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## Novelties in the family Psathyrellaceae. Part VII and description of *Psathyrella longistriata*

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### Key words:

Agaricales

*Psathyrella langei*

*Psathyrella malenconii*

ITS sequence

**Abstract:** New combinations are proposed of taxa belonging to the family Psathyrellaceae. *P. ellename* var. *yubaensis* and *Drosophila langei* are proposed as synonyms of *P. longistriata* of which a European pictured description is provided together with the first ITS sequence from a European finding.

### TAXONOMY

*Coprinellus dendrocystotus* (Voto) Voto, comb. nov. [MB 847750]

Basionym: *Coprinopsis dendrocystota* Voto, Micol. Veget. Medit. 35(2): 157. 2021 ('2020').

*Coprinellus maritimus* (D.J. Schaf., Loizides & P. Alvarado) Voto, comb. nov. [MB 847752]

Basionym: *Tulosesus maritimus* D.J. Schaf., Loizides & P. Alvarado, Mycological Progress 21(5, no. 52): 8. 2022.

*Psathyrella asiatica* (M. Asif, A. Izhar, Niazi & Khalid) Voto, comb. nov. [MB 847753]

Basionym: *Candolleomyces asiaticus* M. Asif, A. Izhar, Niazi & Khalid, European Journal of Taxonomy 826: 180. 2022.

*Psathyrella incana* (C. L. Hou & H. Zhou) Voto, comb. nov. [MB 847754]

Basionym: *Candolleomyces incanus* C. L. Hou & H. Zhou, MycoKeys 88: 117. 2022.

*Psathyrella leucosticta* (Pat.) Voto, comb. nov. [MB 847755]

Basionym: *Coprinus leucostictus* Pat., Bulletin de la Société Mycologique de France 33: 61. 2022

*Psathyrella longistriata* (Murrill) A.H. Sm. Mushrooms in their natural habitats: 552. 1949



Molecular synonyms:

*Psathyrella ellename var. yubaensis* Thiers & A.H. Sm. Memoirs of the New York Botanical Garden 24: 75. 1972.

Morphological synonyms:

*Drosophila langei* Malençon. Flores des champignons supérieurs du Maroc 1: 212. 1970;

*Psathyrella langei* (Malençon) Contu. Micologia e Vegetazione Mediterranea 22(1): 57. 2007;

*Psathyrella longistriata* var. *langei* (Malençon) Neville & Fouchier. Bulletin semestriel de la Fédération des Associations Mycologiques Méditerranéennes 13: 5. 1998;

*Psathyrella malenconii* Fouchier. Documents Mycologiques 24(96): 40. 1995 (nomen novum for *Drosophila langei*).

The collection, identified by Enrique Rubio as *P. langei*, voucher number ERD-6860, GenBank ITS accession number OQ301565, was found in Spain, Asturias, Quirós, Las Llamargas, 21.X.2016, on soil in an acid, pure *Fagus sylvatica* forest at 1400 m a.s.l. The basidiocarps have a robust habit (pileus approx. 25 – 60 mm, stipe approx. 45 – 80 × 4 – 8 mm, gills moderately crowded); spores 8.2 – 10.2 × 4.5 – 5.4 µm, on average 9.2 × 5.0 µ, Q = 1.7 – 2.0, elliptic to narrowly oval in front view, amygdaliform to subphaseoliform in side view, light ochre-brown, germ pore distinct and somewhat little; pleurocystidia approx. 50 – 80 × 10 – 15 µm, lageniform-subutriform with an elongate neck, frequent; cheilocystidia similar to the pleurocystidia, few; paracystidia up to approx. 50 × 35 µm, numerous and dominating. All pictures and descriptive data of the collection are by E. Rubio.

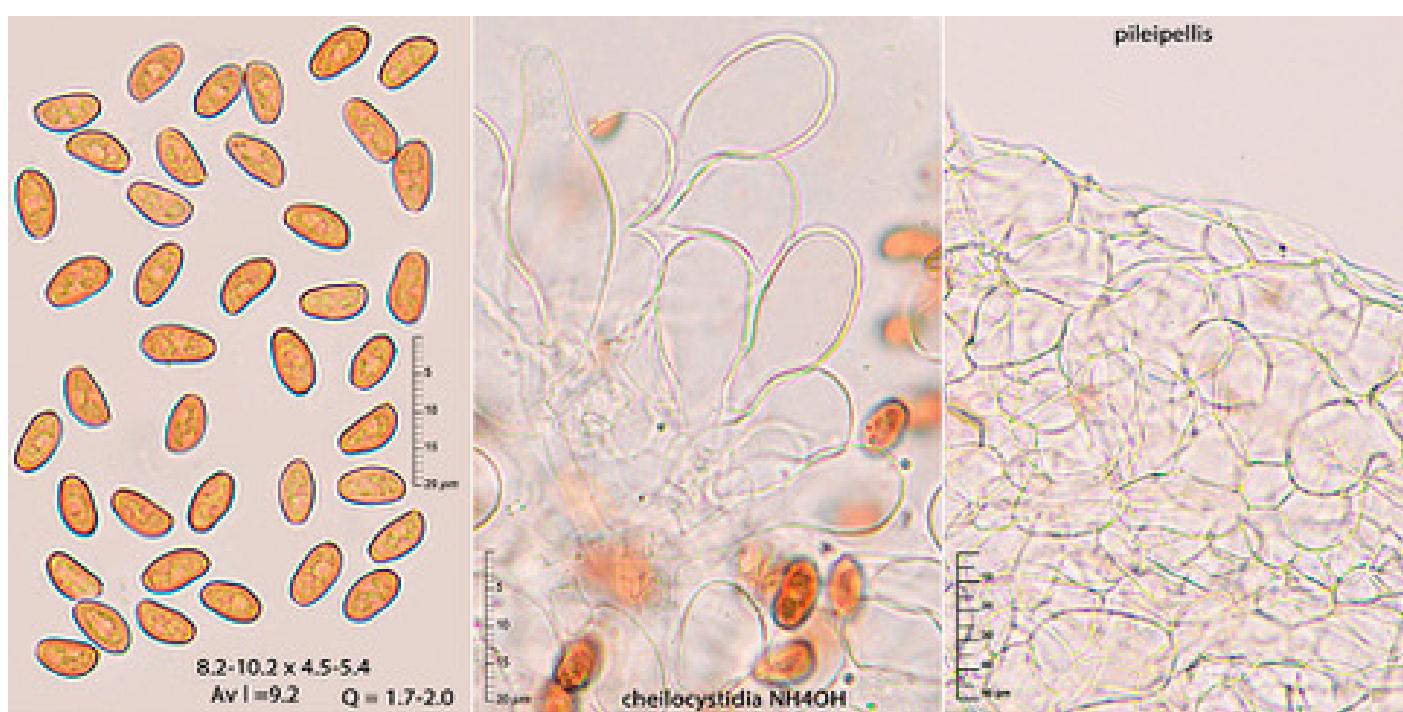
Until now, only a number of non-typical collections originating from USA were present in GenBank representing *Psathyrella longistriata*. A sequenced finding by Enrique Rubio from Spain, sharing a strong, 99.85% to 100%, ITS identity with the type of *Psathyrella ellename var. yubaensis* and the aforementioned American sequences, provides a molecular proof of its presence in the Mediterranean area as well.

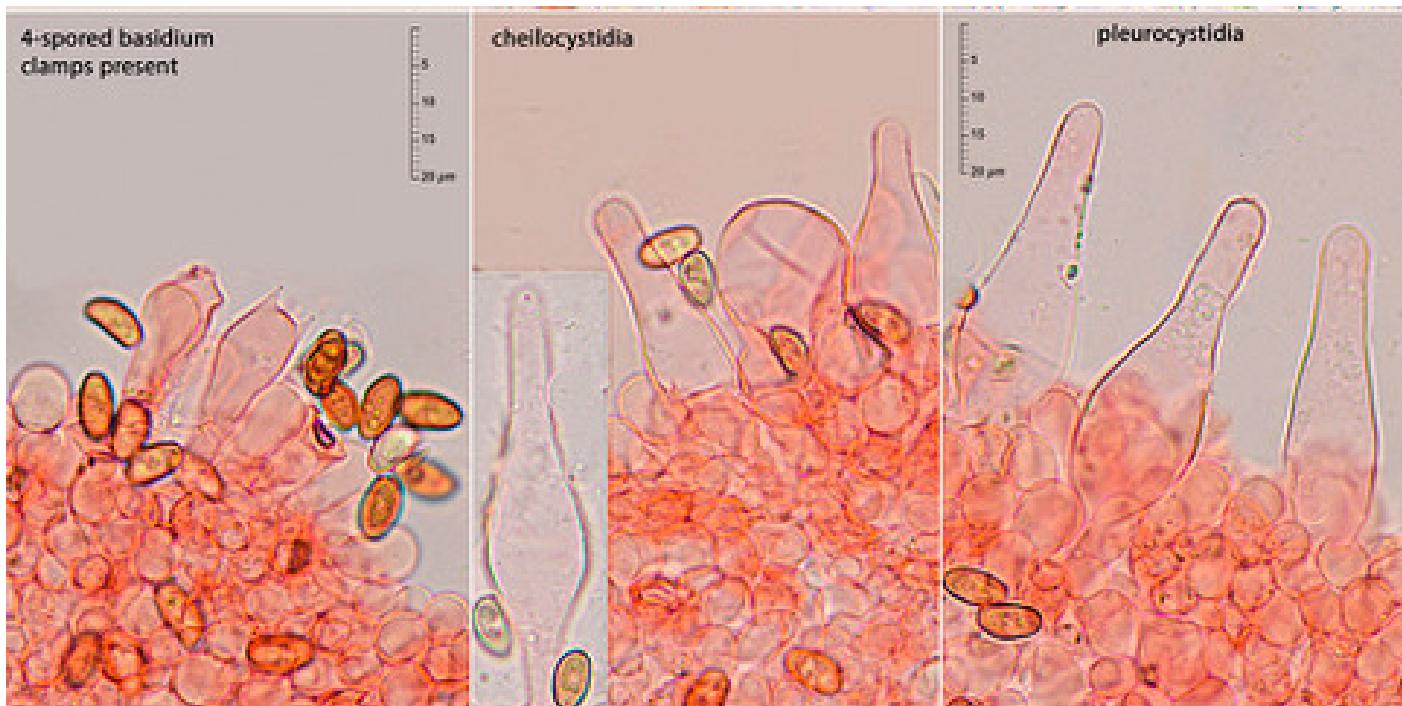
Actually some European authors had reported the presence of a look-alike annulate taxon in North Africa (Malençon & Bertault 1970 as *Drosophila langei*) and in Europe (Ruggero & Contu 2007 as *Psathyrella langei*).

Neville & Fouchier (1998) were the first to recognize a connection between *P. longistriata* and *P. langei* subordinating the European name to the varietal rank of the American one.

However, phylogenetic evidence was still lacking to further confirm cross-Atlantic conspecificity between the two names.

Another European species somewhat similar to *P. longistriata* is *P. rostellata* Örstadius but this taxon is easily distinguished for having numerous cheilocystidia dominating the gill edge, and an often mucronate apex of pleurocystidia.





*Psathyrella subcandolleana* (C. L. Hou & H. Zhou) Voto, comb. nov. [MB 847758]

Basionym: *Candolleomyces subcandolleanus* C. L. Hou & H. Zhou, MycoKeys 88: 115. 2022.

*Psathyrella thailandensis* (Suwannar., Kumla & S. Lumyong) Voto, comb. nov. [MB 847819]

Basionym: *Candolleomyces thailandensis* Suwannar., Kumla & S. Lumyong, Fungal Diversity 114: 431. 2022.

*Psathyrella yanshanensis* (C. L. Hou & H. Zhou) Voto, comb. nov. [MB 847759]

Basionym: *Candolleomyces yanshanensis* C. L. Hou & H. Zhou, MycoKeys 88: 114. 2022.

*Tulosesus callinus* var. *miionis* D.J. Schaf., Loizides & P. Alvarado, from dunes in Cyprus, is treated as a bisporous intraspecific occurrence of *Coprinellus callinus* (M. Lange & A.H. Sm.) Vilgalys, Hopple & Jacq. Johnson. It corresponds to *Coprinellus* sp. 2 (SZMC-NL-1356), a two-spored material from sandy places in Hungary with a central germ pore and pileocystidia with a tapering neck and acute apex (Nagy, Házi, Vágvölgyi & Papp 2012).

*Typhrasa microcarpella* (de Meijer) Voto, comb. nov. [MB 847760]

Basionym: *Psathyrella microcarpella* de Meijer, Macrofungos notáveis das Florestas de Pinheiro-do-Paraná: 307. 2009.

The request of loan for the type, A.A.R. de Meijer 3835, at the Herbarium MBM was unsuccessful; however this taxon shows all characters to fit inside the genus *Typhrasa* looking like a miniature *T. gossypina* (Bull.) Örstadius & E. Larss. found in a subtropical forest of southern Brazil.

## ACKNOWLEDGMENTS

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