

## The genus *Deconica* (W. G. SM.) P. KARST. in Europe – new combinations

MACHIEL E. NOORDELOOS  
National Herbarium of the Netherlands  
Leiden University Branch, P. O. Box 9514  
NL-2300 RA Leiden, The Netherlands  
E-mail: Noordeloos@nhn.leidenuniv.nl

Accepted 26. 10. 2009

**Key words:** *Agaricales*, *Strophariaceae*, *Deconica*, *Psilocybe*. – New combinations.

**Abstract:** 18 new combinations in the genus *Deconica* are presented, as a precursor for a European monograph of the *Strophariaceae*.

**Zusammenfassung:** 18 Neukombinationen in der Gattung *Deconia* werden vorgeschlagen, als Vorarbeit für eine europäische Monografie der *Strophariaceae*.

The introduction of molecular data and phylogeny reconstruction has great impact on the delimitation of families within the *Agaricales* sensu lato. Not only traditional family concepts changed, but also non-agaricoid taxa such as gasteroid, cyphelloid and resupinate fruitbody forms are included in the newly defined phylogenetic family concepts (CANNON & KIRK 2007).

While preparing a European monograph of the *Strophariaceae* (NOORDELOOS 2010), I was confronted with the fact that MONCALVO & al. (2000) demonstrated the polyphyletic nature of several genera. One of the most striking results was the fact that the hallucinogenic species of *Psilocybe* appear to be phylogenetically distant from the non-hallucinogenic taxa around *P. montana* (PERS.) P. KUMM. and *P. merdaria* (FR.) RICKEN. Since *Agaricus montanus* PERS. generally is the accepted lectotype of the genus, this would result in the necessity of renaming the group of *Psilocybe semilanceata* (FR.) P. KUMM. This would however, result in a rather unfortunate situation, as the name *Psilocybe* generally is associated with the hallucinogenic species, with a whole library of publications devoted to the taxonomic, toxic and legislative aspects of this fungal genus. For this reason, REDHEAD & al. (2007) proposed to conserve the name *Psilocybe* for the hallucinogenic members of the genus, and to assign a new lectotype, *P. semilanceata* (FR.) P. KUMM., for it. This proposal has now unanimously been accepted by the Nomenclature Committee for Fungi (NORVELL 2009) and will soon be published in *Taxon*. The remaining non-hallucinogenic species of the traditional *Psilocybe* can be accommodated in the genus *Deconica* (W.G. SM.) P. KARST., This name has already been in use for the group of species concerned (e.g., by ORTON in DENNIS & al. 1960). The present paper presents the necessary new combinations for the above-mentioned European monograph (NOORDELOOS 2010).

**New combinations**

***Deconica montana* var. *macrospora* (NOORDEL. & VERDUIN) NOORDEL., comb. nova**

**Basionym:** *Psilocybe montana* var. *macrospora* NOORDEL. & VERDUIN, *Persoonia* **17**: 256. 1999.

Mycobank 515373.

***Deconica chionophila* (LAMOURE) NOORDEL., comb. nova**

**Basionym:** *Psilocybe chionophila* LAMOURE, *Bull. Mens. Soc. Linn. Lyon* **46**: 215. 1977.

Mycobank 515374.

***Deconica xeroderma* (HUIJSMAN) NOORDEL., comb. nova**

**Basionym:** *Psilocybe xeroderma* HUIJSMAN, *Persoonia* **2**: 94. 1961.

Mycobank 515375.

***Deconica micropora* (NOORDEL. & VERDUIN) NOORDEL., comb. nova**

**Basionym:** *Psilocybe micropora* NOORDEL. & VERDUIN, *Persoonia* **17**: 257. 1999.

Mycobank 515376.

***Deconica magica* (SVRČEK) NOORDEL., comb. nova**

**Basionym:** *Psilocybe magica* SVRČEK, *Česká Mykol.* **43**: 82. 1989.

Mycobank 515377.

***Deconica schoeneti* (BRESINSKY) NOORDEL., comb. nova**

**Basionym:** *Psilocybe schoeneti* Bresinsky, *Hoppea* **35**: 104. 1976.

Mycobank 515378.

***Deconica phyllogena* (PECK) NOORDEL., comb. nova**

**Basionym:** *Agaricus phyllogenus* PECK, *Ann. Rep. N.Y. St. Mus. Nat. Hist.* **26**: 60. (1874) [1873].

Mycobank 515379.

***Deconica submaritima* (GUZMÁN & CONTU) NOORDEL., comb. nova**

**Basionym:** *Psilocybe submaritima* GUZMÁN & CONTU, *Micol. Veget. Mediterranea* **17**: 57-58. 2002.

Mycobank 515380.

***Deconica flocculosa* (BAS & NOORDEL.) NOORDEL., comb. nova**

**Basionym:** *Psilocybe flocculosa* BAS & NOORDEL., *Persoonia* **16**: 243. 1996.

Mycobank 5153781.

***Deconica castanella* (PECK) NOORDEL., comb. nova**

**Basionym:** *Psilocybe castanella* PECK, *Bull. New York State Mus.* **1**: 7. 1887.

Mycobank 515382.

***Deconica subviscida* var. *velata* (NOORDEL. & VERDUIN) NOORDEL., comb. nova****Basionym:** *Psilocybe subviscida* var. *velata* NOORDEL. & VERDUIN, *Persoonia* **17**: 256. 1999.

Mycobank 515383.

***Deconica velifera* (J. FAVRE) NOORDEL., comb. nova****Basionym:** *Geophila velifera* J. FAVRE, *Champ. Sup. Zone Alpine*: 204. 1955.

Mycobank 515384.

***Deconica philipsii* (BERK. & BROOME) NOORDEL., comb. nova****Basionym:** *Agaricus philipsii* BERK. & BROOME, *Ann. Mag. Nat. Hist., Ser. V*, **1** : 21. 1878 (Notic. Br. Fungi 1658).

Mycobank 515385.

***Deconica horizontalis* (BULL.) NOORDEL., comb. nova****Basionym:** *Agaricus horizontalis* BULL., *Herb. France*: pl. 324. 1787-88.

Mycobank 515386.

***Deconica eucalyptina* (MAIRE & MALENÇON) NOORDEL., comb. nova****Basionym:** *Crepidotus eucalyptinus* MAIRE & MALENÇON, *Champ. Sup. Maroc*. **2**: 475. 1975.

Mycobank 515387.

***Deconica merdaria* (FR.: FR.) NOORDEL., comb. nova****Basionym:** *Agaricus merdarius* FR.: FR., *Syst. mycol.* **1**: 291. 1821.

Mycobank 515388.

***Deconica merdicola* (HUIJSMAN) NOORDEL., comb. nova****Basionym:** *Psilocybe merdicola* HUIJSMAN, *Persoonia* **2**: 93. 1961.

Mycobank 515389.

***Deconica moelleri* (GUZMÁN) NOORDEL., comb. nova****Basionym:** *Psilocybe moelleri* GUZMÁN, *Mycotaxon* **7**: 245. 1978.

Mycobank 515390.

**References**

- CANNON, P. F., KIRK, P. M., 2007: *Fungal Families of the World*. – Wallingford, Oxfordshire, UK: CAB International.
- DENNIS, R. W. G., ORTON, P. D., HORA, F. W., 1960: New checklist of British Agarics and Boleti. – *Trans. Brit. Mycol. Soc.* **43**.
- MONCALVO, J. M., LUTZONI, F. M., REHNER, S. A., JOHNSON, J., VILGALYS, R., 2000: Phylogenetic relationships of agaric fungi based on nuclear large subunit ribosomal DNA sequences. – *Syst. Biol.* **49**: 278-305.
- NOORDELOOS, M. E., 2010: *Strophariaceae*. – *Fungi Europei*. – Alassio: Editio Candusso (in prep.).
- NORVELL, L., 2009: Report of the Nomenclature Committee for Fungi: 15. – [<https://www.mycology.org/CFF/pdf/Taxon15cf90706.pdf>]

REDHEAD, S. A., MONCALVO, J. M., VILGALYS, R., MATHENY, P. B., GUZMÁN-DÁVALOS, L., GUZMÁN, G., 2007: Proposal to conserve the name *Psilocybe* (*Basidiomycota*) with a conserved type. – *Taxon* **56**: 255-257.