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# MYCENA VALIDA, A NEW MEMBER OF SECTION FRAGILIPEDES FROM GERMANY

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Mycena valida, collected in the 'Schwarzwald', Germany, and one of the few nitroussmelling members of section *Fragilipedes* associated with conifers, is proposed as a new species.

The present species, found in the part of Germany called 'Schwarzwald', drew the attention by the large size of its fruit-bodies and their robust stature. The second author made colour photos and took some material home for inspection, only to find that it could not be satisfactorily named. Subsequent analysis disclosed a sufficient number of macro- and microscopic elements to warrant the proposal of a new species.

## Mycena valida Maas G. & Münzmay, spec. nov. — Figs. 1-7

Basidiomata partim caespitosa. Pileus 20-40 mm latus, e conico applanatus, umbonatus, margine sulcatus, striatus, albo-pruinosus, flavido-brunneus. Caro tenuis, odore nitroso. Lamellae 17-20 stipitem attingentes, molles, adscendentes, usque ad 4 mm latae, ventricosae, liberae, aetate venosae et intervenosae, albidae, roseo-afflata, margine concolores. Stipes  $45-60(-100) \times 2-4$  mm, cavus, fragilis, aequalis, cylindraceus, levis, tenuiter pruinosus, griseobrunneus, apice albidus, basi albo-fibrillosus.

Basidia  $30-38\times7-8~\mu m$ , clavata, 4-sporigera, fibulata. Sporae  $8.1-10.7\times5.4-6.3~\mu m$ , inaequilateraliter ellipsoideae, leves, amyloideae. Cheilocystidia  $28-60\times7-15\times2.5-4.5~\mu m$ , fusiformia, fibulata, levia vel apice subramosa. Pleurocystidia subfusiformia, cylindracea, sublageniformia. Trama lamellarum iode ope vinescens. Hyphae pileipellis  $1.8-3.5~\mu m$  latae, fibulatae, praecipue apicem versus ramosae, haud in materiam gelatinosam immersae. Hyphae stipitis corticales  $1.8-2.5~\mu m$  latae, fibulatae, leves, in materiam gelatinosam immersae, cellulae terminales diverticulatae.

Piceicola.

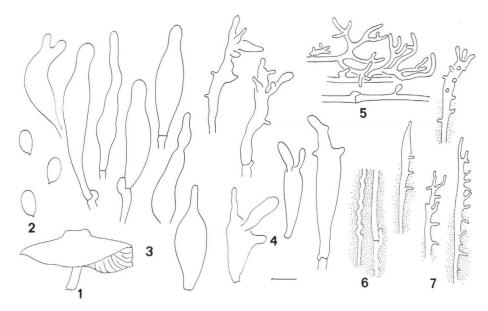
Holotypus: G. Saar & Th. Münzmay H18-95 (L, No. 993.342-028).

Etymology: validus, robust, in reference to the robust habitus.

Basidiomata in part cespitose. Pileus 20–40 mm across, at first conical, flattening with age, conspicuously umbonate, sulcate at the margin, translucent-striate, entirely white-pruinose, evenly coloured warm beige-brown. Context thin, pale. Odour nitrous, taste not recorded. Lamellae 17–20 reaching the stipe, tender, ascending, up to 4 mm broad, ventricose, free, with age developing veins and becoming intervenose, white to greyish-whitish, becoming flushed with pink, with convex, concolorous edge. Stipe  $45-60(-100) \times 2-4$  mm, hollow, fragile, equal, terete, smooth, delicately pruinose, at first watery horn grey, then from the base upwards turning reddish brown, the apex remaining pale for a long time (resulting in the stipe appearing two-coloured), the base densely covered with coarse, long, whitish fibrils.

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Figs. 1-7. Mycena valida (holotype). 1. Pileus (of dried specimen); 2. spores; 3 cheilocystidia (near the middle of the lamella); 4. cheilocystidia (near the margin of the pileus); 5. hyphae of the pileipellis; 6. hyphae of the cortical layer of the stipe; 7. terminal cells of hyphae of the cortical layer of the stipe. Fig. 1,  $\times$  1.5; all others,  $\times$  700; bar = 10  $\mu$ m.

Basidia  $30-38\times7-8~\mu m$ , slender-clavate, 4-spored, clamped, with sterigmata up to 5.5  $\mu m$  long. Spores  $8.1-10.7\times5.4-6.3~\mu m$ , pip-shaped, smooth, (greyish) amyloid. Cheilocystidia  $28-60\times7-15\times2.5-4.5~\mu m$ , forming a sterile band, (a) near the middle of the lamella fusiform, clamped, thin-walled, smooth, upwards passing into a more or less strongly narrowed but always round-tipped neck, (b) near the pileus margin often subclavate, apically branched or covered with coarse excrescences  $2.5-18\times2.5-6.5~\mu m$ . Pleurocystidia frequently more slender than the cheilocystidia, subfusiform, cylindrical or sublageniform. Lamellar trama violet-vinescent in Melzer's reagent when fresh, orange-brown when dried. Pileipellis a cutis of repent, radiately aligned hyphae which are  $1.8-3.5~\mu m$  wide, clamped, not embedded in gelatinous matter, partly smooth, much branched towards their apices, with side-branches  $0.9-1.8~\mu m$  wide. Hypoderm made up of parallel hyphae with inflated cells up to  $30~\mu m$  wide. Hyphae of the cortical layer of the stipe  $1.8-2.5~\mu m$  wide, clamped, smooth, embedded in gelatinous matter, the terminal cells  $3.5-4.5~\mu m$  wide, covered with not very numerous, cylindrical, simple to furcate, straight to curved excrescences  $1.8-10\times0.9-2~\mu m$ .

Growing on and around Picea stumps, c. 900 alt.

Material examined. 'Germany, Schwarzwald, Bräunlingen, Kirnbergsee, on calcareous soil ('Muschelkalk'), 5 October 1995, G. Saar and Th. Münzmay H18-95' (holotype; L, No. 993.342-028; isotype in Herb. Münzmay).

Mycena valida is yet another member of the ever growing section Fragilipedes ((Fr.) Quél.) which contains several species characterized by a nitrous smell. Perhaps, M. abram-

sii (Murrill) Murrill and M. stipata Maas G. & Schwöbel are the two species most likely to be confused with M. valida.

In *M. abramsii* (Maas Geesteranus, 1988: 50), the spores are rather more cylindrical than pip-shaped; many of the cheilocystidia have acute apices; the hyphae of the cortical layer of the stipe are not embedded in gelatinous matter.

Mycena stipata (Maas Geesteranus, 1988: 287) differs from M. valida in having adnate lamellae, decurrent with a short tooth; yellowish shades in the colour of the stipe; and hyphae of the pileipellis being embedded in gelatinous matter.

Of these two species, Mycena stipata is more closely related to M. valida.

A further pronouncedly umbonate, nitrous-smelling species, macroscopically not unlike *Mycena valida*, is *M. algeriense* Maire apud Kühner (1938: 490, 685, fig. 166). However, the latter is a species associated with broad-leaved trees, its pileus is said to be "glaber," its lamellae "adnées," and the "Epicutis pileique ... nettement gélatineux."

Following the key to the *Fragilipedes* (Maas Geesteranus, 1988: 45), one is led to *M. leptocephala* (Pers.: Fr.) Gillet, but this is an entirely different species, slender-stalked and with characteristically inflated terminal parts of the caulocystidia.

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