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 nitrous-smelling members of section *Fragilipes* 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 planus, umbonatus, margin sulcatus, striatus, albo-pruinosus, flavido-brunneus. Caro tenuis, odore nitroso. Lamellae 17–20 stipitem attingentes, molles, adscendentes, usque ad 4 mm latae, ventricoseae, liberae, aetate venosae et intervenosae, albidae, roseo-afflata, margine concolores. Stipes 45—60(—100) x 2-4 mm, cavus, fragilis, aequalis, cylin-draveae, leviter pruinosus, griseobrunneus, apice albidus, basi albo-fibrillosus.

Basidia 30–38 x 7–8 µm, clavata, 4-sporigera, fibulata. Sporae 8.1–10.7 x 5.4–6.3 µm, inequilatero-litere ellipsoideae, levae, amyloideae. Cheilocystidia 28–60 x 7–15 x 2.5–4.5 µm, fusiformia, fibulata, levia vel apice subramosa. Pleurocystidia subfusiformia, cylindracea, sublageniformia. Trama lamellarum iode ope vincescens. Hyphae pileipellis 1.8–3.5 µm latae, fibulatae, praecipue apicem versus ramosae, haud in materiam gelatinosam immersae. Hyphae stipitis corticales 1.8–2.5 µm latae, fibulatae, levae, in mater- riam gelatinosam immersae, cellulae terminales diverticulatae.

*Piceicola.*


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) x 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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Basidia 30–38 × 7–8 μm, slender-clavate, 4-spored, clamped, with sterigmata up to 5.5 μm long. Spores 8.1–10.7 × 5.4–6.3 μm, pip-shaped, smooth, (greyish) amyloid. Cheilocystidia 28–60 × 7–15 × 2.5–4.5 μm, 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 sub-clavate, apically branched or covered with coarse excrescences 2.5–18 × 2.5–6.5 μm. 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 μm wide, clamped, not embedded in gelatinous matter, partly smooth, much branched towards their apices, with side-branches 0.9–1.8 μm wide. Hypoderm made up of parallel hyphae with inflated cells up to 30 μm wide. Hyphae of the cortical layer of the stipe 1.8–2.5 μm wide, clamped, smooth, embedded in gelatinous matter, the terminal cells 3.5–4.5 μm wide, covered with not very numerous, cylindrical, simple to furcate, straight to curved excrescences 1.8–10 × 0.9–2 μm.

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 Fragilipes ((Fr.) Quél.) which contains several species characterized by a nitrous smell. Perhaps, M. abram-
Mycena valida

$sii$ (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 “Épicutis pileique ... nettement gelatineux.”

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.

REFERENCES

Kühner, R. 1938. Le genre Mycena (Fries). Encycl. mycol. 10.