

## *Lactocollybia dendrobii* (*Tricholomataceae, Agaricales*), a new species from a flower pot in Austria

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Accepted 2. 7. 2008

**Key words:** Basidiomycota, Agaricales, Tricholomataceae, *Lactocollybia*. – New species. – Mycoflora of Austria.

**Abstract:** *Lactocollybia dendrobii*, found in a flower pot in Lower Austria, is described as new. Microscopical drawings and a colour plate are given.

**Zusammenfassung:** *Lactocollybia dendrobii*, gefunden in einem Blumentopf in Niederösterreich, wird neu beschrieben. Mikrozeichnungen und ein Farbbild werden gegeben.



Fig. 1. *Lactocollybia dendrobii* (holotype). – Phot. A. HAUSKNECHT

Presently in *Lactocollybia* 17 species are known worldwide (KIRK 2008). They are mostly tropical or occur in the southern hemisphere. JOSSERAND (1935) first described a “tropical *Collybia*” from Europe, namely France, as new, which currently is placed in *Lactocollybia*. This is *L. cycadicola* (JOSS.) SINGER, which SINGER (1936) reported from the Leningrad Botanical Garden as well. SINGER & al. (1990) detected the type species of the genus, *Lactocollybia epia* (BERK. & BROOME) PEGLER, for the first time in Europe, in Spain. Later CONTU (2000) found it also in Italy. A further European representative of the genus was described by CONTU & ROBICH (1998) as *Hydropus liciosae* CONTU & ROBICH and later (CONTU 2000) transferred to *Lactocollybia*. EYS-SARTIER & MOREAU (2001) found *L. liciosae* in Corsica, a collection perfectly agreeing with the type material of *H. liciosae*, and considered it to be conspecific with *Lactocollybia variicystis* D. A. REID & EICKER, a species described from South Africa (REID & EICKER 1998). Both species were published in 1998, but *L. variicystis* in March and *Hydropus liciosae* in September. Therefore, *L. variicystis* has priority. However, meanwhile CONTU and also EYS-SARTIER and MOREAU (CONTU, pers. comm.) are convinced that the two species are not synonymous having also different distribution areas.

Last year an active member of the Viennese working group of the Austrian Mycological Society, M. GROLL, brought a collybioid fungus growing on remnants of *Dendrobium stuartii* F. M. BAILEY in a flower pot in his greenhouse. After microscopical examination it was clear that it must be a species of *Macrocystidia* or *Lactocollybia*, because of the abundant gloeocystidia, conspicuous cheilo-, caulo- and pileocystidia as well as inamyloid spores. Both genera are very close (SINGER 1986) differing by spore print colour (not recorded in our collection), colour of spores in the light microscope, and surface of spore wall. Presence of latex, gloeocystidia in the lamellar trama, shape of cheilocystidia, and spore characters of our collection (smooth in light microscope) only allow a placement in the genus *Lactocollybia* as a new species.

From all *Lactocollybia* taxa described the Austrian collection is most similar to *L. aurantiaca* SINGER from South America (SINGER & DIGILIO 1953); but abundant clamp connections and gloeocystidia, not changing to green in potassium hydroxyde, in our new species are sufficient differentiating characters. On basis of presence of clamp connections and gloeocystidia the collection from Leobersdorf can be included in sect. *Albae* SINGER, although there are only white or weakly pigmented taxa comprised. As the relatively short, wide spores, pleuro- and pileocystidia as well as the pileipellis consisting of short, diverticulate hyphae do not fit to any of the species known, it is described as new.

***Lactocollybia dendrobii* HAUSKN. & KRISAI, spec. nova** (Figs. 1, 2)  
MycoBank MB 512495

**Latin diagnosis:** Pileus ad 25 mm latus, plane conicus, flavobrunneus, aurantiaco-brunneus, omnino pruinosis. Lamellae late adnatae, ochraceoflavae, stipes ad 35 × 2 mm, ochraceoflavus, pruinosis. Caro latice aquoso, inolens. Sporae 6-7 × 4-5 µm, nucleiformes, hyalinae, inamyloideae, haud dextrinoideae vel cyanophilae. Basidia tetrasporigera, fibulae praesentes. Cheilo-, caulo- et pileocystidia abunde praesentia. Chrysocystidia superficie lamellarum et gloeocystidia trama multa. In olla floris *Dendrobium stuartii*.

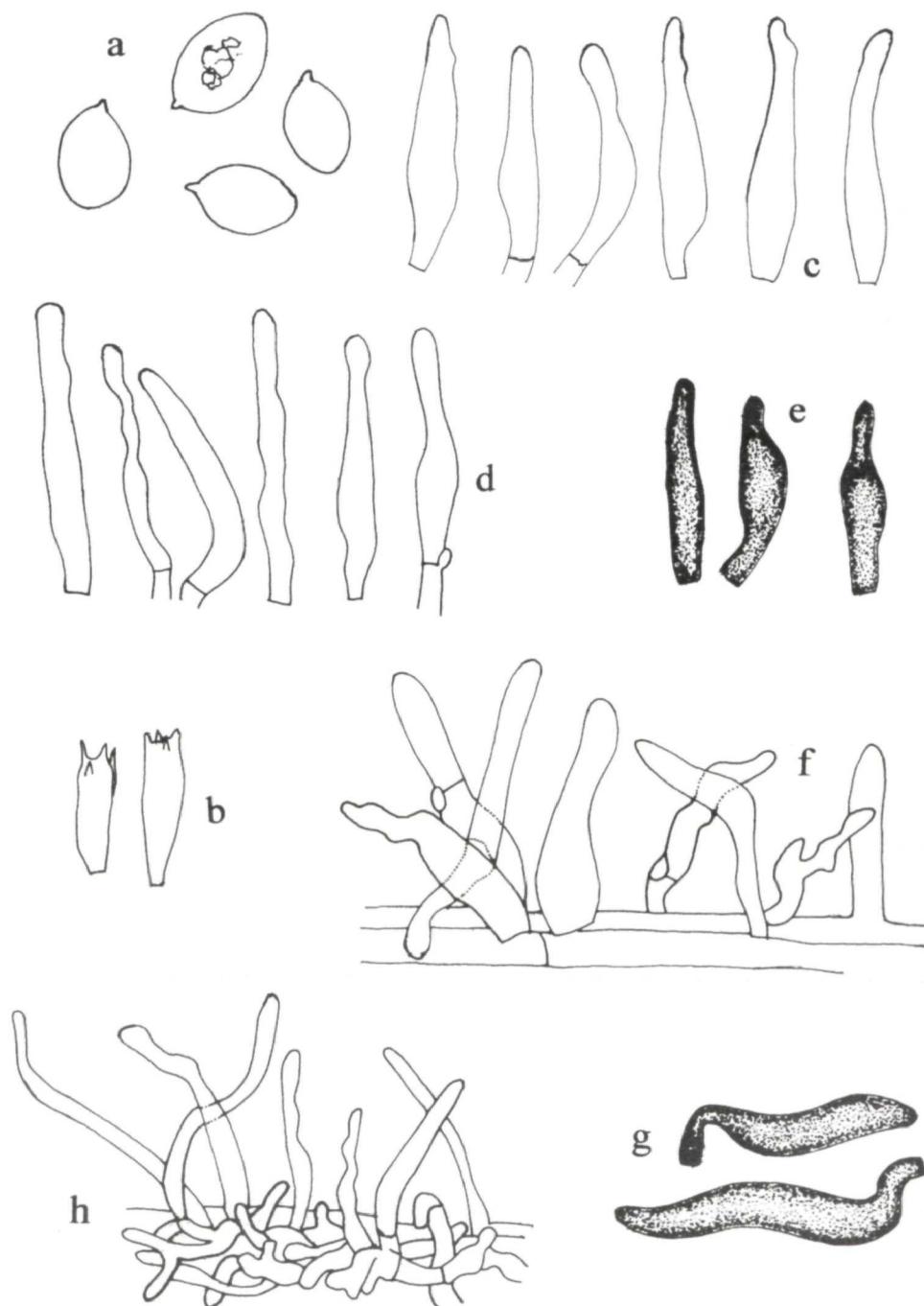


Fig. 2. *Lactocollybia dendrobii* (holotype). a spores,  $\times 2000$ , b basidia,  $\times 800$ , c cheilocystidia,  $\times 800$ , d pleurocystidia,  $\times 800$ , e chrysocystidia,  $\times 800$ , f caulocystidia,  $\times 800$ , g gloeocystidia from trama,  $\times 800$ , h pileipellis,  $\times 800$ .

**Holotypus:** Austria, Niederösterreich, Korneuburg, Leobendorf (MTB 7663/2), in a flower pot in a greenhouse, 24. 9. 2007, leg. M. GROLL (WU 28386).

### Characters:

**Pileus:** 22-25 mm wide, flat convex, flat conical, first whitish to pale ochre, soon ochre brownish, yellow-brown, brown-orange; not hygrophanous, not striate; surface smooth, entirely pruinose, almost like fine hairy, thereby centre paler; margin old brownish.

**Lamellae:** broadly adnate, dense, only slightly ventricose, ochraceous, ochre-yellow with concolorous, slightly denticulate lamellar edge.

**Stipe:** 30-35 mm long, 1.5-2 mm thick, cylindrical, base hardly swollen, ochre-yellow, rusty yellow, base slightly paler, weakly tomentose; entirely fine pruinose.

**Context:** with watery latex when cut, ochraceous, rusty yellowish, smell and taste indistinct.

**Spores:**  $6.7 \times 4.5 \mu\text{m}$ , mean  $6.6 \times 4.4 \mu\text{m}$ , Q = 1.4-1.7, ellipsoidical-pip-shaped, thin-walled, hyaline, inamyloid, not dextrinoid, acyanophilous, often in tetrads.

**Basidia:** 4-spored,  $18-25 \times 5-7 \mu\text{m}$ .

**Clamp connections:** abundant at almost all septa.

**Cheilocystidia:**  $30-50 \times 5.5-8.5 \mu\text{m}$ , variable, mostly lageniform, also subcylindrical with long tapering apex, apex sometimes also clavate or irregularly constricted, with slightly thickened, yellow wall, lamellar edge heteromorphous.

**Pleurocystidia:**  $25-53 \times 4-7 \mu\text{m}$ , similar to cheilocystidia, but often narrower, abundant.

**Chrysocystidia:**  $28-35 \times 5-9 \mu\text{m}$ , lageniform, subcylindrical, with yellow contents.

**Caulocystidia:**  $28-60 \times 5-10 \mu\text{m}$ , similar to cheilocystidia, but often also distinctly diverticulate and somewhat branched, partly with thick, yellow wall.

**Gloeocystidia:** abundant in pileipellis and trama, up to  $10 \mu\text{m}$  wide, with yellow contents.

**Pileipellis:** a cutis consisting of irregularly interwoven, diverticulate, shortly catenulate hyphae, inbetween many pileocystidia ( $25-60 \times 3-4.5 \mu\text{m}$ ) similar to cheilocystidia, but narrower and more irregular.

**Habitat:** indoors in a flower pot on dead remnants of *Dendrobium stuartii*.

**Material examined (besides type): Austria:** Niederösterreich, Korneuburg, Leobendorf (MTB 7663/2), 15. 8. 2008, leg. M. GROLL (herb. GROLL); - - 9. 9. 2008, leg. M. GROLL (herb. GROLL); - - 15.-19. 9. 2008, leg. M. GROLL (WU 28741).

We are grateful to MARCO CONTU for providing valuable literature and reviewing the manuscript.

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Jahr/Year: 2008

Band/Volume: [17](#)

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

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