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## *Mycena dura*, a new species of sect. *Calodontes* subsect. *Purae* from Austria

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Abstract: Mycena dura, discovered in Austria and recognized as a member of sect. Calodontes subsect. Purae, is described as a new species, whose tough, silvery white stipe is its outstanding feature. The characters of the new species are compared with those of the other members of the subsection.

Zusammenfassung: Mycena dura, eine neue Art aus der Sekt. Calodontes Subsekt. Purae, wurde in Österreich entdeckt. Ihr auffälligstes Merkmal ist der besonders feste, silbrig weiße Stiel. Die Merkmale der neuen Art werden mit jenen der übrigen Arten der Subsekt. Purae verglichen.

In late fall of 1991, a fungus was brought to our attention which had been mistaken for *Marasmius oreades* and subsequently consumed by several people, as a result of which three persons had to be admitted to the hospital with symptoms of poisoning. The offending fungus turned out to be a thus far unknown member of *Mycena* subsect. *Purae*, here described as a new species.

Appreciative acknowledgment is made to Dr U. PASSAUER for collecting material of the new species and most kindly placing this at our disposal. Grateful mention is also made of Dr PASSAUER's intermediary in obtaining medical data from the hospital.

## Mycena dura MAAS G. & HAUSKNECHT, spec. nova1 (Colour fig. I, Figs. 1-6)

Basidiomata plerumque fasciculata. Pileus 20-60 mm latus, e conico subcampanulatus, (praesertim cum aetate) rugulosus, translucente striatus, glaber, varie coloratus, initio purpureofuscus, postea roseobrunneus vel subbrunneo-incarnatus, demum subgriseo-aurantiacus, margine sordide pallideque griseoflavus. Caro firma, alba, odore saporeque *Mycenae purae*. Lamellae 35 vel ultra stipitem attingentes, molles, adscendentes, usque ad c. 5 mm latae, ventricosae, anguste adnatae, leves vel venosae, e pallide roseis albidae. Stipes 35-80 x 5-13 mm, cavus, durus, aequalis, cylindraceus, subtortuosus, procerus vel curvatus, tenui-sulcatus, magna ex parte glaber, nitens, al-

<sup>&</sup>lt;sup>1</sup> Etymology: Latin: durus = tough, rigid; referring to the consistency of the stipe.

bus, apice puberulus, basi albo-tomentosus. Sporae  $8,1-9,8 \times 5,4-6,3 \mu$ m, inaequaliter ellipsoideae, leves, amyloideae. Basidia  $30-37 \times 6-7 \mu$ m, clavata, 4-spora, fibulata, sterigmatibus 5,5-6,5 µm longis praedita. Cheilocystidia 65-100 x 13,5-22,5 µm, fusiformia, fibulata. Pleurocystidia haud numerosa, cheilocystidiis similia. Trama lamellarum iodi ope rubrobrunnea. Hyphae pileipellis 2,7-4,5 µm latae, fibulatae, leves. Hyphae stipitis corticales 1,8-2,7 µm latae, fibulatae, leves; caulocystidia 45-60 x 4,5-10 µm, fusiformia, cylindracea, apice attenuata.

In pratis.

Holotypus: Austria, Burgenland, Trausdorf prope Eisenstadt, 20. 10. 1991, U. PASSAUER (No. 988.279-754, L); isotypus in WU 10315.

Pileus: 20-60 mm across, conical, later more flattened and conical-campanulate, apically fairly acute to obtuse, especially with age radiately rugulose, translucent-striate when moist, glabrous, hygrophanous, variously coloured, at first very dark brown with some purplish shade (KORNERUP & WANSCHER 1975: 9F5, 9EF 5), soon becoming paler, greyish brown, pinkish-purplish brown (9DE4, 8E4, 8D4), then losing all purplish or pinkish tints and turning a greyed orange, with a yellowish beige margin (5B4-5A2).

Lamellae: more than 35 reaching the stipe, tender, ascending, up to c. 5 mm broad, ventricose, narrowly adnate, without decurrent tooth, at first smooth, then ribbed, often dorsally intervenose and anastomosing, for a long time remaining pale pink, finally white, with concolorous edge.

Stipe: 35-80 x 5-13 mm, hollow, tough, rigid, equal, terete but often more or less distorted, straight to somewhat curved, longitudinally sulcate, glabrous for the greater part, white with a silvery lustre, apically puberulous, white-tomentose at the base.

Context: firm, whitish in the pileus, pure white in the stipe. Odour and taste very much resembling those of *Mycena pura*.

Spores: 8.1-9.8 x 5.4-6.3 µm, pip-shaped, amyloid.

Basidia:  $30-37 \times 6-7 \mu m$ , slender-clavate, 4-spored, clamped, sterigmata 5.5-6.5  $\mu m$  long.

Cheilocystidia: 65-100 x 13.5-22.5  $\mu$ m, intermixed with basidia (lamellar edge heterogeneous), fusiform, clamped, more or less long-stalked with colourless contents.

Pleurocystidia: not numerous, similar to cheilocystidia.

Lamellar trama: reddish brown in MELZER's reagent.

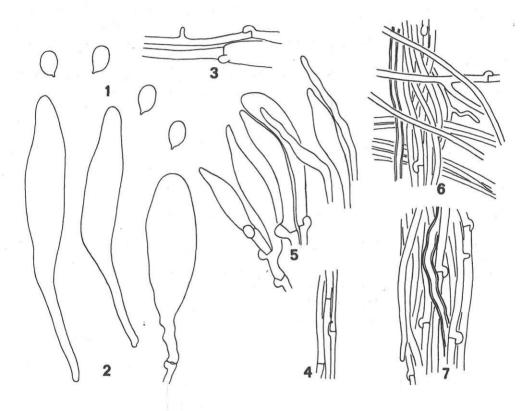
Hyphae of the pileipellis:  $2.7-4.5 \ \mu m$  wide, clamped, smooth. Hyphae of the cortical layer of the stipe  $1.8-2.7 \ \mu m$  wide, clamped, smooth. Caulocystidia mainly near the apex of the stipe, rather scarce,  $45-60 \ x \ 4.5-10 \ \mu m$ , fusiform, cylindrical, apically more or less pronouncedly narrowed. Hyphae at the base of the stipe formig a silky weft, not tightly cohering, of two kinds: (1)  $1.8-2.7 \ \mu m$  wide, clamped, thin-walled, numerous; (2)  $2.5-3.5 \ \mu m$  wide, clampless, thick-walled, scattered.

**Habit and habitat:** Mostly densely fasciculate, hundreds of specimens were found at the edge of an airfield in ruderal grassland and in company of such thermophilic species as *Agaricus maskae* PILÁT and *A. pseudopratensis* (BOHUS) WASSER.

**Poisonous substance:** The symptoms shown by all poisoned persons suggest a substance containing muscarin, possibly the same as in *Mycena rosea*. However, the

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progress of the poisoning proved to be much more dramatic and, more particularly, was extended for a longer period than has been recorded for *rosea*-poisoning (KUBIČKA & VESELSKÝ 1978). One of the persons, an old woman, needed treatment for almost two weeks. Although nothing can be said about the quantity of the fungus consumed, there is little doubt that *Mycena dura* is the most poisonous member of the genus in Europe.



Figs. 1-6. *Mycena dura* (holotype, L). - 1. Spores. - 2. Cheilocystidia. - 3. Hyphae of the pileipellis. - 4. Hyphae of the cortical layer of the stipe. - 5. Caulocystidia. - 6. Loosely cohering hyphae which form the soft tomentum at the base of the stipe. - Fig. 7. *Mycena pura* (The Netherlands, Oost-Flevoland, Abbert, 31. 10. 1981, leg. Mrs TJALLINGII-BEUKERS, L). Tightly cohering hyphae forming one of the fibrils at the base of the stipe. - All figs. x 700.

The general aspect of the present species is undeniably that of a member of the *Mycena pura*-group, but its colours match none of the species thus far described. It seemed wise, however, not to rely on colours alone. Table 1, comparing several characters of the members of subsect. *Purae* with narrowly adnate lamellae, conclusively shows that *Mycena dura* is a species in its own right.

Species	Habit densely fasciculate	Young pileus dark	Stipe tough	Stipe white	Basal part of stipe with coarse fibrils	Cheilocystidia forming a sterile band
M. diosma	+/-	+	-	-	+	+
M. pura		÷.	+	+/-	+	+
M. rosea	-	<b>H</b> 7		+/-	+	+
M. dura	+	+	+	+	-	-

Table 1. Several discriminating characters of some Mycena subsect. Purae species

Since *M. dura* was found in company with some thermophilic members of *Agaricus*, this prompted the suggestion that the species could well have been described already by an earlier author whose work is still largely neglected: J. VELENOVSKÝ. He described among many other new Mycenas a *M. legionaria* (VELENOVSKÝ 1940: 88) which was said to have the habit of *M. pura* and a dingy argillaceous pileus with a dark brown umbo, but several differences separate this species from *M. dura*. VELENOVSKÝ (1940) described the habit as non-caespitose, the context as odourless, the lamellae as permanently white, and the stipe as fragile and dingy fuscous. No other *Mycena* described by VELENOVSKÝ [1922 (translated by PILÁT 1948), 1947] appears to have any relation with our new species.

## References

KORNERUP, A., WANSCHER, J. H., 1975: Taschenlexikon der Farben, 2. Aufl. - Zürich, Göttingen: Muster-Schmidt.

KUBIČKA, J., VESELSKÝ, J., 1978: Mycena rosea (BULL.) ex SACC. et DALLA COSTA ist giftig. - Česka Mykol. 32: 167-168.

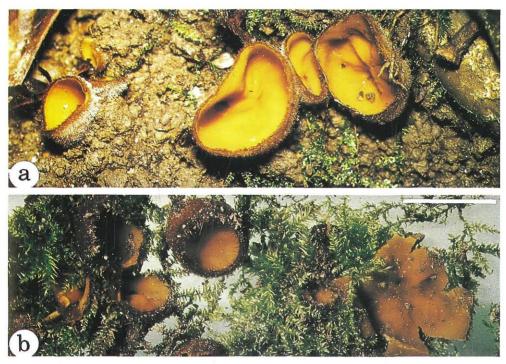
PILAT, A., 1948: VELENOVSKYI species novae Basidiomycetum. - Pragae.

VELENOVSKÝ, J., 1940: Novitates mycologicae. - Pragae.

- 1947: Novitates mycologicae novissimae. - Pragae.



Colour fig. I. Mycena dura (WU 10315, holotype), x 0.7.



Farbige Abb. II. *Humaria aurantia*. Habitus. a Fund aus dem Rheinauenwald, Kollektion und Foto: G. MÜLLER, b Fund aus dem Wiener Donauauenwald, WU 12837, Foto: W. KLOFAC. Maß für a und b: 1 cm.

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