

Conocybe roseipes*, a new species from loess slopes in eastern Austria

A. Hausknecht

Sonndorferstraße 22, A-3712 Maissau, Austria

Hausknecht, A. (1995). *Conocybe roseipes*, a new species from loess slopes in eastern Austria. – Beih. Sydowia X: 97–100.

A new species of *Conocybe* sect. Mixtae, *C. roseipes*, is described, its microscopic characters are illustrated, and its taxonomic position and delimitation towards other species are discussed.

Keywords: Agaricales, Bolbitiaceae, *Conocybe roseipes*, taxonomy.

Ten years of continuous mycofloristic observation of south-exposed, dry loess slopes in the western Weinviertel in Lower Austria has yielded some interesting results (Singer & Hausknecht, 1990). When weather conditions are favourable, many Bolbitiaceae grow there, especially small *Conocybe* species such as the recently described *Conocybe minima* (Singer & Hausknecht, 1992). Another hitherto unknown species is described here.

***Conocybe roseipes* Hausknecht, sp. n. – (Figs. 1–6).**

Pileus (2–)3–6(–8) mm latus, –4 mm altus, primo conico–campanulatus, senescens applanatus et late umbonatus; solim juvenilis centro paene obscurobrunneus (Kornerup & Wanscher 6F6), marginem versus brunneus (6E5), deinde celeriter pallidior et griseus tinctus, centrum decolorans ex aeneo, „tan“ usque „saruq–brunneus“ (5–6E5, 6E3, 6E3–4), margo decolorans e flavo usque griseobetulinus (5C4, 5C3, 5C2), pileus siccus ultimo argenteus usque ad sordide albus (5BC2, 5BC3, 6AB2, sed pallidior); hygrophanus, sed solim margo indistincte striatus. Superficies glabra, in statu sicco valde micacea. Lamellae adnatae, ventricosae, distantes, primum pallide lacteocoffeatae, tum sordide griseobrunneae (ca. 6E4); sub margine pilei protrudentes. Stipes 15–28(–40) × ca. 1 mm latus, basi leviter incrassatus vel bulbosus (–2,5 mm), juvenilis hyalinus, roseus, griseoroseus usque incarnatus (fere 8B3, 8B2, sed pallidior), omnino ceraceus translucidusque; postremo sine colore rosea, pallide eburneus; superficies juvenilis pruinosa, partim etiam pilosa. Caro ceracea et hyalina in stipite, valde tenui in pileo, odore et sapore indistinctis. NH₄OH reactio nulla. Sporae (7–)7.5–9.5 × 4.5–5.5(–6) μm, ellipsoideae, non lenticulares, leves, pariete leviter duplicato, poro germinativo distincto, ca.

* This paper is dedicated to Professor M. Moser on the occasion of his seventieth birthday.

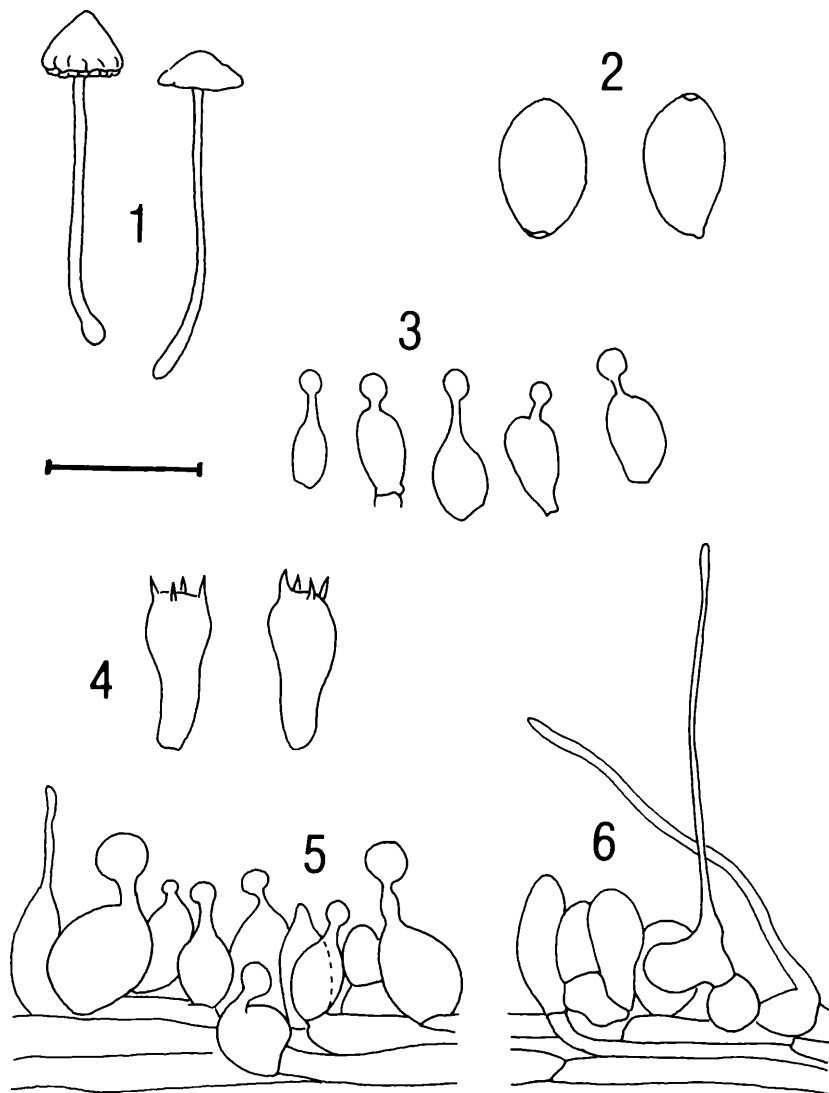
1 μm lato; in aqua flavae pariete croceo, in KOH ferrugineae pariete vinaceo. Basidia 16–24 $\times$ 8–9 μm , 4-spora, fibula parva adest. Cheilocystidia 15–20 $\times$ 5–7 μm , lecythiformia capitulo 2.5–4(–5) μm lato, saepe variabilia collis longis vel brevibus. Fibulae in trama adsunt. Stipitipellis maximam partem e dermatocystidiis lecythiformibus, 16–25 $\times$ 6–13 μm , capitulis 2–4(–7) μm in diam.; interdum sparsim aggregatis elementis clavato-vesiculosus (–20 $\times$ 8 μm) et pilis longis (–60 $\times$ 2 μm). Pileipellis hymeniformis, e cellulis sphaeropedunculatis, 35–55 $\times$ 20–33 μm , interdum saepe cystidia lecythiformia cheilocystidiis similia.

Habitatio et distributio: Inter gramina et Artemisias in clivis arenosis (in terra „loess“ dicta), siccis, australiter expositis; aestate; species praesenti tempore solum cognita ex Austria Inferior.

Holotypus: Austria, Austria Inferior, Röschitz, Galgenberg (MTB 7361/1), 5.8.1987, leg. A. Hausknecht S1660 (WU 7180).

Pileus (2)–3–6(–8) mm broad, –4 mm high, young conical-campanulate, old applanate with broad obtuse umbo, nearly dark brown (Kornerup & Wanscher 6F6) in centre when very young and fresh, brown (6F5) towards margin, becoming very quickly paler and increasingly tinged with grey, the centre brightening from bronze coloured, „tan“ to saruq-brown (5–6E5, 6E3, 6E3–4), the margin to „goldblond“, birch-grey (5C4, 5C3, 5C2), drying finally becoming silvery grey-beige up to nearly dirty whitish (near 5BC2, 5BC3, 6AB2, but much lighter), hygrophanous, only at the marginal zone slightly striate. Surface smooth, dry, strongly micaceous. – Lamellae narrowly adnate, ventricose, distant, first pale milky coffee-coloured, finally dirty greyish brown without rusty tinge (ca. 6E4), protruding at margin. – Stipe 15–28(–40) mm long, ca. 1 mm thick, with slightly swollen to bulbous base (–2.5 mm), hyaline-pink, greyish-pink to watery flesh-coloured (near 8B3, 8B2, but lighter) when young, entirely waxy, transparent; when older the pink tinge fading, turning to light beige or even yellowish white; surface pruinose, partly also hairy when young. – Context waxy, hyaline in stipe, very thin in pileus. – Smell and taste not distinctive. No needle crystals in NH_4OH solution even after twelve hours. – Spores (7)–7.5–9.5 $\times$ 4.5–5.5(–6) μm , ellipsoid, not lentiform, smooth, with faint double wall and distinct, ca. 1 μm wide germ pore, in water light yellow with orange-reddish wall, in KOH rusty brown with red wall. – Basidia 16–24 $\times$ 8–9 μm , 4-spored, with very small, often inconspicuous basal clamp connection. – Cheilocystidia 15–20 $\times$ 5–7 μm , lecythiform with 2.5–4(–5) μm large capitulum, often very variable with long or short necks. – Clamp connections present.

Habitat and distribution. – The species occurs on S-exposed, dry, very steep loess slopes, under *Artemisia absinthium* L., *A. vulgaris* L., diverse *Gramineae* and *Rosa* spp., in summer, after heavy and long rains; hitherto only known from Lower Austria.



Figs. 1-6. *Conocybe roseipes* (all from type). – 1. carpophores. 2. spores. 3. cheilocystidia. – 4. basidia. 5 and 6. stipe surface, two different groups of cystidia. – Bar: Fig. 1: 1cm; Figs. 2, 5, 6: 10 μ m; Figs. 3, 4: 20 μ m.

Material examined (besides holotype). – AUSTRIA: Lower Austria, Mühlbach/Manhartsberg, Krotental (MTB 7460/4), 21. 7. 1985, A. Hausknecht S 1351 (exsiccatum lost); Röschitz, Galgenberg (MTB 7361/1), 5. 8. 1987, A. Hausknecht S 1651 and S 1654 (WU 7182, isotype); 16. 8. 1987, A. Hausknecht S 1672 (Herb. Hausknecht); Röschitz, Roggendorf (MTB 7361/1), 5. 8. 1987, A. Hausknecht S 1661 (Herb. Hausknecht); Pulkau, Kleinjetzelsdorf (MTB 7360/2), 16. 8. 1987, A. Hausknecht S 1671 (WU 7181); Krems, Rohrendorf (MTB 7559/4), 27. 8. 1988, A. Hausknecht S 1775 and S 1776 (WU 7183).

The distinctive characters of *C. roseipes* are the small carpophores which are waxy in consistence, the pileus, brown only when young but then rapidly changing to greyish and finally fading very strongly, and especially the hyaline stipe, distinctly pink when young. Microscopically, the covering layer of the stipe is conspicuous by its preponderantly lecythiform cystidia and scattered groups of clavate and hair-like elements. In the classification of Singer (1986) the species is best placed in sect. *Mixtae* (Kühner) Singer although the proportion of hair-like elements on the stipe varies strongly in different carpophores and often are inconspicuous. Thus, it does not completely correspond to the normal ratio of ca. 1: 1 in species of this section. The more material from different European regions is collected and examined, the more it becomes evident that there are specimens which would be classified either in sect. *Mixtae* or sect. *Conocybe* even if they sporadically show characters of the other sections. Further studies in this direction, especially regarding the ontogenetic development (from the primordial state to the mature carpophore) of the lecythiform and hair-like elements on the stipe, will perhaps bring clarity and eventually lead to the fusion of both sections.

Acknowledgments

I thank Dr. Irmgard Krisai-Greilhuber for the translation of the original text into English and for the Latin description and Monika Köberl-Hausknecht for the preparation of the line drawings.

References

- Kornerup, A. & J. H. Wanscher (1975). Taschenlexikon der Farben. 2. Aufl. Zürich-Göttingen (Muster-Schmidt).
- Singer, R. (1986). The Agaricales in modern taxonomy. 4th Ed. – Koeltz, Königstein.
- & A. Hausknecht (1990). Some interesting agarics from eastern Austria. – Pl. Syst. Evol. 170: 133–150.
- & — (1992). The group of *Conocybe mesospora* in Europe (Bolbitiaceae). – Pl. Syst. Evol. 180: 77–104.

(Manuscript accepted 20th June 1994)

ZOBODAT - www.zobodat.at

Zoologisch-Botanische Datenbank/Zoological-Botanical Database

Digitale Literatur/Digital Literature

Zeitschrift/Journal: [Sydowia Beihefte](#)

Jahr/Year: 1995

Band/Volume: [10](#)

Autor(en)/Author(s): Hausknecht Anton

Artikel/Article: [Conocybe roseipes, a new species from loess slopes in eastern Austria 97-100](#)