Two new *Conocybe* species from Europe and corrections to the monograph *Conocybe-Pholiotina*
Zwei neue *Conocybe*-Arten aus Europa und Korrekturen zur Monografie *Conocybe-Pholiotina*

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Abstract: Two new species of *Conocybe*, viz. *C. panaeoloides* and *C. reinwaldii*, are described and treated macro- and microscopically. Their systematic position is discussed and the key given in the monograph is emended. Furthermore, some corrections to the monograph are provided.

Zusammenfassung: Zwei neue Arten der Gattung *Conocybe*, *C. panaeoloides* und *C. reinwaldii*, werden beschrieben und makro- und mikroskopisch dokumentiert. Ihre systematische Position wird diskutiert, und der Schlüssel in der Monografie wird ergänzt. Weiters werden einige Korrekturen zur Monografie gegeben.

While the monograph of *Conocybe* and *Pholiotina* in Europe had been in print (HAUSKNECHT 2009), the first author received two collections of *Conocybe* which after careful examinations turned out to be hitherto undescribed species. They are described in the first part of the present paper followed by some corrections to the monograph (HAUSKNECHT 2009).

New taxa

***Conocybe panaeoloides* HAUSKN. & ZUGNA, spec. nova** (Figs. 1 a-e, 2, 3)
MycoBank MB 515505

Descriptio latina: Pileus 10-30 mm latus, convexus, sine umbone, primum centro atrobrunneus, griseobrunneus, brunneus et leviter purpurascens, marginem versus pallidiore rubescente brunneus, purpurascente brunneus, demum centro griseobrunneus, margine incarnatobrunnescens, exsiccans castaneus; hygrophanus, sed etiam valde juvenis haud striatus, marmoratus *Panaeolus* similis. Lamellae adnatae, moderate distantae, ventricosae, 1-3 lamellulae, ferrugineae, acie concolore. Stipes 30-50 mm longus, 2,5-4 mm latus, cylindricus, basis leviter bulbosa usque ad 5 mm, sine pseudoradix, apicem versus pallide ochraceus, basin versus ochraceobrunneus, minute lon-

gistriatus et omnino tomentosus. Caro tenuis, odore leviter suave, sapore indistincto. Sporae 6-9 × 3,5-4,5 µm, anguste ellipsoideae-nucleiformes sine poro germinativo sed cum callo, unitunicatae sed tunica crassiuscula, superficies glabra sub microscopio lucis, sed distincte ruguloso-aspera sub microscopio electronico, sine distincte verrucis vel cristis. Basidia tetrasporigera, 16,5-21 × 6-9 µm, clavata. Fibulae adsunt. Cheilozystidia lecythiformia, 18-24 × 8-12 µm, capitulo 4-5 µm lato collo brevi crassoque. Stipitipellis consistens solum cystidiis lecythiformibus, 20-28 × 9-15 µm, capitulo 3-6,5 µm lato. Pileipellis hymeniformis, elementis sphaeropedunculatis (40-65 × 18-40 µm) consistens, immixtis abundantibus saepe luteobrunneis lecythiformibus (25-35 × 4-6 µm, capitulo 4-6 µm lato) pileocystidiis. Pigmentum pileipellis asperiter incrustans, elementa singularia et etiam pileocystidia pigmento intracellulari. Habitat in sylvis frondosis vel mixtis loco valde udo substrato herbaceo.

Holotypus: Italia, Abruzzi, Teramo, Torrente Vezzola, 28. 3. 2008, leg. B. RUVO (MCVE, isotypus in WU 29992).

Etymology: reminding of a *Panaeolus*, due to colours and mottled pileus surface.

Characters:

Pileus: 10-30 mm wide, young broadly hemispherical, then convex, without umbo, lamellae at pileus margin slightly hanging over, young centre blackish brown, dark grey-brown, dark brown with purple hue, towards margin paler reddish brown, purplish brown, older centre grey-brown, margin incarnate, drying to chestnut-brownish; hygrophanous, but even very young and fresh only a few mm striate, mottled similar to a *Panaeolus*; surface fine uneven-rugulose, at least in centre, slightly shining.

Lamellae: adnate, moderately distant, ventricose, 1-3 lamellulae, rubiginous, with concolorous or slightly paler, a bit undulating lamellar edge.

Stipe: 30-50 mm long, 2.5-4 mm thick, cylindrical, base slightly bulbous up to 5 mm, not radicant, apex pale ochre, towards base ochre-brownish, older up to grey-brownish, fine longitudinally striate and entirely tomentose.

Context: thin, smell slightly sweetish, taste indistinct, neither bitter nor acrid.

Exsiccate: pileus dark brown, chocolate with slightly darker centre, lamellae rubiginous, stipe pale reddish brown.

Spores: 6-9 × 3.5-4.5 µm, in average 7.8 × 3.9 µm, Q = (1.6-)1.9-2.2, narrowly ellipsoid-nucleiform, germ-pore absent but thinner part of wall reminding of a callus, wall simple but relatively thick, surface smooth under light microscope, distinctly rugulose-uneven in SEM, no verrucae or cristae present, ochre-yellow in KOH.

Basidia: 4-spored, 16.5-21 × 6-9 µm, clavate.

Clamp connections: present.

Ammoniacal reaction: negative.

Pseudoparaphyses: absent.

Cheilocystidia: lecythiform, 18-24 × 8-12 µm, with 4-5 µm wide capitulum and short, thick neck.

Stipitipellis: only made up of lecythiform elements (20-28 × 9-15 µm, with 3-6.5 µm wide capitulum).

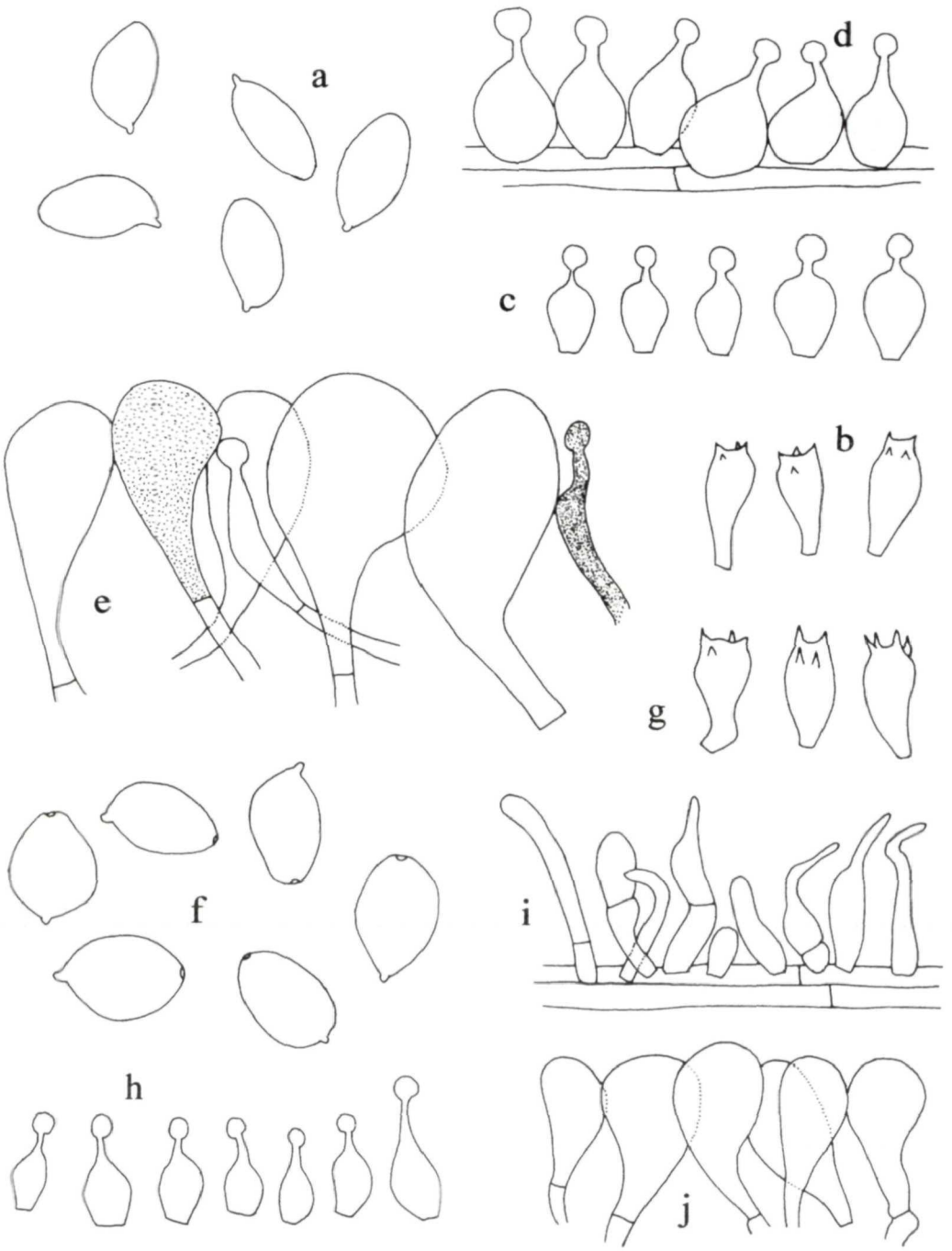

Fig. 1. *a-e. Conocybe panaeoloides*, holotype. *a* spores, × 2000, *b* basidia, × 800, *c* cheilocystidia, × 800, *d* caulocystidia, × 800, *e* pileipellis with two pileocystidia, × 800. *f-j. Conocybe reinwaldii*, holotype. *f* spores, × 2000, *g* basidia, × 800, *h* cheilocystidia, × 800, *i* caulocystidia, × 800, *j* pileipellis, × 800.

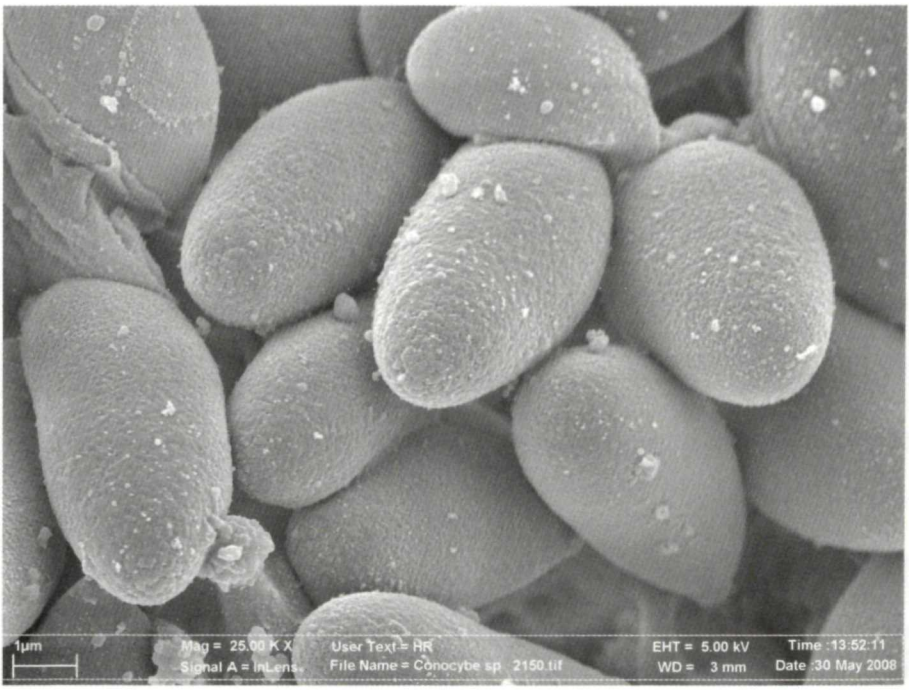

Fig. 2. *Conocybe panaeoloides*. SEM-photograph of spores. – Phot. A. ORTEGA.

Pileipellis: hymeniform, made up of sphaeropedunculate elements (40-65 × 18-40 µm), mixed with abundant lecythiform, often yellow-brown coloured pileocystidia (25-35 × 4-6 µm, with 4-6 µm wide capitulum). Pigment coarsely incrusting in pileipellis, single elements and also pileocystidia with intracellular pigment.

Habitat: very wet locality on plant remnants, under *Robinia pseudacacia* mixed with *Ulmus*, *Juglans*, *Quercus* and *Populus*.

Collection examined: holotype.

Comments:

An exhausting macro- and microscopical documentation of this find is given by ZUGNA (2008, as *Conocybe* spec.).

On account of the distinctly rugulose-uneven spore wall in SEM and the stipitipellis exclusively made up of lecythiform caulocystidia the new species must be classified in sect. *Ochromarasmius* (HAUSKNECHT & KRISAI-GREILHUBER 2006). The pattern of the spore surface matches subsect. *Subleiosporae*, but the new species has no radicant stipe. Therefore the diagnosis of this section (HAUSKNECHT 2009: 516) is emended:

Fig. 3. *Conocybe panaeoloides*, holotype. – Phot. M. ZUGNA.

Fig. 4. *Conocybe reinwaldii*, holotype. – Phot. K. F. REINWALD.

Subsectio *Subleiosporae* HAUSKN. emend. HAUSKN.

Cystidia et pileipellis ut in subsectione *Dumetorae*. Basidiocarpium medium stipite radicante vel non radicante. Sporae per microscopium luminis visum leves, per microscopium electronicum visum subrugulosae, non spinulosae. Pleurocystidia et pseudoparaphyses nulla. Stipitipellis praecipue consistens elementis lecythiformibus.

The as yet only representative of this subsection, *Conocybe subleiospora* HAUSKN., differs by radicant stipe, striate, more red-brown pileus, smaller, ellipsoid spores with Q = 1.4-1.7 (in *C. panaeoloides* mostly 1.9-2.2), and smaller cheilo- and caulocystidia.

In the key of the genus the new species must be inserted twice, because the rugulose spore surface cannot be observed in light microscope.

Key A (section *Conocybe*)

29* if spores narrower, in average only up to 4 µm wide, often with callus:

a) Pileus hardly 10 mm, dark brown to blackish brown, spore wall with obtuse, isolated verrucae, see 98 b ***Conocybe dumetorum* var. *phaeoleiospora*** with under light microscope seemingly smooth spores.
b) Pileus 15-25(-30) mm, dark brown with purple tinge, mottled when drying, spore wall rugulose-uneven, see ***Conocybe panaeoloides.***

Key G (section *Ochromarasmius*)

1	Spores under light microscope almost smooth, under SEM irregularly rugulose-rough	2
1*	Spores under light microscope smooth to verrucose, under SEM with obtuse, isolated verrucae	3
2	Stipe radicant; spores ellipsoid, with Q = 1.4-1.7 **99) *Conocybe subleiospora***	
2*	Stipe with bulbous base; spores narrowly ellipsoid-nucleiform, mostly with Q = 1.9-2.3 ***Conocybe panaeoloides***	
3	Continuation (see HAUSKNECHT 2009 under 2 …)	

Bemerkungen:

Eine erschöpfende makro- und mikroskopische Dokumentation des vorliegenden Fundes (als *Conocybe* spec.) wird von ZUGNA (2008) gegeben.

Auf Grund der im REM deutlich runzelig-unebenen Sporenwand und der Stielbekleidung aus ausschließlich lecythiformen Kaulozystiden ist die neue Art in die Sektion *Ochromarasmius* einzureihen (HAUSKNECHT & KRISAI-GREILHUBER 2006). Das Muster der Sporenoberfläche entspricht der Subsektion *Subleiosporae*, sie hat

aber keinen wurzelnden Stiel. Deshalb wird die Diagnose dieser Sektion (HAUSKNECHT 2009: 516) wie folgt erweitert:

Subsektion *Subleiosporae* HAUSKN. emend. HAUSKN.

Cystidia et pileipellis ut in subsectione *Dumetorae*. Basidiocarpium medium stipite radicante vel non radicante. Sporae per microscopium luminis visum leves, per microscopium electronicum visum subrugulosae, non spinulosae. Pleurocystidia et pseudoparphyses nulla. Stipitipellis praecipue consistens elementis lecythiformibus.

Der bisher einzige Vertreter dieser Subsektion, *Conocybe subleiospora* HAUSKN., unterscheidet sich durch wurzelnden Stiel, gerieften, mehr rotbraunen Hut, kleinere, ellipsoidische Sporen mit einem Q von 1,4-1,7 (bei *C. panaeoloides* meist 1,9-2,2) und kleinere Cheilo- und Kaulozystiden.

Im Gattungsschlüssel ist die neue Art zweimal einzufügen, da die runzelige Sporenoberfläche im LM nicht erkannt werden kann:

Schlüssel A (Sektion *Conocybe*)

29* wenn Sporen schmäler, im Mittel nur bis 4 µm breit, oft mit Kallus:

c) Hut kaum 10 mm mit dunkelbrauner bis schwarzbrauner Farbe, Sporenwand im REM mit stumpfen, isolierten Warzen, siehe 98 b ***Conocybe dumetorum* var. *phaeoleiospora*** mit im Lichtmikroskop glatt erscheinenden Sporen.
d) Hut 15-25(-30) mm, dunkelbraun mit purpurlichem Stich, beim Austrocknen fleckig-marmoriert, Sporenwand im REM runzelig-uneben siehe ***Conocybe panaeoloides.***

Schlüssel G (Sektion *Ochromarasmius*)

1	Sporen im Lichtmikroskop fast glatt, im REM unregelmäßig runzelig-rau	2
1*	Sporen im LM glatt bis warzig, im REM mit stumpfen, isolierten Warzen	3
2	Stiel wurzelnd, Sporen ellipsoidisch, mit einem Q von 1,4-1,7 **99) *Conocybe subleiospora***	
2*	Stiel mit knolliger Basis; Sporen schlank ellipsoidisch-apfelkernförmig mit einem Q von meist 1,9-2,3 ***Conocybe panaeoloides***	
3	Fortsetzung (wie in HAUSKNECHT 2009 unter 2 …)	

***Conocybe reinwaldii* HAUSKN., spec. nova** (Figs. 1 f-j, 4)
MycoBank MB 515506

Descriptio latina: Pileus 15-24 mm latus, usque ad 14 mm altus, plane convexus, sine umbo, centro clare aurantius, marginem versus pallidior, pallide aurantius, cremeus,

non hygrophanus, estriatus; superficies centro aequalis, marginem versus inaeqalis. Lamellae anguste adnatae, moderate distantes, leviter ventricosae, aureoflavae, colore chrysolithus, acie concolore. Stipes 40-50 mm longus (sine pseudorhiza), 1-2 mm latus, cylindricus, basis incrassata usque ad 3 mm, pseudorhiza usque ad 30 mm; claroflavidus, ochraceus, tandem flavus, omnino subtiliter tomentoso-pilosus; pseudoradix albida. Caro albida, pallide ochracea, fragilissima, sapor et odor indistincti. Sporae 7-8,5 × 5-6 × 4,5-5 µm, in medio 8,0 × 5,6 × 4,8 µm, lentiformes, aspectu frontali leviter angulatae, late ellipsoideae ad leviter mitriformes, aspectu laterali anguste ellipsoideae, poro germinativo distincto, ca. 1 µm lato, tenuitunicatae. Basidia tetrasporigera, 18-22 × 7,5-10,5 µm, clavata, sterigmata usque ad 3 µm longa. Fibulae adsunt. Cheilocystidia lecythiformia, 14-25 × 6-9 µm, capitulo 2,5-4,5 µm lato et collo angusto saepe longo. Stipitipellis consistens solum elementis non-lecythiformibus. Pileipellis hymeniformis, elementis sphaeropedunculatis ad pyriformibus (22-32 × 10-18 µm), pileocystidia non observata. Habitat in pascuis in gramine alto.

Holotypus: Austria, Carinthia, Spittal an der Drau, Malta, Schlatzingerau (MTB 9046/2), 28. 8. 2008, leg. K. F. REINWALD & A. HAUSKNECHT (WU 28818).

Etymologie: dedicated to KARL FRIEDRICH REINWALD †, Lauf, Germany, invaluable friend and mycological companion of the first author for about 20 years.

Characters:

Pileus: 15-24 mm wide, up to 14 mm high, flat convex, without distinct umbo, centre pale orange (KORNERUP & WANSCHER 1975: 5A5, 5A4-5), paler towards margin, pale orange, cream (5A3, 4-5A3), not hygrophanous, not striate; surface smooth in centre, a bit uneven towards margin.

Lamellae: narrowly adnate, moderately distant, slightly ventricose, golden blond, topaz (5C4-5), with concolorous, straight lamellar edge.

Stipe: 40-50 mm long (without pseudorhiza), 1-2 mm thick, cylindrical, base thickened up to 3 mm, with up to 30 mm long pseudorhiza; pale yellowish, ochraceous, old yellow in whole length, entirely fine tomentose-hairy; pseudorhiza whitish.

Context: whitish, pale ochraceous, very fragile, smell and taste indistinct.

Exsiccate: Pileus and stipe orange-yellow to rusty yellow, lamellae rusty-brownish.

Spores: 7-8.5 × 5-6 × 4.5-5 µm, in average 8.0 × 5.6 × 4.8 µm, Q = 1.35-1.6, lentiform, in front view slightly angular, widely ellipsoid to slightly mitriform, in side view narrowly ellipsoid, with disctinct, ca. 1 µm wide germ-pore and simple to slightly double underlined wall, ochre-yellow in KOH.

Basidia: 4-spored, 18-22 × 7.5-10.5 µm, clavate, with up to 3 µm long sterigmata.

Clamp connections: present.

Ammoniacal reaction: negative.

Pseudoparaphyses: absent.

Cheilocystidia: lecythiform, 14-25 × 6-9 µm, with 2.5-4.5 µm wide capitulum and narrow, often long tapering neck.

Stipitipellis: only made up of capilliform, cylindrical, fusiform to ellipsoidical elements (12-40 × 4-9 µm), lecythiform caulocystidia absent.

Pileipellis: hymeniform, made up of sphaeropedunculate to pyriform elements (22-32 × 10-18 µm), pileocystidia not observed.

Habitat: pasture, in high grass, (very rotten dung cannot be excluded).

Collection examined: holotype.

Comments:

The distinctly radicant, pale stipe, the non-striate pale orange to yellow-orange pileus and the small, pale, distinctly lentiform spores are a combination of characters hitherto unknown in the genus. The new species is placed in sect. *Pilosellae* series *Microrrhiza* (HAUSKNECHT & KRISAI-GREILHUBER 2006) near *Conocybe microrrhiza* HAUSKN. var. *parvispora* (HAUSKN.) HAUSKN. It differs from it by larger, brighter basidiocarps with longer pseudorhiza and wider, in front view lentiform spores (in *C. microrrhiza* var. *parvispora* the spores never are lentiform, but often distinctly phaseoliform and also narrower).

The microscopically somewhat similar *Conocybe incarnata* (JUL. SCHÄFF.) HAUSKN. & ARNOLDS cannot be confused with the new species already due to the wine-red colours. Further, it has larger, never lentiform spores.

From the extra-European species only *Conocybe myosura* SINGER has similar spore sizes, but differs by more tender basidiocarps, papillate, ochre-brown pileus, weak pseudorhiza, ellipsoidical, not lentiform spores and growth in tropical rainforest (SINGER 1989).

In the key of the monograph (HAUSKNECHT 2009) the new species is added in sect. *Pilosellae* no. 16 ff.

16	Spores in average under 11.0 µm long, basidiocarps not growing directly on dung	17
17	Spores ellipsoidical, in average 8.7-10.7 × 5.2-7.0 µm, pileus reddish brown to dark brown **67 b) *Conocybe microrrhiza* var. *tetraspora***	
17*	Spores slightly phaseoliform, in average 7.7-8.1 × 4.6-4.7 µm, pileus brown, yellow-brown **67 a) *Conocybe microrrhiza* var. *parvispora***	
17**	Spores distinctly lentiform, in average 8.0 × 5.6 × 4.8 µm, pileus pale orange to clear orange ***Conocybe reinwaldii***	

Bemerkungen:

Der deutlich wurzelnde, hell gefärbte Stiel, der ungeriefte Hut mit blassoranger bis gelboranger Farbe und die kleinen, hell gefärbten, deutlich lentiformen Sporen sind eine Merkmalskombination, die in der Gattung bisher nicht bekannt war. Die neue Art ist in der Sektion *Pilosellae*, Serie *Microrrhiza* (HAUSKNECHT & KRISAI-GREILHUBER 2006) einzuordnen und findet dort ihren Platz in der Nähe von *Conocybe microrrhiza* HAUSKN. var. *parvispora* (HAUSKN.) HAUSKN. Sie unterscheidet sich von dieser durch größere,

freudiger gefärbte Fruchtkörper mit deutlicherer Wurzel und breitere, in Vorderansicht lentiforme Sporen (bei *C. microrrhiza* var. *parvispora* sind die Sporen niemals linsenförmig, sondern oft deutlich bohnenförmig und auch schmäler).

Die mikroskopisch etwas ähnliche *Conocybe incarnata* (JUL. SCHÄFF.) HAUSKN. & ARNOLDS ist schon auf Grund der weinroten Farben mit unserer neuen Art nicht zu verwechseln, sie hat überdies größere, nie linsenförmige Sporen.

Von den außereuropäischen Arten hat nur *Conocybe myosura* SINGER ähnliche Sporenmaße, unterscheidet sich aber durch zartere Fruchtkörper, papillierten, ockerbraunen Hut, wenig ausgebildete Pseudorhiza, ellipsoidische, nicht lentiforme Sporen und Wachstum im tropischen Regenwald (SINGER 1989).

Im Schlüssel der Monografie (HAUSKNECHT 2009) fügt sich die neue Art wie folgt ein: Sektion *Pilosellae* Zi. 16 ff.

16	Sporen im Mittel unter 11,0 µm lang, Fruchtkörper nicht direkt auf Dung wachsend	17
17	Sporen ellipsoidisch, im Mittel 8,7-10,7 × 5,2-7,0 µm groß, Hut rötlichbraun bis dunkelbraun **67 b) *Conocybe microrrhiza* var. *tetraspora***	
17*	Sporen leicht bohnenförmig, im Mittel 7,7-8,1 × 4,6-4,7 µm groß, Hut braun, gelbbraun **67 a) *Conocybe microrrhiza* var. *parvispora***	
17**	Sporen deutlich linsenförmig, im Mittel 8,0 × 5,6 × 4,8 µm, Hut blaßorange bis hellorange ***Conocybe reinwaldii***	

Corrections to the monograph (HAUSKNECHT 2009):

S. 356 (collections examined): Tirol, Innsbruck City (MTB 8734/2), 29. 5. 1996, M. MOSER (IB 96/1) to be deleted.

S. 366 (collections examined): Democratic Republic Congo: Nord-Kivu, Panzi, Lacs Edouard et Kivu, 15. 1. 1956, M. GOOSSENS-FONTANA (BR) to be deleted.

S. 459 (collections examined): Sweden, Skåne, Brösarp, Bertilsdorp, 16. 6. 1991, E. LUDWIG (KR, depicted in LUDWIG 2007: 92.16) to be deleted.

S. 535 Key F (Section *Pholiotina*) numbers 3 und 3*:

3 Spores in average 10.0-12.7 × 4.8-6.6 µm — continue with 6 (not 4!)
3* Spores in average 6.7-10.3 × 3.8-5.7 µm — continue with 4 (not 6!)

S. 540 Chiave F (Sezione *Pholiotina*) 3 e 3*: Cambiare 4 con 6 come p. 535.

S. 577 Distribution map: Mark in Serbia is missing.

S. 635 (synonymy): *Pholiotina arrhenii* (FR.) SINGER var. *squamosipes* A. ORTEGA & ESTEVE-RAV. 1998, Nova Hedwigia **67**: 108 must be added.

S. 637 (collections examined): Spain: Andalucia, Quintilla, Arroyo Gamiz, 2. 12. 1994, J. GOMEZ & F. ESTEVE-RAVENTÓS (GDAC, holotype of *Pholiotina arrhenii* var. *squamosipes*) must be added.

S. 646 (collections examined): Niederösterreich, Horn, Sigmundsherberg, Röhrawiesen, Tannenwald (MTB7260/4), 19. 10. 1985, A. HAUSKNECHT (WU 5058, photo 1) to be deleted.

S. 679 Text must be changed as follows: *Conocybe aurea*. 2 WU 18689, phot. K. F. REINWALD.

S. 680 above Text must be changed as follows: *Conocybe aurea*. 3 WU 18277, phot. N. N.

S. 834 below: The SEM-picture is erronous (= *Conocybe dumetorum* var. *laricina*, see p. 836 above). Please replace it by Fig. 5 given at the end of the present paper!

Korrekturen zur Monografie (HAUSKNECHT 2009):

S. 356 (collections examined): Tirol, Innsbruck City (MTB 8734/2), 29. 5. 1996, M. Moser (IB 96/1) ist zu streichen.

S. 366 (collections examined): Democratic Republic Congo: Nord-Kivu, Panzi, Lacs Edouard et Kivu, 15. 1. 1956, M. GOOSSENS-FONTANA (BR) ist zu streichen.

S. 459 (collections examined): Sweden, Skåne, Brösarp, Bertilsdorp, 16. 6. 1991, E. LUDWIG (KR, depicted in LUDWIG 2007: 92.16) ist zu streichen.

S. 545 Schlüssel F (Sektion *Pholiotina*) Ziffern 3 und 3*:

3 Sporen im Durchschnitt 10,0-12,7 × 4,8-6,6 µm	mit 6 (nicht 4!) fortsetzen
3* Sporen im Durchschnitt 6,7-10,3 × 3,8-5,7 µm	mit 4 (nicht 6!) fortsetzen

S. 577 Verbreitungskarte: Punkt in Serbien fehlt.

S. 635 (synonymy): *Pholiotina arrhenii* (FR.) SINGER var. *squamosipes* A. ORTEGA & ESTEVE-RAV.1998, Nova Hedwigia **67**: 108 ist einzufügen.

S. 637 (collections examined): Spain: Andalucia, Quintilla, Arroyo Gamiz, 2. 12. 1994, J. GOMEZ & F. ESTEVE-RAVENTÓS (GDAC, holotype of *Pholiotina arrhenii* var. *squamosipes*) ist einzufügen.

S. 646 (collections examined): Niederösterreich, Horn, Sigmundsherberg, Röhrawiesen, Tannenwald (MTB7260/4), 19. 10. 1985, A. HAUSKNECHT (WU 5058, photo 1) ist zu streichen.

S. 679 Text ist wie folgt zu ändern: *Conocybe aurea*. 2 WU 18689, phot. K. F. REINWALD.

S. 680 oben Text ist wie folgt zu ändern: *Conocybe aurea*. 3 WU 18277, phot. N. N.

S. 834 unten: Die SEM-Fotografie ist falsch (= *Conocybe dumetorum* var. *laricina*, siehe S. 836 oben). Bitte durch Fig. 5 (am Ende dieser Arbeit) ersetzen!

We are grateful to ANTONIO ORTEGA, Granada, Spain, for the SEM-photograph of *C. panaeoloides*.

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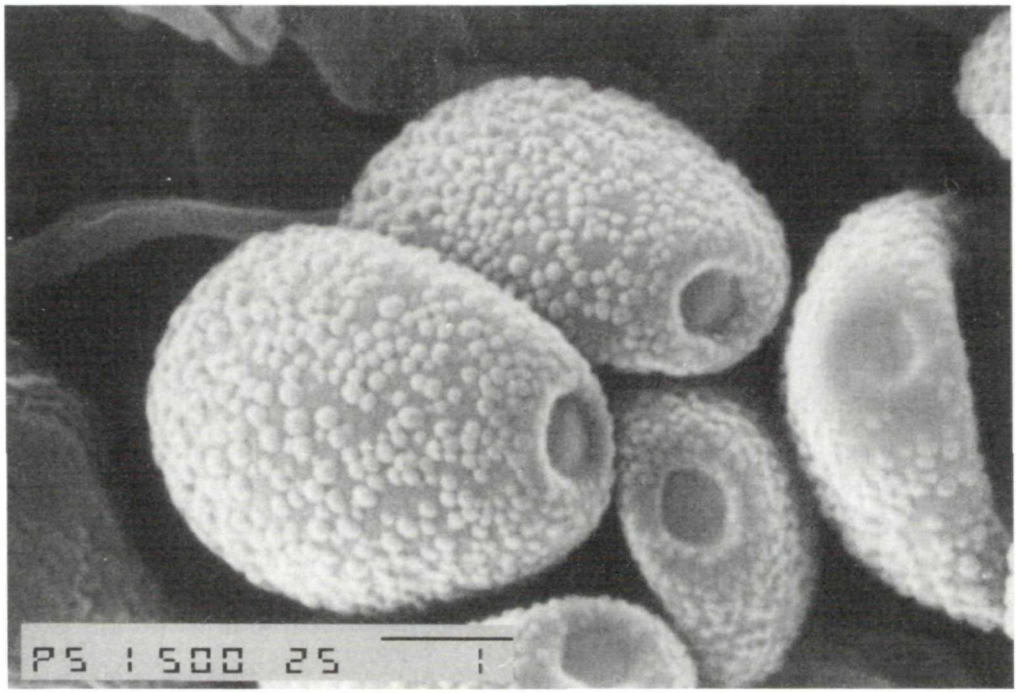

Fig. 5. *Conocybe dumetorum* var. *dumetorum*. – SEM-photograph of spores.