

MYCOTAXON

Volume 102, pp. 231–234

October–December 2007

An annotated checklist of *Pluteus* in the Iberian Peninsula and Balearic Islands

A. JUSTO & M.L. CASTRO

fjusto@uvigo.es or alfredo.just@gmail.com; lcastro@uvigo.es

Laboratorio de Micoloxía. Facultade de Bioloxía
Campus As Lagoas-Marcosende, Universidade de Vigo
E-36310 Vigo Spain

Abstract—The checklist collates all 33 taxa of *Pluteus* reported from the Iberian Peninsula (Spain, Portugal) and Balearic Islands (Spain). The complete checklist is posted at <http://www.mycotaxon.com/resources/weblists.html>, with data on the collections, distribution, ecology and phenology of each taxon.

Key words—*Pluteaceae*, biodiversity

Introduction

Pluteus Fr. is the type genus of the family *Pluteaceae* Kotl. & Pouzar (*Agaricales*, *Basidiomycota*). Its main characteristics are the pluteoid basidiomes (i.e. free lamellae; context of pileus and stipe discontinuous), pink spore print and inverse lamella trama. It comprises about 300 species (Kirk & al. 2001) and is distributed in all continents except Antarctica (Singer 1986).

Monographic studies in the genus had been carried out in Europe (Kühner & Romagnesi 1956, Orton 1986, Vellinga 1990) North America (Smith & Stuntz 1958, Homola 1972, Banerjee & Sundberg 1995) and South America (Singer 1958, 1961). A worldwide monographic approach was published by Singer (1956).

In the Iberian Peninsula (Spain, Portugal) and Balearic Islands (Spain) *Pluteus* records are often cited in general checklists. Prior to our study, the only monographic paper on this genus was an article by Muñoz-Sánchez (1991), which focused on species in section *Pluteus*, mainly based on collections from the Basque Country (northern Spain). Regional studies on *Pluteus* within the Iberian Peninsula had been published in recent years, as a part of the Flora Mycologica Iberica project (Justo & Castro 2004, Justo & al. 2005a, b, 2006).



Fig. 1. Provinces of the Iberian Peninsula and Balearic Islands.

Material & methods

We have studied the collections gathered by members of the Mycology Lab at Vigo University between 1991 and 2006. Collections of *Pluteus* deposited in the Iberian herbaria, both official and personal, have been revised.

The information obtained from the bibliographic references of *Pluteus* in the Iberian literature has been incorporated into the distribution maps for each species.

Catalogue

In the online checklist (<http://www.mycotaxon.com/resources/weblists.html>), the following information is given for each taxon: a list of all collections examined; a map of its distribution in our area and some brief comments on its ecology and phenology.

We present a catalogue of the 33 taxa of *Pluteus* recorded in the Iberian Peninsula and Balearic Islands, arranged according to the subdivision of the genus by Vellinga & Schreurs (1985), arranged within each (sub-)section alphabetically.

Section *Pluteus*—*Pluteus atromarginatus* (Singer) Kühner; *Pluteus atropungens* A.H. Sm. & Bartelli; *Pluteus brunneidiscus* Murrill; *Pluteus brunneoradiatus* Bonnard; *Pluteus cervinus* (Schaeff.) P. Kumm.; *Pluteus nothopellitus* Justo & M.L. Castro; *Pluteus pellitus* (Pers.: Fr.) P. Kumm.; *Pluteus petasatus* (Fr.) Gillet; *Pluteus pouzarianus* Singer var. *pouzarianus*; *Pluteus pouzarianus* var. *albus* Bonnard; *Pluteus salicinus* (Pers.: Fr.) P. Kumm.; *Pluteus sandalioticus* Contu & Arras

Section *Villosi* Schreurs & Vellinga—*Pluteus ephebeus* (Fr.: Fr.) Gillet; *Pluteus hispidulus* (Fr.: Fr.) Quél. var. *hispidulus*; *Pluteus hispidulus* var. *cephalocystis* Schreurs

Section *Celluloderma* Fayod

Subsection *Hispidodermini* (Fayod) Vellinga & Schreurs—*Pluteus exiguum* (Pat.) Sacc.; *Pluteus leoninus* (Schaeff.: Fr.) P. Kumm.; *Pluteus plautus* (Weinm.) Gillet; *Pluteus umbrosus* (Pers.: Fr.) P. Kumm.

Subsection *Eucellulodermini* Singer ex Singer—*Pluteus aurantiorugosus* (Trog) Sacc.; *Pluteus chrysophaeus* (Schaeff.) Quél.; *Pluteus cinereofuscus* J.E. Lange; *Pluteus cyanopus* Quél.; *Pluteus dietrichii* Bres.; *Pluteus insidiosus* Vellinga & Schreurs; *Pluteus luctuosus* Boud.; *Pluteus nanus* (Pers.: Fr.) P. Kumm.; *Pluteus pallescens* P.D. Orton; *Pluteus phlebophorus* (Ditmar: Fr.) P. Kumm.; *Pluteus poliocnemis* Kühner; *Pluteus romellii* (Britzelm.) Sacc.

Subsection *Mixtini* Singer ex Singer—*Pluteus podospileus* Sacc. & Cub.; *Pluteus thomsonii* (Berk. & Broome) Dennis

Acknowledgements

Else Vellinga and Pablo Daniëls are thanked for their helpful comments on the presubmission reviews. This work is included in the project Flora Mycologica Iberica VI (CGL2006-12732-C02-01/BOS).

Literature cited

- Banerjee P, Sundberg WJ. 1995. The genus *Pluteus* section *Pluteus* (*Pluteaceae, Agaricales*) in the midwestern United States. *Mycotaxon* 53: 189-246.
- Homola R. 1972. Section *Celluloderma* of the genus *Pluteus* in North America. *Mycologia* 64: 1211-1247.
- Justo A, Castro ML. 2004. Familia *Pluteaceae* na micoteca LOU-Fungi: revisión nomenclatural e taxonómica. *Mykés* 7: 11-18.
- Justo A, Castro ML, Caballero A. 2005a. Los géneros *Pluteus* y *Volvariella* (*Basidiomycota, Fungi*) en La Rioja (España). *Rev. catalana Micol.* 27: 75-84.
- Justo A, Castro ML, Tejedor F. 2005b. *Pluteus insidiosus*, nueva cita para la Península Ibérica. *Rev. catalana Micol.* 27: 85-88.

- Justo A, Castro ML, Rodríguez-Ramos N, Infante F. 2006. Neotipificación de *Pluteus sandalioticus*. Cryptog. Mycol. 27: 197-200.
- Kirk PM, Cannon PF, David JC, Stalpers JA (eds). 2001. Ainsworth & Bisby's Dictionary of the Fungi. 9th Edition. CAB International, Surrey UK.
- Kühner R, Romagnesi H. 1956. Compléments à la flore analytique. VIII. Espèces nouvelles, critiques ou rares de Volvariaceées. Bull. Trimestriel Soc. Mycol. France 72: 181-249.
- Orton PD. 1986. British Fungus Flora 4: *Pluteaceae*. Royal Botanic Garden. Edinburgh.
- Muñoz-Sánchez JA. 1991. La sección *Trichoderma* del género *Pluteus*. Belarra 8: 15-26.
- Singer R. 1956. Contributions towards a monograph of the genus *Pluteus*. Trans. Brit. Mycol. Soc. 39: 145-232
- Singer R. 1958. Monographs of South American basidiomycetes, especially those of the east slope of the Andes and Brazil: 1. The genus *Pluteus* in South America. Lloydia. 21: 195-299.
- Singer R. 1961. Monographs of South American basidiomycetes, especially those of the east slope of the Andes and Brazil: 4. *Inocybe* in the Amazon region, with a supplement to part 1 (*Pluteus* in South America). Sydowia 15: 112-139.
- Singer R. 1986. The *Agaricales* in modern taxonomy (4th revised edition). Koeltz Scientific Books. Koenigstein.
- Smith AH, Stuntz DE. 1958. Studies in the genus *Pluteus* I. Redescription of the American species based on an study of the type specimens. Lloydia 21: 115-136.
- Vellinga EC. 1990. *Pluteus* in C Bas, Th W Kuyper, ME Noordeloos, EC Vellinga (eds.). Flora Agaricina Neerlandica 2: 31-55. A.A. Balkema. Rotterdam.
- Vellinga EC, Schreurs J. 1985. *Pluteus* Fr. in West Europe. Persoonia 12: 337-373.