

Two new *Mycena* species from La Réunion (France, Africa)

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Abstract: *Mycena conglobata*, a member of section *Euspeireae*, and *Mycena heluensis* of section *Clavulares*, collected in La Réunion, are proposed as new. Colour plates of both species are presented, and they are compared with similar species, with which they have several features in common.

Zusammenfassung: *Mycena conglobata* aus der Sektion *Euspeireae* und *Mycena heluensis* aus der Sektion *Clavulares*, beide aus dem französischen Überseedepartement La Réunion, werden als neue Arten vorgestellt und farbig abgebildet. Vergleiche zu nahestehenden Arten, die ähnliche Eigenschaften aufweisen, werden angestellt.

During a second visit of the island La Réunion in 1996, together with G. WÖLFEL, Erlangen, the second author discovered several mycenoid fungi, two of which prove to be undescribed *Mycena* species. Together with *Mycena pallescens* MAAS G. & HAUSKN. (MAAS GEESTERANUS & HAUSKNECHT 1995), this brings the number of new *Mycenas* from La Réunion up to three.

Mycena conglobata MAAS G. & HAUSKN., spec. nova¹ (Colour fig. I; Figs. 1-6)

Basidiomata fasciculata. Pileus 4-15 mm latus, usque ad 6 mm altus, e hemisphaerico plano-conicus, haud umbonatus, striatus, viscidus, glaber, hygrophanus, recens bicolor, centro griseobrunneus, marginem versus albidopallidus. Caro sublenta, odore farinaceo. Lamellae 18-20 stipitem attingentes, molles, arcuatae, decurrentes, e griseo-albo albidae vel roseae. Stipes 20-45 x 1-1,5 mm, cavus, fragilis, aequalis, cylindraceus, viscidus, levis, glaber, albidus, deorsum griseus, basi fibrillis albis dense instructus.

Basidia 16-18 x 4,5-5,5 μm , clavata, 4-sporigera, fibulata, sterigmatibus 4,5 μm longis praedita. Sporae 4,5-5,4 x 2,2-2,7 μm , inaequilateraliter ellipsoideae, leves, amyloideae. Cheilocystidia 35-45 x 3,5-5 μm , cylindracea, fibulata, stipitata, levia,

¹ Etymology: Latin: conglobatus, accumulated; referring to the densely fasciculate growth of the basidiomes.

apice obtusa, haud in materiam gelatinosam immersa. Pleurocystidia nulla. Trama lamellarum iodi ope brunneovinescens. Hyphae pileipellis 0,9-1,8 μm latae, fibulatae, sparse ramosae, leves, in materiam gelatinosam immersae. Hyphae stipitis corticales 1,8 μm latae, fibulatae, leves, in materiam gelatinosam immersae; cellulae terminales 60-100 x 4,5-5,5 μm , cylindratae vel subfusiformes, leves.

Arboricola.

Holotypus: La Réunion (France, Africa), Plaine des Palmistes, Sentier Botanique de Petite Plaine, 8. 3. 1996, A. HAUSKNECHT RE 31 & G. WÖLFEL (L 993.111-875; isotypus in WU 16167).

Pileus: 4-15 mm across, up to 6 mm high, at first somewhat level hemispherical-convex, flattening to plano-conical, not umbonate, translucent-striate from margin to disc, viscid, covered with a completely separable pellicle, glabrous, hygrophanous, fresh two-coloured, the disc fairly dark grey-brown (KORNERUP & WANSCHER 1975: 6D4-6E4), towards the margin pale greyish white with a slight orange touch (6B2, 5A2), the whole turning whitish with age.

Lamellae: 18-20 reaching the stipe, tender, arcuate, c. 1 mm broad, smooth when young, later dorsally reticulately interconnected (the hymenophore almost poroid when seen from beneath), at first greyish white, then white to pale pink, with the edge seemingly gelatinized, not separable as a tough thread, concolorous with the sides.

Stipe: 20-45 x 1-1.5 mm, hollow, pliant when fresh, fragile when dry, equal, terete, viscid, towards the base often agglutinated with other stipes to form a solid bundle, smooth, glabrous, greyish white, apically white, towards the base horn grey to dark grey, the base densely covered with white fibrils.

Context: rather tough, partially stained with rusty spots on drying. Odour farinaceous, taste not recorded.

Basidia: 16-18 x 4.5-5.5 μm , slender-clavate, 4-spored, clamped, with 4.5 μm long sterigmata.

Spores: 4.5-5.4 x 2.2-2.7 μm , pip-shaped, smooth, amyloid.

Cheilocystidia: 35-45 x 3.5-5 μm , forming a sterile band, projecting 18-26 μm , almost cylindrical, clamped, more or less long-stalked, smooth, apically obtuse, not embedded in gelatinous matter.

Pleurocystidia: absent.

Lamellar trama: brownish vivescent in Melzer's reagent.

Pileipellis: an ixocutis of radiately aligned hyphae near the upper surface, of fairly sparsely branched hyphae farther below, with the hyphae 0.9-1.8 μm wide, clamped, smooth.

Hypoderm: made up of parallel inflated hyphae.

Hyphae of the cortical layer of the stipe: 1.8 mm wide, clamped, smooth, embedded in gelatinous matter, often tortuous, with terminal cells 60-100 x 4.5-5.5 μm , cylindrical to subfusiform, smooth, apically obtuse.

Habitus and habitat: growing densely fasciculate with up to 200 pilei on decaying dicotyledonous trees (once found very probably on *Sideroxylon* sp.) in rain forest in a zone between 150 m s. m. and 1500 m s. m. The species turned out to be almost one of the commonest members of *Agaricales* at this time.

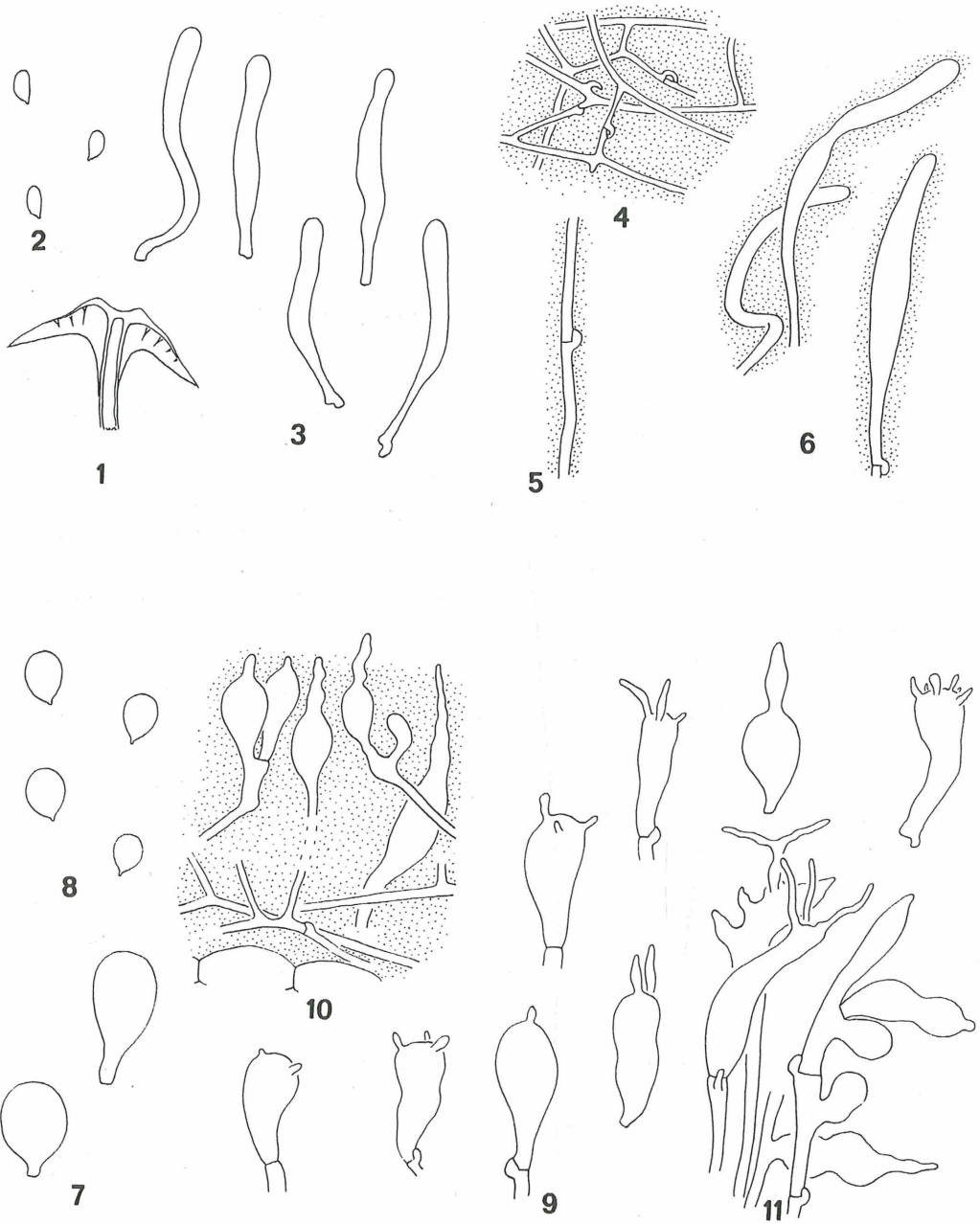


I



II

Colour fig. I. *Mycena conglobata*, holotypus. Colour fig. II. *Mycena beluensis*, holotypus. - Phot. INGRID HAUSKNECHT.



Figs. 1-6. *Mycena conglobata* (holotype, L). - 1. Section of the pileus; - 2. Spores; - 3. Cheilocystidia; - 4. Hyphae of the pileipellis; - 5. Hypha of the cortical layer of the stipe; - 6. Terminal cells. Figs. 7-11. *Mycena beluensis* (holotype, L). - 7. Immature basidia; - 8. Spores; - 9. Cheilocystidia; - 10. Hyphae of the pileipellis and pileocystidia; - 11. Caulocystidia. - Fig. 1 x 3, all others x 700.

Additional material studied: La Réunion, St. Philippe, Sentier Botanique de Mare Longue, 9. 3. 1996, G. WÖLFEL & A. HAUSKNECHT RE 35 (WU 16168); - Forêt de Bélouve, 13. 3. 1996, A. HAUSKNECHT RE 57, 66 (WU 16169, 16170); - St. Gilles-les-Hauts, Bois de Nèfles, 14. 3. 1996, A. HAUSKNECHT RE 84 (WU 16172); - St. Joseph, Grand Galet, 16. 3. 1996, G. WÖLFEL (WU 16173).

Mycena conglobata is a species of section *Euspeireae* MAAS G. (1989: 355), of which there exist three members, *M. euspeirea* (BERK. & CURT.) SACC. and *M. glutinosa* BEARDSLEE in the Caribbean area, and a third (to be published) in eastern Brazil. The two species from the Caribbean region differ from *M. conglobata* in having a white pileus and differently shaped terminal cells of the hyphae of the cortical layer of the stipe, while the Brazilian species has a much paler centre of the pileus and diverticulate hyphae of the pileipellis.

Four other species, although probably only one of which belongs to the *Euspeireae*, described from Madagascar, Chile, East Africa and Malesia respectively, should be briefly discussed.

Mycena viscata MÉTROD (1949: 60, fig. 33) grows, like *M. conglobata*, "en touffes denses" on rotting wood, possesses a viscid pileus, arcuate and intervenose lamellae, viscid agglutinated stipes, very small spores and cheilocystida forming a sterile lamellar edge. MÉTROD compared his species with *M. euspeirea* and *M. glutinosa* and it could well represent a member of the *Euspeireae*, if it were not for the fairly thick-walled cheilocystidia. *Mycena viscata* further differs from *M. conglobata* in being entirely white and having a subumbonate pileus.

Mycena subglutinosa SING. (1971: 16) is a species with a glutinous, fuscous pileus, whitish towards the margin; white lamellae; a viscid stipe which is "fuscidulo-pallido" but more whitish above and "admodum villosa" from its basal mycelium; while it was found growing caespitously on decaying wood. The difference from *M. conglobata* lies in the apparently non-arcuate lamellae, the much larger spores and the clavate, apically ornate cheilocystidia.

Mycena myxocaulis PEGLER (1977: 228, fig. 47.1 a-e) was described as growing caespitously; having a slightly viscid pileus, brown at the centre and pale grey at the margin; white, strongly interveined lamellae; a white stipe "becoming greyish brown towards the base" and "covered by a thick gluten"; small spores. However, PEGLER described the lamellar edge as gelatinized and he failed to find cheilocystidia, while the hyphae of the pileipellis were said to be diverticulate.

Mycena visciditenax CORNER (1994: 216). Like *M. conglobata*, this species has a viscid pileus and stipe, decurrent lamellae, and small spores, and grows on rotten wood. But the pileus is "pale livid cream white", the interstices between the lamellae are smooth, the lamellar trama is tough, the cheilocystidia "often lobulate with short processes"

***Mycena beluensis* MAAS G. & HAUSKN., spec. nova² (Colour fig. II; Figs. 7-11)**

Basidiomata dispersa. Pileus 4-10 mm latus, c. 5 mm altus, e convexo plano-conicus, haud umbonatus, haud sulcatus, striatus, viscidus, pruinosis, hygrophanus, griseo-brunneus, marginem versus pallidior. Caro griseola, odore saporeque nullis. Lamellae 15-16 stipitem attingentes, molles, adscendentes, c. 1 mm latae, anguste adnatae, stel-

² Etymology: beluensis, latinized after Forêt de Bélouve.

latim recedentes, ventricosae, griseae vel brunneogriseae, margine haud viscidae, pallidiores. Stipes 9-15 x 0,7-1 mm, cavus, fragilis, aequalis, cylindraceus, haud viscidus, levis, e pruinoso glabrescens, pallide griseus, deorsum brunneogriseus, e disco basali crasso pruinosoque natus.

Basidia (immatura) 18-27 x 11-12 μm , late clavata, fibulata. Sporae 7,2-9,0 x 5,4-7,2 μm , subglobose, leves, amyloideae. Cheilocystidia 20-27 x 7-12,5 μm , clavata, fibulata, apice surculis varieformibus instructa, haud in materiam gelatinosam immersa. Pleurocystidia nulla. Trama lamellarum iodi ope brunneovinescens. Hyphae pileipellis 1,8-2,5 μm latae, fibulatae, ramosae, leves, in materiam gelatinosam immersae, sursum pileocystidiis fusiformibus munitae. Hyphae stipitis corticales 1,8-3,5 μm latae, fibulatae, leves, haud in materiam gelatinosam immersae, cellulas terminales varieformes praeditae.

Arboricola.

Holotypus: La Réunion (France, Africa), Forêt de Bélouve, 13. 3. 1996, A. HAUS-KNECHT RE 72 (L 993.111-905; isotypus in WU 16171).

Pileus: 4-10 mm across, c. 5 mm high, at first plano-convex, becoming obtusely plano-conical, not umbonate, not sulcate, translucent-striate from margin to disc, viscid, delicately pruinose, hygrophanous, centrally fairly dark grey-brown (7E3-4, 7D3, 7D2-3), paler towards the margin (about 6C1-2), turning ash grey on drying.

Lamellae: 15-16 reaching the stipe, tender, ascending, c. 1 mm broad, narrowly adnate, stellately receding from the stipe and forming a pseudocollarium, ventricose, grey to somewhat brownish grey, the edge not gelatinized, pale grey.

Stipe: 9-15 x 0.7-1 mm, hollow, fragile, equal, terete, not viscid, smooth, delicately pruinose, glabrescent for the greater part, pale grey, darker and more brownish grey below, springing from a thick, not very broad, pruinose basal disc.

Context: thin, somewhat greyish. Odour and taste absent.

Basidia: immature, 18-27 x 11-12 μm , broadly clavate, clamped.

Spores: 7.2-9.0 x 5.4-7.2 μm , subglobose, smooth, amyloid.

Cheilocystidia: 20-27 x 7-12.5 μm , forming a sterile band, clavate, clamped, apically covered with few, fairly coarse, straight to curved, cylindrical to subfusiform excrescences 3.5-12.5 x 1.8-2.5 μm , not embedded in gelatinous matter.

Pleurocystidia: absent.

Lamellar trama: brownish vinescent in Melzer's reagent.

Pileipellis: an ixocutis of radiately aligned, much branched hyphae which are 1.8-2.5 μm wide, clamped, and towards the upper surface produce fusiform pileocystidia 35-54 x 4.5-9 μm with much narrowed, frequently torulose necks 2-3 μm wide.

Hypoderm: made up of parallel inflated hyphae up to 30 μm broad.

Hyphae of the cortical layer of the stipe: 1.8-3.5 μm wide, clamped, smooth, not embedded in gelatinous matter; caulocystidia 25-75 x 5.5-9 μm , simple to branched, variously shaped.

Habitus and habitat: growing scattered on the decaying trunk of a dicotyledonous tree [or possibly *Cryptomeria japonica* (L. f.) DON] overgrown with liverworts at an altitude of c. 1500 m s. m. in rain forest.

Mycena beluvensis is a member of section *Clavulares* MAAS G. (1983: 416), the type species and only species of which thus far was *M. clavularis* (BATSCH: FR.) SACC., known only from Europe. The most striking difference between the two species lies in the shape of the pileocystidia which KÜHNER (1938) for *M. clavularis* described as "poils filiformes-allongés, flexueux, obtus, très grêles (1-2.2 μ diam.)."

Many years later, MALENÇON & BERTAULT (1975: 242, fig. 44) reported a find from Morocco which they considered conspecific with *M. clavularis* but which turned out to be a different species, named *Mycena marocana* by MAAS GEESTERANUS (1983: 418) and placed in the new section *Exiguae* MAAS G. This section was "placed, temporarily, near sect. *Clavulares* solely to indicate that it has been segregated from that section" Now, it can be stated with some certainty that sections *Clavulares* and *Exiguae* are probably more closely related than originally presumed, since among other things the shape of the pileocystidia of *M. beluvensis* appears intermediate between those of *M. clavularis* and *M. marocana*. The differences between the three species under discussion are tabulated below (table 1).

Table 1. Differences between *M. clavularis*, *M. beluvensis* and *M. marocana*.

	Pileus	Lamellae reaching the stipe	Lamellar edge	Stipe	Cheilocystidia	Hyphae of the pileipellis	Pileocystidia	Caulocystidia
<i>M. clavularis</i>	shallowly sulcate	7-12 forming pseudo-collarium	sterile	springing from basal disc	apically covered with very slender excresc. 0.9 μ m wide	smooth	filiform	not resembling the pileocystidia
<i>M. beluvensis</i>	smooth	15-16 forming pseudo-collarium	sterile	springing from basal disc	apically covered with coarse excresc. 1.8-2.5 μ m wide	smooth	fusiform	not resembling the pileocystidia
<i>M. marocana</i>	strongly sulcate	8-12 broadly adnate	part near pileus margin fertile	broadened below, no basal disc	apically covered with coarse excresc.	diverticulate	lageniform	resembling the pileocystidia covered with mucilaginous droplets

References

- CORNER, E. J. H., 1994: Agarics in Malesia. Part II. *Mycena*, *Filoboletus*, *Mycenosporella* and *Poromyces* in Malesia. - Nova Hedwigia Beih. **109**: 165-265.
- KORNERUP, A., WANSCHER, J. H., 1975: Taschenlexikon der Farben, 2. Aufl. - Zürich, Göttingen: Muster-Schmidt.
- KÜHNER, R., 1938: Le genre *Mycena* (FRIES). - Paris: Lechevalier.

- MAAS GEESTERANUS, R. A., 1983: *Conspectus of the Mycenas of the Northern Hemisphere - 1. Sections Sacchariferae, Basipedes, Bulbosae, Clavulares, Exiguae, and Longisetae.* - Proc. K. Ned. Akad. Wet. (Ser. C) **86**: 401-421.
- 1989: *Conspectus of the Mycenas of the Northern Hemisphere - 12. Sections Fuliginellae, Insignes, Ingratae, Euspeireae, and Caespitosae.* - Proc. K. Ned. Akad. Wet. (Ser. C) **92**: 331-365.
- HAUSKNECHT, A., 1995: *Mycena pallescens*, a new species of sect. *Fragilipedes* from La Réunion (France, Africa). - Österr. Z. Pilzk. **4**: 51-54.
- MALENÇON, G., BERTAULT, R., 1975: *Flore des champignons supérieurs du Maroc 2.* - Rabat: Faculté des Sciences.
- MÉTROD, G., 1949: *Les Mycènes de Madagascar (Mycena, Corrugaria, Pterospora).* - Prodr. flore mycol. Madagascar. - III.
- PEGLER, D. N., 1977: *A preliminary agaric flora of East Africa.* - Kew Bull. Addit. Ser. **6**.
- SINGER, R. (apud N. LAZO), 1971: *Contribution à l'étude des Macromycètes du Chili.* - Lejeunia **61**: 1-32.

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