.-H. REXER for providing valuable literature and G. ROBICH for reviewing the manuscript.

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Band/Volume: 17

Autor(en)/Author(s): Hausknecht Anton, Krisai-Greilhuber Irmgard

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