

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

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Abstract—Species of *Pluteus* reported from the Iberian Peninsula (Spain, Portugal) and Balearic Islands (Spain) are listed, with data on their distribution, ecology and phenology. For each taxon a list of all collections examined and a map of its distribution is given. According to our revision 33 taxa of *Pluteus* occur in the area.

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 spores and inverse lamellae trama. It comprises about 300 species (Kirk et 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 & Stunz 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 and Portugal) and Balearic Islands (Spain) the records of *Pluteus* are often included in general checklists. Prior to our study the only monographic paper on this genus was an article by Muñoz-Sánchez (1991), dealing with species of section *Pluteus*, mainly based on collections from the Basque Country (northern Spain). Regional studies on *Pluteus* within the Iberian Peninsula have been published in recent years, as part of the Flora Mycologica Iberica project (Justo & Castro 2004; Justo et al. 2005a, b, 2006).

We present a catalogue of the 33 taxa of *Pluteus* recorded in the Iberian Peninsula and Balearic Islands. For each taxon the following information is given: a list of all collections examined, a map of its distribution in our area and some brief comments on its ecology and phenology.

Collections examined

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 official herbaria (AH, ARAN, COFC-F; GDA-GDAC; JACUSSTA; LEB; LOU-Fungi; MA-Fungi) have been revised. Personal herbaria, from independent mycologists and associations, have also been revised and are listed and abbreviated as follows: Agustín Caballero (ACAB); Asociación Micológica de Barakaldo (Barakaldo); Associação Micológica A Pantorra (AMP); Carlos Hermosilla (CEH); Centro de Estudios Forestales de Valonsadero (VALON); Francisco Tejedor (PT); Josep Leonard Siquier (JLS); Luis Alberto Parra (LAP); Societat Catalana de Micologia (SCAT).

Distribution data

The provinces of the Iberian Peninsula and Balearic Islands are shown in fig. 1. Abbreviations for province names are given in table 1.

For each taxon a distribution map is given, containing the following information:

Grey provinces: collections of this taxon from these provinces have been studied.

Provinces indicated by a dot: bibliographic references about the occurrence of the taxon in the area exist, but no collections have been studied.

Provinces with letter “D” (doubtful): bibliographic references about the occurrence of the taxon in the area exist, but possibly they do not correspond to the taxon or, at least, to our taxonomic concept.

Full bibliographic references of all taxa will be published in the ongoing monographic series “Cuadernos de Flora Micológica Ibérica” (Pando et al., 1990, Parra 2006) that contains references of all groups being studied within the *Flora Mycologia Iberica* project.

Catalogue

The catalogue is arranged according to the subdivision of the genus by Vellinga & Schreurs (1985), and alphabetically within each (sub-)section. Taxonomic concepts are the same as the ones presented by Vellinga (1990). If our taxonomic concept differs from the one in that work, or if the species is not treated there, additional references are given.

Section *Pluteus*

1. *Pluteus atromarginatus* (Singer) Kühner, Bull. Mens. Soc. Linn. Lyon 4: 51. 1935

On coniferous wood (*Pinus*).

Fruiting from late summer (August) to winter (February), but more commonly recorded during autumn (October-December).

Collections examined—**SPAIN: A Coruña:** Santiago de Compostela, on *Pinus pinaster* wood, 19.I.1986, L. Freire & M. Castro, LOU-Fungi 2709; Corcubión, Finisterre, *Pinus* forest, 3.XI.1983, L. Freire & M. Pérez-Froiz, LOU-Fungi 6267; San Andrés de Teixido, *Pinus pinaster* forest, 26.XI.1988, A. Zaera & L. Rodríguez, LOU-Fungi 4437; **Barcelona:** Dosrius, *Pinus pinaster* forest, 9.I.1993, M. Tabarés & al., SCAT 2078; **Castellón:** Fredes, Pinar Plá, on *Pinus sylvestris* wood, 17.X.2001, P. Daniels, MA-Fungi 52174; Pina del Montalgrao, Umbría de Santa Bárbara, on *Pinus sylvestris* stump, 17.X.1996, F. Tejedor, PT 108; Vistabella del Maestrat, Sanahuja, on *Pinus sylvestris* stump, 26.X.1997, F. Tejedor, PT 235; ibidem, 13.VIII.2002, PT 817; **Gipuzkoa:** Ezkio Itsaso, on *Pinus radiata* wood, 30.VIII.1999, Z.E. Aranzadi, ARAN 5037215; **Girona:** Nevà (Ripollès), on unidentified coniferous wood, IX.1996, M. Tabarés, SCAT 3128; **Jaén:** Orcera, Los Negros, in *Pinus nigra* & *Pinus halepensis* forest, on wood, 25.X.2003, J. de Dios Reyes García, JACUSSTA 4071; **Navarra:** Alsasua, on *Pinus sylvestris* stump, 23.IX.1995, P. Pasabán, ARAN s.n.; **Pontevedra:** As Neves, on *Pinus pinaster* stump, 10.II.2002, J. Rodríguez-Vázquez, LOU-Fungi 16667; Cangas, Cabo Home, in *Pinus* forest in sand dunes, 18.X.1993, J. Rodríguez-Vázquez & L. Freire, LOU-Fungi 7093; ibidem, MA-Fungi 34007; Carretera de Porriño a Gondomar, without habitat, 25.XI.1982, F.D. Calonge, MA-Fungi 4503; Sta. María de Oia, without habitat, 15.XII.2001, X. Varela, LOU-Fungi 17382; Vigo, Campus As Lagoas-Marcosende, on *Pinus* stump, 23.IX.2002, A. Justo, LOU-Fungi 18235; Vigo, Parque Forestal de Beade, on *Pinus* stump, 20.X.2003, P. Lorenzo & A. Justo, LOU-Fungi 18232, Vigo, Saians, on unidentified wood, 6.XII.2001, X. Varela, LOU-Fungi 17309; Vigo, Zamáns, on *Pinus pinaster* stump, 9.XI.1980, C. Castro, LOU-Fungi 2710; **Soria:** Duruelo de la Sierra, in *Pinus sylvestris* forest, 15.IX.1992, F. Martínez-Peña, VALON 941; Pinar Grande, on *Pinus pinaster* stump, 10.IX.1992, F. Martínez, VALON 959; ibidem, on wood, 26.X.1990, Ana, Alejandro, Marisa, VALON 449; San Leonardo de Yagüe, on *Pinus sylvestris* stump, 5.XI.1995, S.A. Romanillos, VALON 1244; Tardelcuende, on *Pinus pinaster* wood, 25.X.2001, Ibon, VALON 1909.

2. *Pluteus atropungens* A.H. Sm. & Bartelli, *Michigan Botanist* 4: 60. 1965

On wood of broad-leaved trees (*Populus*).

Fruiting during autumn (October-November).

For a full description and comments see Justo & Castro (2007a).

Collections examined—**SPAIN: Ávila:** Peguerinos, on unidentified wood of broad-leaved tree, 24.X.1976, F.D. Calonge, MA-Fungi 4633; **Valladolid:** Laguna de Duero, on *Populus* stump, 19.XI.1994, A. García-Blanco & al., MA-Fungi 54269.

3. *Pluteus brunneidiscus* Murrill, N. Amer. Fl. 10: 131. 1917

On wood of broad-leaved trees (*Fagus*, *Quercus*).

Fruiting during the Summer (June) or Autumn (November).

For a full description and discussion on the synonymy see Justo & Castro (2007a)

Collections examined—**SPAIN: Huelva:** Aracena, La Galbana, in mixed *Quercus ilex* subsp. *ballota* & *Quercus suber* forest, on wood, 8.XI.2003, L. Romero de la Osa, JA-CUSSTA 3069; **Navarra:** Donamaría, on *Fagus sylvatica* wood, 11.VII.1999, J.M. Lekuona, ARAN 5006001.

4. *Pluteus brunneoradiatus* Bonnard, Mycol. Helvetica 2: 141. 1987

On wood of broad-leaved trees (*Alnus*)

Recorded in April

For comments on this species see Justo & al. (2007)

Collections examined—**SPAIN: Sevilla:** Cazalla de la Sierra, Río Rivera de Hueznar (Alanís), on *Alnus glutinosa* wood, 2.IV.2003, J. Mariñas & N. Rodríguez-Ramos, COFC-F 2978.

5. *Pluteus cervinus* (Schaeff.) P. Kumm., Führer Pilzk.: 138. 1871

On wood of broad-leaved trees (*Quercus*, *Fagus*, *Eucalyptus*, *Alnus*; *Betula*, *Ulmus*), very rarely on coniferous wood (*Pinus*) or terrestrial.

Fruiting mostly during autumn and winter (October-February), although it may be found all over the year.

Collections examined—**SPAIN: A Coruña:** Betanzos, Chelo, on *Quercus* wood, 8.IX.2004, A. Justo, LOU-Fungi 18718; Santiago de Compostela, on unidentified stump, 7.I.2002, J. Rodríguez-Vázquez, LOU-Fungi 16668; Santiago de Compostela, Selva Negra, on *Pinus pinaster* stump, 26.XII.1973, L. Freire, LOU-Fungi 2713; ibidem, 5.XI.1975, LOU-Fungi 2720; ibidem, 8.XI.1981, LOU-Fungi 2717; ibidem, on *Quercus robur* stump, 18.IX.1986, LOU-Fungi 2716; Santiago de Compostela, Santa Susana, on *Quercus robur* stump, 17.II.1982, L. Freire, LOU-Fungi 2722; Santiago de Compostela, Campus Universitario, on unidentified stump, 28.XI.1974, L. Freire, LOU-Fungi 2721; Santiago de Compostela, Pedroso, on *Eucalyptus globulus* stump, 11.XI.1989, L. Freire, LOU-Fungi 4201; **Asturias:** Arborio, in *Quercus* forest, 10.VI.1998, E. Rubio-Domínguez, MA-Fungi 39649; Hayedo de Pandernedas, habitat unknown, 28.IX.1973, F. D. Calonge, MA-Fungi 5226; Somiedo, Éndriga, on *Fagus* wood, 5.X.2005, L. Llorens, LOU-Fungi 18979; **Ávila:** Casavieja, Valle del Tiétar, in mixed *Quercus* & *Pinus* forest, on unidentified wood, 29.XI.1998, J. Martín, MA-Fungi 40270; Candeleda, on *Alnus glutinosa* wood, 31.X.1992, G.M.L., LEB 987; La Adrada, Charca de la Haya, habitat unknown, 9.V.1983, F. D. Calonge, MA-Fungi 9722; Piedralaves, habitat unknown, 11.XI.1983, F. D. Calonge, MA-Fungi 11455; **Barcelona:** Dosrius, on *Pinus* wood, 1.IV.2002, A. Rocabruna & M. Tabarés, SCAT 4149; Pla de l'Espinal, on *Fagus sylvatica* stump, 24.VI.1989, A. Rocabruna, SCAT 1194; Sta. Fe del Montseny, on *Fagus sylvatica* stump, 13.IX.1979, J. Girbal, MA-Fungi 1791; ibidem, MA-Fungi 46008; ibidem, GDAC 11763; ibidem, habitat unknown, 2.VI.1984, F.D. Calonge, MA-Fungi 14222; ibidem, on *Fagus*

sylvatica wood, 16.VIII.1986, A. Rocabruna, SCAT 26; ibidem, on *Fagus sylvatica* wood, 14.VI.1987, A. Rocabruna, SCAT 116; **Cádiz:** Jimena de la Frontera, La Higuera, in mixed forest of *Quercus suber*, *Q. canariensis* & *Pistacia lentiscus*, on wood, 29.XI.2003, F. Prieto García, JA-CUSSTA 2836; **Córdoba:** Hornachuelos, Cuesta de los Chinos, in mixed forest of *Quercus suber* & *Q. ilex*, 3.XI.2003, T. Illescas, JA-CUSSTA 6568; **Gipuzkoa:** Astigarraga, on *Pinus radiata* wood, 8.XI.2002, J.M. Lekuona, ARAN 3004026; Billabona, on *Alnus glutinosa* wood, 21.II.2004, J.M. Lekuona, A3007016; Hernani, on *Quercus robur* wood, 7.I.2004, J.M. Lekuona, ARAN 3011012; Irun, on *Fagus sylvatica* wood, 6.V.2000, J.M. Lekuona, ARAN 3014023; ibidem, 25.IV.2002, ARAN 3014023; Oiartzun, on *Quercus rubra* wood, 10.V.2001, J.M. Lekuona, ARAN 3020020; **Girona:** Riells del Montseny, on unidentified wood, 19.IV.1987, A. Rocabruna, SCAT 99; **Granada:** Río Bastidas, on dead *Populus* wood, 3.XI.1992, A. Ortega, GDAC 38293; Sierra Nevada, on unidentified wood, under *Salix*, 21.X.1998, A: Capilla, GDAC 44835; Sierra Nevada, Río Maitena, on unidentified wood, 26.XI.1978, A. Caballero & al., GDAC 11339; Sierra Nevada, Venta del Último, on *Populus* stump, 1.VI.1977, A. Ortega, GDAC 11338; **Guadalajara:** Majaelrayo, on *Quercus* wood, 27.III.1978, B. Moreno, MA-Fungi 4610; **Huelva:** Alrededores del Palacio de Doñana, on *Quercus suber* wood, 4.II.1978, F.D. Calonge, MA-Fungi 145; Almonte, Reserva Biológica de Doñana, El Bolín, habitat unknown, 7.XII.2001, L.A. Parra, LAP 121; Calañas, Finca El Pozuelo, El Chaparral, in *Eucalyptus* forest, 22.III.2003, P.P. Daniëls, JA-CUSSTA 6217; **Jaén:** Andujar, Ribera del Jándula, in forest of *Populus nigra*, on wood, 8.XI.2003, Felipe Jimenz Antonio, JA-CUSSTA 3209; Santa Elena, subida del Valdeazores, in mixed forest of *Quercus suber*, *Q. ilex* & *Cistus ladanifer*, 20.XI.2003, J. de Dios Reyes, JA-CUSSTA3887; **León:** Puerto del Pando, on dead *Fagus sylvatica* wood, 3.VI.1988, G.M.L., LEB 532; **La Rioja:** El Rasillo, on *Quercus pyrenaica* stump, 11.VI.1983, A. Caballero, ACAB 157; Zarzosa, on *Fagus sylvatica* wood, 2.VII.2004, A. Caballero, ACAB 2847; Larriba, on dead branch of *Fagus sylvatica*, 17.VII.2004, A. Caballero, ACAB 2853; **Lugo:** Lugo, Conturiz, Casa da Fervenza, on *Quercus* wood, 15.X.2003, A. Justo, LOU-Fungi 18227; ibidem, LOU-Fungi 18228; ibidem, LOU-Fungi 18229; ibidem, 26.IX.2004, LOU-Fungi 18723; ibidem, 26.IX.2004, LOU-Fungi 18722; ibidem, 26.IX.2004, LOU-Fungi 18720; ibidem, 26.IX.2004, LOU-Fungi 18721; Lugo, Segade, on wood of deciduous tree, 8.XII.2003, M. Castro & X. Martíns, LOU-Fungi 18614; Pedrafita do Cebreiro, Liñares, on *Fagus sylvatica* wood, 9.X.1985, A. Prunell & al., LOU-Fungi 2707; **Málaga:** Cortes de la Frontera, on *Quercus suber* wood, 15.XI.1987, A. Ortega & al., GDAC 31526; **Navarra:** Goizueta, on *Pinus radiata* wood, 10.VII.2001, J.J. Iturrioz, ARAN 5011143; **Ourense:** Allariz, Enfesto, on *Quercus* wood, 9.VI.2002, M. Castro, LOU-Fungi 17406; Allariz, Requeixo, on *Alnus glutinosa* stump, 9.VI.2002, J. Blanco-Dios, LOU-Fungi 17407; Castro Caldelas, Abeleda, on *Betula* stump, 24.IV.1993, M. Castro LOU-Fungi 4498; Nogueira da Romeria, on unidentified wood, without date, J. Rodríguez, LOU-Fungi 19021; ibidem, 19020; Os Peares, Ferreira de Pantón, on dead tree, 23.XII.1993, R. González, LOU-Fungi 7549; **Palencia:** Herreruclas de Castillería, in *Quercus* forest, 24.X.1992, G.M.L., LEB 986; **Pontevedra:** Baiona, Chan da Lagoa, on

Eucalyptus stump, 29.XI.2003, S. Viso, LOU-Fungi 18224; ibidem, LOU-Fungi 18223; ibidem, LOU-Fungi 18225; ibidem, LOU-Fungi 18226; ibidem, LOU-Fungi 18222; Cangas, Cabo Home, in *Pinus* forest on sand dunes, on unidentified wood, 10.X.2001, A. Justo, LOU-Fungi 17304; Covelo, Coveliño, in *Quercus robur* forest, on wood, 26.X.1997, P. Comesaña & A. Soliño, LOU-Fungi 17303; Lalín, As Cruces, on *Betula* (living tree), 30.III.1986, M. Pérez-Froiz, LOU-Fungi 6011; Moaña, Muiños do Rfo Fraga, on unidentified wood, 21.III.2002, J. Rodríguez-Vázquez, LOU-Fungi 16652; Mondariz, Fraga de Aboal, on branch of *Quercus robur*, 10.I.1998, M. A. Fernández, LOU-Fungi 17307; ibidem, 2.IX.1997, leg. M. A. Fernández, LOU-Fungi 17308; Mondariz, on fallen log of *Quercus*, 20.XI.1996, M. A. Fernández, LOU-Fungi 17306; Tomiño, Goián, Forte de S. Lorenzo, on unidentified wood of deciduous tree, 2.II.2003, M. Castro & M. Martínez-Campos, LOU-Fungi 18233; ibidem, X. Martíns, LOU-Fungi 18234; Redondela, on unidentified wood, 29.V.1994, A. Matilde, LOU-Fungi 8735; Vigo, Camiño de Gonderan, on *Alnus glutinosa* stump, 19.XII.1995, J. Rodríguez-Vázquez, LOU-Fungi 8401; Vigo, Saiáns, on unidentified wood of deciduous tree, 5.X.2000, X. Varela, LOU-Fungi 17305; **Salamanca**: La Orbada, on straw, 18.V.2003, A. García-Blanco & al., MA-Fungi 55411; **Sevilla**: Constantina, Arroyo de Guadalvacar, on *Ulmus minor* wood, 8.X.2002, N. Rodríguez-Ramos, COFC 2931; Constantina, Navalvillar, on *Quercus suber* wood, 7.XI.2003, J. M. Fernández-Rodríguez, COFC 2936; ibidem, 28.XI.2003, N. Rodríguez-Ramos, COFC 2573; **Soria**: Cebollera, on *Fagus sylvatica* stump, 9.VI.1992, Carlos, VAL-Fungi 841; Montenegro de Cameros, Hayedo de las Tozas, on *Fagus sylvatica* stump, 30.IX.1989, M. Fernández-Toirán & Fernando Martínez-Peña, VAL-Fungi 44; Moncayo, on *Fagus sylvatica* stump, 11.X.1992, G.M.L., LEB 985; **Vizcaya**: Ochandiano, on *Fagus sylvatica* stump 3.X.1980, Grupo Micología, GDAC 16185; **Zamora**: Fermoselle, in forest of *Quercus ilex*, 11.V.1991, G.M.L., LEB 874; **PORTUGAL**: **Tras os Montes e Alto Douro**: Miranda do Douro, monte da Trindade, on *Quercus ilex* wood, 10.V.2003; M. Paraiso & G. Marques, AMP 125.

6. *Pluteus nothopellitus* Justo & M.L. Castro, Mycotaxon 102: 222. 2007

On *Quercus* wood.

Fruiting in autumn (late September).

For a full description and comments see Justo & Castro (2007b).

Collections examined—**SPAIN**: **A Coruña**: Cambre, Cecebre, on fallen branch of *Quercus robur*, 30.IX.2004, A. Justo 58 (MA, Holotype); ibidem, LOU-Fungi 18726 (Isotype).

7. *Pluteus pellitus* (Pers.: Fr.) P. Kumm., Führer Pilzk.: 98. 1871

On *Eucalyptus* wood.

Fruiting in spring (March-June).

For a full description and comments see Justo & Castro (2007b).

Collections examined—**SPAIN**: **Pontevedra**: Pontevedra, A Xunqueira, on *Eucalyptus cinerea* stump 7.V.1998, M. Lago & D. Solís, LOU-Fungi 15215; ibidem, on remnants of *Eucalyptus globulus*, 2.VI.1997, M. Lago, LOU-Fungi 15216.

8. *Pluteus petasatus* (Fr.) Gillet, Hyménomycètes: 395. 1876

On wood of broad-leaved trees (*Quercus*, *Populus*), also on sawdust, straw or terrestrial.

Fruiting mostly during spring (March-April) but also recorded during summer (July) and autumn (October).

Collections examined—**SPAIN: A Coruña:** Brión, Adoufe, on unidentified stump, 17.IX.1979, L. Cabo, LOU-Fungi 2714; Santiago de Compostela, San Antolín de Toques, on unidentified wood, 7.X.1985, F. Cabo, LOU-Fungi 4123; **Barcelona:** Argentona, on sawdust, 10.IV.1988, A. Rocabrana, SCAT 474; Cardedeu, Carretera de Cardedeu a St. Ignasi, on straw, 11.VI.1987, A. Rocabrana, SCAT 154; **Cáceres:** Aldeanueva del Camino, on trunk of *Quercus suber*, 11.IV.1996, A. Caballero 1945; Monfragüe, Villareal de San Carlos, on *Quercus suber* wood, 18.IV.1994, R. González, LOU-Fungi 7570; ibidem, MA-Fungi 34006; **Huelva:** La Rocina, Doñana, on *Quercus suber* wood, 24.III.1978, J.M.Rey, MA-Fungi 330; **La Rioja:** Villarroya, on *Quercus ilex* stump, 24.VI.1988, A. Caballero, ACAB 1054; Ortigosa de Cameros, terrestrial, 13.VII.1988, A. Caballero, ACAB 1125; Villarroya, on *Quercus ilex* stump, 27.IX.1999, A. Caballero 2288; **Madrid:** Valdetorras de Jarama, terrestrial, 25.VI.1978, J.L.Vicioso, MA-Fungi 4716; **Segovia:** Riaza, on *Populus* wood, 17.VI.1979, C. Santonja, MA-Fungi 2961; **Sevilla:** Cazalla de la Sierra, Arroyo Hiel de la Vaca, on *Quercus suber* wood, 29.X.2002, N. Rodríguez-Ramos & L. Cabrera-Muñoz, COFC-F 3923; Constantina, Navalvillar, on *Quercus ilex* subsp. *ballota* wood, 21.X.2003, I. Olariaga, COFC 2944; El Pedroso, La Jarosa, habitat unknown, 30.IV.2003, N. Rodríguez-Ramos, COFC 2961; Las Navas de la Concepción, Embalse del Retortillo, habitat unknown, 29.XI.2002, COFC 2957; **Valladolid:** Mucientes, on straw, 15.III.2003, A. García-Blanco & al., MA-Fungi 55409; Villalba de los Alcores, on straw, 15.III.2003, A. García-Blanco & al., MA-Fungi 55410.

9. *Pluteus pouzarianus* Singer, Sydowia 36: 283. 1984 var. *pouzarianus*

On coniferous wood (*Pinus*), once recorded on needles of *Pinus*.

Fruiting during autumn-winter (October-February), more rarely during spring (May).

Collections examined—**SPAIN: A Coruña:** Sobrado dos Monxes, on unidentified coniferous wood, 23.X.2004, J.A. Díaz, LOU-Fungi 18717; **Cantabria:** Lienares, on *Pinus* wood, 18.XI.2004, G. Carrascosa, LOU-Fungi 18715; **Madrid:** Madrid, Casa de Campo, on unidentified coniferous wood, 4.V.1980, J. Laviada, MA-Fungi 4360; **Málaga:** Yunquera, Puerto de Saucillo, in forest of *Pinus halepensis*, *P. pinaster*, *Abies pinsapo*, on wood, 3.XII.2003, A. Gonzalez-Cruz & F. Prieto-García, JA-CUSSTA 2639; **Pontevedra:** Cangas, Barra, on *Pinus pinaster* wood, 24.II.2006, J.C. Alonso-Lago, LOU-Fungi 18921; Redondela, Cedeira, on *Pinus pinaster* wood, 11.XI.2001, J. Rodríguez-Vázquez, LOU-Fungi 16651; **Segovia:** Puerto de Los Leones, habitat unknown, 23.X.1977, F.D. Calonge, MA-Fungi 1685; **Soria:** Tardelcuende, on (burned) *Pinus pinaster* wood, 17.X.2002, Ibon, VAL-Fungi 1997; **Vizcaya:** Laga, on *Pinus* needles, 16.II.1975, M.T. Tellería, MA-Fungi

5013; **PORTUGAL: Minho:** Mata do Camarido, on *Pinus* wood, 29.II.2004, N. Alonso-Pereira & G.M.G., LOU-Fungi 18842.

10. *Pluteus pouzarianus* var. *albus* Bonnard, Mycol. Helvetica 5: 204. 1993

On woody remnants of coniferous trees (*Pinus pinaster*).

Collected in early autumn (October).

For a detailed description and discussion see Rodríguez & Moreno (2006).

11. *Pluteus salicinus* (Pers.: Fr.) P. Kumm., Führer Pilzk.: 99. 1871

On wood of broad-leaved trees (*Fagus*, *Quercus*, *Populus*), very rarely terrestrial.

Fruiting from summer (June) to early winter (January).

Collections examined—**SPAIN: Asturias:** Somiedo, Veigas, on unidentified wood, 22.VIII.1997, E. Rubio-Domínguez, MA-Fungi 38383; **Barcelona:** La Floresta, on unidentified wood, 5.XI.2002, A.M. Tarín, SCAT 4598; Rupit, Pruit, on *Fagus sylvatica* stump, 1.VI.1999, M. Tabarés, SCAT 4599; Sta. Fe del Montseny, on *Fagus sylvatica* stump, 24.VI.1987, A. Rocabrana, SCAT 120; ibidem, 19.VII.1987, SCAT 284; ibidem, 1.VI.1988, M. Tabarés & A. Rocabrana, SCAT 1094; ibidem, 17.VI.1995, SCAT 2523; ibidem, 15.VIII.1995, SCAT 2545; **Cádiz:** Los Barrios, Arroyo del Tiradero, in forest of *Quercus canariensis*, *Q. suber*, *Alnus glutinosa*, on wood, 3.I.2004, A. González-Cruz & F. Prieto-García, JA-CUSSTA 4098; Grazelema, Las Cumbres, on *Quercus suber* wood, 7.XI.2001, A. Castro, MA-Fungi 53681; **Girona:** Requesens, Castell, on *Populus* wood, 7.XI.1995, leg. A. Prunell, LOU-Fungi 8264; Riells, on wood of unidentified deciduous tree, 28.IX.1996, A. Rocabrana, SCAT 3140; **Gipuzkoa:** Tolosa, on wood of unidentified deciduous tree (*Quercus rubra* or *Acer*), 23.VI.2001, P. Pasabán, ARAN s.n.; **Granada:** Aldeire, Río Aldeire, in *Populus* forest, apparently terrestrial, 27.IX.2003, A. Capilla, JA-CUSSTA 4305; **Huelva:** Ribera del Múrtiga, La Nava, on *Populus nigra* wood, 18.X.1992, L. Romero de la Osa, MA-Fungi 33470.

12. *Pluteus sandalioticus* Contu & Arras, Mycol. Helvetica 11: 138.2001

On wood of broad-leaved trees, mainly *Quercus ilex* and *Q. suber*.

Fruiting during spring (March-June) or autumn (October).

For a detailed discussion of this species see Justo et al. (2006).

Collections examined—**SPAIN: Barcelona:** Dosrius, pujada del Castell, on unidentified wood, 18.IV.1993, A. Rocabrana, SCAT 2135; **Huelva:** Nava, Múrtiga-mina M^a Luisa, in mixed forest of *Alnus glutinosa* and *Populus nigra*, on wood, 4.X.2003, L. Romero de la Osa, JA-CUSSTA 3031; **La Rioja:** Villarroya, on buried stump of *Quercus ilex*, 20.X.2001, A. Caballero, ACAB 2429; **Madrid:** Madrid, Real Jardín Botánico, on unidentified wood, 12.VI.1985, A. Martínez, MA-Fungi 11466; **Sevilla:** Cazalla de la Sierra, La Atalaya, on *Quercus suber* wood, 21.III.2002, N. Rodríguez-Ramos, COFC-F 2959 [*Neotypus*; *Isonotypus* in PC].

Section *Villosi* Schreurs & Vellinga, *Persoonia* 12: 343. 1985

13. *Pluteus ephebeus* (Fr.: Fr.) Gillet, *Hyménomycètes*: 392. 1876.

On wood of broad-leaved trees (*Alnus*, *Populus*, *Ulmus*, *Quercus*) or terrestrial.

Fruiting from summer (August) until late autumn (December).

Collections examined—**SPAIN: Barcelona:** Collserola, Riera de la Salamandra, *Populus nigra* trunk, 15.IX.1993, M. Tabarés, SCAT 2310; Dosrius, under *Platanus* & *Populus*, 1.VIII.1984, A. Rocabrana, SCAT 97; Olzinelles (Vallès Oriental), on unidentified wood of broad-leaved tree, 31.X.2001, A. Rocabrana & M. Tabarés, SCAT 3996; Sant Cugat del Vallès, on unidentified wood of broad-leaved tree, 14.IX.1996, Leg. M. Tabarés, SCAT 4602; **Córdoba:** Arroyo Tifras, on *Populus* wood, without date, J. Gómez & B. Moreno, GDAC 39067; Carcabuey, Navazuelo-Carcabuey, on *Quercus ilex* subsp. *ballota* wood, 1.XI.2002, J. Gómez Fernández & al, JA-CUSSTA 484; Priego de Córdoba, Arroyo Gomiz-Jaula, in *Ulmus minor* forest, terrestrial, 1.XI.2002, J. Gómez & al., JA-CUSSTA 2712; **Granada:** Alhambra de Granada, terrestrial, 24.XI.1981, R. Galán & R. Ortega, GDAC 12202; Hueneja, río Hueneja, in *Populus* forest, 12.X.2003, A. Capilla, JA-CUSSTA 4568; **Jaén:** Santa Elena, Arroyo del Rey, in mixed forest of *Populus nigra*, *Salix*, *Tamarix*, terrestrial, 6.XII.2003, J. Reyes-García, JA-CUSSTA 3900; **La Rioja:** Larriba, on *Fagus sylvatica* stump, 4.X.1986, A. Caballero, ACAB 580; **León:** Villabalter, under *Populus*, terrestrial, 27.V.1989, G.M.L., LEB 531; **Mallorca:** Muro, S`Albufera de Muro, under *Ulmus*, 3.XI.1997, J. Siquier, JLS 912B; **Sevilla:** Cazalla del Sierra, La Atalaya, on *Quercus suber* wood, 29.X.2003, N. Rodríguez-Ramos, COFC-F 2935; ibidem, COFC-F 2945; ibidem, COFC-F 2946; ibidem, on *Ulmus* stump, 15.X.2003, N. Rodríguez-Ramos, COFC-F 3549; Cazalla de la Sierra, Río Rivera de Hueznar, on *Alnus glutinosa* wood, 15.X.2003, N. Rodríguez-Ramos, COFC-F 2934; Constantina, Arroyo del Guadalvacar, on *Quercus suber* wood, 8.X.2002, N. Rodríguez-Ramos, COFC-F 2938; Constantina, Cerro del Hierro, on *Quercus suber* wood, 23.X.2003, N. Rodríguez-Ramos, COFC-F 2933.

14. *Pluteus hispidulus* (Fr.: Fr.) Quél., *Mém. Soc. Émul. Montbéliard*, 2e Sér., 5: 536. 1875 **var. *hispidulus***

On coniferous wood (*Abies*) or terrestrial.

Recorded in July and October.

Collections examined—**SPAIN: Barcelona:** Sant Cugat, on the ground, among wood remnants, 7.X.1995, M. Tabarés & J. Vila, SCAT 3363; **Girona:** Campelles, on *Abies alba* wood, 11.VII.2002, M. Tabarés & J. Vila, SCAT 4597.

15. *Pluteus hispidulus* var. *cephalocystis* Schreurs in Vellinga & Schreurs, *Persoonia* 12: 348.1985

Terrestrial, among wood remnants.

Recorded in October.

Collections examined—**SPAIN: Barcelona:** Sant Cugat., on the ground, among wood remnants, 1.X.1995, M. Tabarés & J. Vila, SCAT 4592.

Section *Celluloderma* Fayod, Ann. Sci. Nat. Bot., sér. VII, 9: 364. 1889

Subsection *Hispidodermini* (Fayod) Vellinga & Schreurs, Persoonia 12: 349. 1985

16. *Pluteus exiguus* (Pat.) Sacc., Syll. Fung. 5: 671. 1887

On coniferous wood or terrestrial.

Recorded in August and November.

Collections examined—**SPAIN: Gipuzkoa:** Billabona, on the ground, among mosses, 30.VIII.2001, P. Pasabán, ARAN-s.n.; **Mallorca:** Capdepera, playa de Cala Agulla, on unidentified wood, in mixed forest of *Pinus halepensis* & *Juniperus phoenicea* on sand dunes, 8.XI.1994, J. Siquier, JLS 696B.

17. *Pluteus leoninus* (Schaeff.: Fr.) P. Kumm., Führer Pilzk.: 98. 1871

On wood of broad-leaved trees (*Fagus*, *Quercus*).

Fruiting during late spring-summer (June-July), also during the Autumn (October-November).

Collections examined—**SPAIN: Asturias:** Arborio, in *Quercus robur* forest, 10.VI.1998, E. Rubio-Domínguez, MA-Fungi 39650; **Barcelona:** Sta. Fe del Montseny, on *Fagus sylvatica* wood, 24.VI.1987, A. Rocabrana, SCAT 216; ibidem, 6.VII.1987, SCAT 275; ibidem, 6.VII.1990, SCAT 1412; ibidem, X.1989, M. Tabarés, SCAT 1480; **Burgos:** Berberana, Monte de Santiago de Compostela, habitat unknown, 16.VII.1994, L.A. Parra, LAP 34; **Girona:** Riells del Montseny (La Selva), on fallen wood of *Quercus suber*, 17.VI.1992, A. Rocabrana, SCAT 2043; **Jaén:** Santa Elena, Subida de Valdeazores, in *Quercus ilex* & *Q. suber* forest, on wood, 27.XI.2003, J. Reyes-García, JACUSSTA 3094; **La Rioja:** Larriba, in *Fagus sylvatica* forest, 11.X.1986, A. Caballero, ACAB 599; **Lugo:** Monforte, Rubián, on unidentified wood, 5.XI.1983, M. Martínez-Campos, LOU-Fungi 4368; **Navarra:** Goizueta, on *Fagus sylvatica* wood, 15.VII.2001, J.I. Iturrioz, ARAN-5011155; Zarranz, on *Fagus* wood, 7.VI.1997, P.Pasabán, ARAN-s.n.

18. *Pluteus plautus* (Weinm.) Gillet, Hyménomycètes: 394. 1876

On wood of broad-leaved trees (*Quercus*, *Fagus*).

Fruiting from summer (June) until late autumn (December).

Collections examined—**SPAIN: A Coruña:** Cambre, Cecebre, on *Quercus* wood, 30.IX.2004, A. Justo, LOU-Fungi 18724; ibidem, LOU-Fungi 18725; **Asturias:** Somiedo, Éndriga, on unidentified wood of broad-leaved tree, 5.X.2005, J. Girbal, LOU-Fungi 18980; **Barcelona:** Collserola (Barcelonès), Riera de la Salamandra, on *Quercus ilex* wood, X.1993, M. Tabarés & J. Vila, SCAT 2341; Pla de l'Espinal (Vallès Oriental), Fogars de Montclús, on *Fagus sylvatica* wood, 3.VIII.1996, A. Rocabrana & M. Tabarés, SCAT 2941; Sta. Fe del Montseny, near Avet Blau, on *Fagus sylvatica* wood, 10.VII.1987, A. Rocabrana, SCAT 189; **Burgos:** Fresnedo, in *Quercus* forest, 12.X.1991, G.M.L., LEB 873; **Cádiz:** Carretera de Los Barrios a Facinas, on wood of

broad-leaved tree, 17.XI.1987, A. Ortega & al., GDAC 31991; Carretera de Jimena al Puerto de Galis, on *Quercus suber* branch, 11.XI.1989, A. Ortega & al., GDAC 31741; Castellar de la Frontera, Chirina, in *Quercus suber* & *Q. canariensis* forest, 2.XI.2003, A. González-Cruz & F. Prieto-García, JA-CUSSTA 2754; Grazalema, carretera Grazalema-Ronda, in *Quercus faginea* & *Q. suber*, forest, on wood, 1.XII.2003, A. González-Cruz & F. Prieto-García, JA-CUSSTA 4656; **Córdoba**: Cuelgaperros, in *Quercus ilex* subsp *ballota* forest, on wood, 15.X.2003, O. Sánchez-escamilla, JA-CUSSTA 3580; **Huelva**: Cala, La Cañada, in *Quercus pyrenaica* & *Q. suber* forest, on wood, 5.XI.2003, L. Romero de la Osa, JA-CUSSTA 3027; **Jaén**: Santa Elena, Ribera de la Aliseda, in mixed forest of *Alnus glutinosa*, *Populus nigra*, *Salix*, *Ulmus minor*, *Pinus pinaster*, 20.X.2003, J. Reyes-García, JA-CUSSTA 3346; Orcera, in mixed forest of *Populus nigra*, *Pinus halepensis*, *P. nigra*, on wood, 22.XI.2003, J. Reyes-García, JA-CUSSTA 4065; **La Rioja**: Las Ruedas de Ocón, on unidentified stump, 3.X.1987, A. Caballero, ACAB 783; Villarroya, on *Quercus ilex* wood, 18.VI.1988, A. Caballero, ACAB 1049; Larriba, on *Fagus sylvatica* stump, 13.VII.2002, A. Caballero, ACAB 2490; **Málaga**: Cortes de la Frontera, in *Quercus canariensis* forest, on wood, 14.XII.2002, A. González-Cruz & al., JA-CUSSTA 872; **Navarra**: Bernete, Borda, on fallen branch of *Fagus*, 7.X.1995, P. Pasabán, ARAN s.n.; Erasun, on *Fagus* stump, 27.VIII.1997, P. Pasabán, ARAN s.n.; **Toledo**: Alcañizo, habitat unknown, 25.XI.1984, A. Gil, MA-Fungi 20689.

19. *Pluteus umbrosus* (Pers.: Fr.) P. Kumm., Führer Pilzk.: 98. 1871

On wood of broad-leaved trees (*Populus*).

Fruiting during the autumn (September-December).

Collections examined—**SPAIN**: **Almería**: Nacimiento del río Andarax, on *Populus* wood, 30.XI.1983, F. D. Calonge, MA-Fungi 5854; **Castellón**: Pina de Montalgrao, on *Populus* wood, 27.X.2004, F. Tejedor, PT 1034; **Córdoba**: Carcabuey, Arroyo Tijeras, in *Populus nigra* forest 15.XI.2002, J. Gómez-Fernández, JA-CUSSTA 575; **Segovia**: Hoces del Duratón, Sepúlveda, on *Populus* wood, 10.XI.1992, M. Tabarés, SCAT 4601; **Valladolid**: Castromonte, La Espina, on *Populus* stump, 30.IX.1995, A. García-Blanco & al., MA-Fungi 54273; Herrera de Duero, on *Populus nigra* trunk, 26.XII.1992, A. García-Blanco, MA-Fungi 54275; Valladolid, on *Populus* log, 22.XI.1994, A. García-Blanco & al., MA-Fungi 54274.

Subsection *Eucellulodermini* Singer ex Singer, Lloydia 21: 274. 1958

20. *Pluteus aurantiorugosus* (Trog) Sacc., Beih. Hedwigia 35 (7): 5. 1896

On wood of broad-leaved trees (*Populus*, *Ulmus*).

Recorded during autumn (October-December), more rarely in the summer (July).

Collections examined—**SPAIN**: **Ávila**: Barco de Ávila, on unidentified wood, 5.X.1986, F.D. Calonge, MA-Fungi 17577; **Barcelona**: Collserola (Barcelona), on *Populus nigra* wood, 24.VII.1996, M. Tabarés, SCAT 3387; ibidem, IX.1999, SCAT 4587; Olzinelles (Vallès Oriental), on

unidentified wood of broad-leaved tree, 5.X.1989, A. Rocabrana, SCAT 1283; **Córdoba:** Monturque, Cortijo del Cerro Hidalgo, in *Ulmus* forest, on wood, 21.XI.2003, A. Montes Comino, JA-CUSSTA 6379; Priego de Córdoba, Arroyo Gómiz-Jaula, in *Ulmus minor* forest, 20.XI.2002, J. Gómez-Fernández, JA-CUSSTA 553; **Jaén:** Andújar, Ribera del Jándula, in *Populus nigra* forest, on wood, 7.XII.2002, F. Jiménez, JA-CUSSTA 1928; **Huelva:** La Nava, Ribera de Múrtiga, in *Ulmus minor* trunk, 25.XI.1998, L. Romero de la Osa, MA-Fungi 41066; **La Rioja:** Herce, on *Populus nigra* trunk, 4.X.1987, A. Caballero, ACAB 800; La Villa de Ocón, on *Populus nigra* stump, 8.XI.1997, A. Caballero, ACAB 2132; **Madrid:** Valdetorres del Jarama, on unidentified wood, 17.X.1976, E. Álvarez, MA-Fungi 4762; Valle de la Fonfria, on unidentified wood, 23.IX.1979, M. Gordaqui, MA-Fungi 5340; **Valladolid:** Herrera de Duero, on *Populus* wood, 22.X.1998, A. García-Blanco & al., MA-Fungi 54627; Sieteiglesias de Trabanco, on *Ulmus* stump, 13.X.1997, A. García Blanco & al., MA-Fungi 54270; ibidem, on *Populus alba* stump, 2.X.1999, MA-Fungi 54626; Tudela de Duero, on *Ulmus* trunk X.1993, M. Tabarés, SCAT 2381; Villanueva de Duero, on *Ulmus* stump 30.IX.1990, A. García Blanco & al., MA-Fungi 54271.

- 21. *Pluteus chrysophaeus* (Schaeff.) Quél., Champ. Jura. Vosges 1: 82. 1872**
On wood of broad-leaved trees (*Corylus*, *Quercus*, *Fagus*).
Fruiting during autumn (October-December).

Collections examined—SPAIN: **Asturias:** Somiedo, Éndriga, on *Corylus avellana* wood, 5.X.2005, I. Olariaga, LOU-Fungi 18982; **Cádiz:** Llano del Espino, in forest of *Quercus faginea* & *Pistacia lentiscus*, on wood, 4.XII.2003, A. González & F. Prieto-García, JA-CUSSTA 2911; **Navarra:** Urbiasa, on *Fagus sylvatica* wood, 12.X.2001, I. Olariaga, ARAN 5026125.

- 22. *Pluteus cinereofuscus* J.E. Lange, Dansk. Bot. Ark. 2 (7): 9. 1917**
On wood of broad-leaved trees (*Quercus*, *Populus*, *Fraxinus*, *Juglans*), more rarely terrestrial.
Mostly recorded during autumn (September-December), more rarely during spring (March-May).

Collections examined—SPAIN: **Barcelona:** Can Bova, La Floresta (Vallès Oriental), 5.XI.1992, on unidentified wood of broad-leaved tree, Tarin, SCAT 4588; **Burgos:** Adraza de Haza, on buried unidentified wood, 28.X.1992, L.A. Parra, LAP 70; **Córdoba:** Cardeña, Yeguerizo Norte, in *Quercus rotundifolia* forest, 21.X.2003, O. Sánchez-Escamilla, JA-CUSSTA 3605; **Girona:** Espinelves, habitat unknown, 11.IX.1998, M. Tabarés & A.M. Tarin, SCAT 4590; **Granada:** Alhambra de Granada, in *Quercus ilex* forest, on putrifying wood, 26.III.1980, R. Galán, GDAC 8267; Caniles, Los Olmos, Río Moras, in *Populus* forest, 23.X.2003, F.B. Navarro-Reyes & N. Jiménez, JA-CUSSTA 4507; Fuente de las Lluvias, Llano de la Perdiz, in *Pinus* forest, terrestrial, 14.XII.1978, M. Casares & J. Moraro, GDAC 8268; Huéneja, under *Populus*, on wood, 19.V.1996, A. Capilla, GDAC 44836; Monachil, in a park, terrestrial, 27.X.1979, R. Galán, GDAC 8269; **Huelva:** Carretera de los Marines a Fuenteheridos, on fallen wood of *Juglans*, 29.X.1991, L. Romero de la Osa, GDAC 38058; **Jaén:** Baños de la Encina, Ribera de La Aliseda, in *Populus*

nigra forest, 21.XII.2002, F. Jiménez, JA-CUSSTA 2014; **Lleida:** Barruera (Vall de Boí), under *Fraxinus* and other broad-leaved trees, 13.X.2001, A. Martínez, SCAT 3995; Cardós, Balneari, under *Fraxinus*, 5.XII.1994, P. Hugo, SCAT 2464; **Lugo:** Monforte de Lemos, Río Cabe, on *Populus* wood, 1.V.2004, J.C. Alonso-Lago, LOU-Fungi 18604.

23. *Pluteus cyanopus* Quél., Champ. Jura Vosges 11: 6. 1883

Terrestrial.

Recorded in late spring (June).

Collections examined—**SPAIN: La Rioja:** Villarroja, terrestrial, 13.VI.1992, A. Caballero, ACAB 1637.

24. *Pluteus diettrichii* Bres., Ann. Mycol 3: 160. 1905

Terrestrial, in coniferous or deciduous forest, also on wood of broad-leaved trees (*Populus*).

Fruiting in autumn (November) and spring (April).

Collections examined—**SPAIN: Barcelona:** Collserola, Barcelona, on *Populus nigra* wood, IV.2002, M. Tabarés, SCAT 4596; **Mallorca:** Artá, Sou Fag, in *Pinus halepensis* forest, terrestrial, 16.XI.2002, J. Siquier, JLS 1624; Valldemossa, Mirador de Tudons, in *Quercus ilex* forest, among fallen leaves, 21.XI.1998, J. Siquier, JLS 1047.

25. *Pluteus insidiosus* Vellinga & Schreurs, Persoonia 12: 366. 1985

On wood of broad-leaved trees (*Populus*), possibly also on coniferous wood (*Pinus*, *Abies*).

Recorded during summer (August) and early autumn (September).

Collections examined—**SPAIN: Castelló:** Pina de Montalgrao, Río Pina, on *Populus nigra* stump, 25.IX.1998, F. Tejedor, PT 441; **Girona:** Campelles (Ripollès), on unidentified wood, under *Pinus* & *Abies*, 23.VIII.2001, A. Martínez & A. Rocabrana, SCAT 4030.

26. *Pluteus luctuosus* Boud., Bull. Trimestriel Soc. Mycol. France 21: 70. 1905

On wood of broad-leaved trees (*Quercus*).

Fruiting during autumn (October-November).

Collections examined—**SPAIN: León:** Casas, on *Quercus pyrenaica* trunk X.2000, A.M. Tarin, SCAT 4733; **Huelva:** Santa Ana la Real, on (burned) *Quercus suber* wood, 4.XI.2003, L.A. Parra, LOU-Fungi 18239; ibidem, LOU-Fungi 18240; ibidem, LOU-Fungi 18241; **Jaén:** Sierra de Cazorla, Río Borosa, in *Quercus ilex* forest, 30.X.1986, A. Ortega & A.F. Buendía, GDAC 30057.

27. *Pluteus nanus* (Pers.: Fr.) P. Kumm., Führer Pilzk.: 98: 1871

On wood of broad-leaved trees (*Quercus*, *Fagus*, *Eucalyptus*), bushes (*Ammophila*), coniferous trees (*Pinus*) or terrestrial.

Fruiting mostly during autumn (October-December), but also in spring (March-April) or summer (August).

Collections examined—**SPAIN: Barcelona:** Santa Fe del Montseny (Vallès Oriental), under *Fagus sylvatica*, 20.VIII.1993, A. Rocabruna, SCAT 2176; **Cádiz:** Jimena de la Frontera, Loma de la Peña, in *Quercus suber*, *Q. canariensis*, *Pistacia lentiscus* forest, on wood, 29.XI.2003, A. González-Cruz, JA-CUSSTA 2798; Llano del Espino, in *Quercus faginea*, *Pistacia lentiscus*, forest, on wood, 4.XII.2003, A. González-Cruz & F. Prieto-García, JA-CUSSTA 2912; **Córdoba:** Montoro, Españares, in *Quercus rotundifolia*, *Q. suber*, *Pinus* forest, terrestrial, 18.XI.2003, O. Sánchez, JA-CUSSTA 4958; **Huelva:** Aracena, on fallen branch of *Quercus suber*, 2.XII.1992, L. Romero de la Osa, MA-Fungi 33471; La Rocina, terrestrial, under *Quercus*, 16.IV.1978, F.D. Calonge, MA-Fungi 335; **Jaén:** Mata-Bejial, in *Quercus ilex* forest, terrestrial, 26.X.1987, A. Ortega & al., GDAC 30132; ibidem, among leaves, 16.XI.1988, GDAC 30603; **Ibiza:** Sant Josep, Platja des Cavelet, on remnants of *Ammophila arenaria*, 10.XI.1993, J. Siquier, JLS 118B; **La Rioja:** Villarroya, on *Quercus ilex* stump, 30.IV.1988, A. Caballero, ACAB 983; **Málaga:** Tolox, Cerro del Hajar, in *Pinus pinaster* & *Castanea sativa* forest, 8.I.2004, A. González-Cruz & F. Prieto-García, JA-CUSSTA 4199; **Mallorca:** Andratx, La Trapa, on remnants of *Pinus halepensis*, 27.XI.1998, J. Siquier, JLS 1075; Santayí, Parc Natural de Mondragó, Fons de N'Alis, in *Pinus halepensis* forest on sandy soil, 13.XII.2003, J. Siquier, JLS 1783; **Navarra** Atondo, terrestrial, 24.III.2001, P. Pasabán, ARAN s.n.; **Sevilla:** Constantina, Dehesa Botones y Oreganal, on *Quercus suber* wood, 22.X.2003, N. Rodríguez-Ramos, COFC-F 2943; Las Navas de la Concepción, on *Eucalyptus* remnants, 11.XII.2002, N. Rodríguez-Ramos, COFC-F 4241; **Tarragona:** La Sénia, barranc del Retaule, on *Fagus sylvatica* wood, 16.X.2001, P. P. Daniëls, MA-Fungi 52175.

28. *Pluteus pallescens* P. D. Orton, Trans. Brit. Mycol. Soc. 43: 360. 1960

On wood of broad-leaved trees (*Quercus*).

Recorded during autumn (November) and spring (March).

Collections examined—**SPAIN: Sevilla:** Las Navas de la Concepción, Embalse del Retortillo, on *Quercus suber* wood, 29.XI.2002, N. Rodríguez-Ramos, COFC-F 2963; **Valladolid:** Herrera de Duero, on *Quercus ilex* wood, 8.V.1999, A. García-Blanco & al., MA-Fungi 54628.

29. *Pluteus phlebophorus* (Ditmar: Fr.) P. Kumm., Führer Pilzk.: 98. 1871

On wood of broad-leaved trees (*Quercus*, *Fagus*, *Eucalyptus*, *Corylus*, *Fraxinus*).

Recorded during autumn (October-November) but also in spring (May) and summer (August).

Collections examined—**SPAIN: Asturias:** Somiedo, Éndriga, on unidentified wood of broad-leaved tree, 5.X.2005, R. Picón, LOU-Fungi 18985; ibidem, J. Girbal, LOU-Fungi 18986; ibidem, on *Corylus avellana* wood, I. Olariaga, LOU-Fungi 18987; Somiedo, La Rebolleda, on unidentified wood of broad-leaved tree, 6.X.2005, L. Llorens, LOU-Fungi 18988; Somiedo, Valle de Lago a Veigas, on *Fagus sylvatica* wood, 20.VIII.1997, E. Rubio-Domínguez, MA-Fungi 38381; **La Rioja:** Las Ruedas de Ocón, on *Fagus sylvatica* wood, 3.X.1987, A. Caballero, ACAB 781; Villarroya, on *Quercus ilex* wood,

21.V.1988, A. Caballero, ACAB 1014; **Sevilla:** San Cayetano, habitat unknown, 22.X.2002, N. Rodríguez-Ramos, COFC 2194; **PORTUGAL: Trás-os-Montes e Alto Douro:** Mogadouro, Trindade, on *Fraxinus* wood, 2.XI.2002, S. Oliveira, LOU-Fungi 18616.

30. *Pluteus poliocnemis* Kühner in Kühner & Romagn., Bull. Trimestriel Soc. Mycol. France 72: 182. 1956

Terrestrial.

Recorded in autumn (September-November).

Collections examined—SPAIN: Barcelona: Sant Cugat, terrestrial, 2.XI.1995, M. Tabarés & J. Vila, SCAT 4589; *ibidem*, XI.1995, SCAT 3381; **La Rioja:** Las Ruedas de Ocón, in *Fagus sylvatica* forest, terrestrial, 26.IX.1987, A. Caballero, ACAB 767.

31. *Pluteus romellii* (Britzelm.) Sacc., Syll. Fung. 11: 44: 1895

On wood of broad-leaved trees (*Quercus*, *Fagus*, *Alnus*, *Populus*; *Salix*), coniferous trees (*Pinus*) or terrestrial.

Recorded mostly during autumn (November-December) but it may be found all over the year.

Collections examined—SPAIN: Asturias: Somiedo, Aguasmestas, on *Castanea* wood, 13.IX.1997, E. Rubio-Domínguez, MA-Fungi 38382; Somiedo, Vigidel, on unidentified wood of broad-leaved tree, 4.X.2005, P. Siquier & L.A. Parra, LOU-Fungi 18983; Éndriga, on *Salix* wood, 5.X.2005, R. Picón, LOU-Fungi 18984; **Ávila:** El Tiemblo, Garganta de la Yedra, habitat unknown, 7.VI.1997, P. Daniels, MA-Fungi 37530; **Barcelona:** Cabrera de Mar (El Maresme), under *Eucalyptus*, 15.XI.1999, A. Rocabrúna, SCAT 3675; Cabrils (El Maresme) on *Quercus suber* wood, 17.V.1991, A. Rocabrúna, SCAT 1749; Collserola (Barcelonès), Can Calopa de Dalt, in mixed forest of *Quercus ilex* & *Pinus*, 17.XII.1994, G. Carrascosa, SCAT 2589; Olzinelles (Vallès Oriental), on stump of unidentified broad-leaved tree, 20.IV.2002, A. Rocabrúna, SCAT 4128; Orrius, on branches of unidentified broad-leaved tree, 11.V.1988, A. Rocabrúna, SCAT 493; Tibidabo (Barcelonès) Can Piera, on branches of unidentified broad-leaved tree, IV.1988, M. Tabarés, SCAT 915; Viladecans (Baix Llobregat), El Remolar, among grasses, 15.X.1995, F. Àngel & J. Vila, SCAT 3728; **Cabrera:** Altos de Cala Ganduf, on fallen branches of *Phyllirea angustifolia*, 24.XI.1994, J. Siquier, JLS 130B; Serra de ses Figueres, on *Pinus halepensis* wood, 22.XI.1994, J. Siquier, JLS 84; **Cádiz:** Carretera a Facinas, in *Quercus ilex* forest, 17.XI.1987, GDAC 32038; Grazalema, Cortijo Monte Abajo, under *Quercus suber*, 1.XII.2001, A. Castro, MA-Fungi 53682; Llano del Espino, in forest of *Quercus faginea*, *Pistacia lentiscus*, on wood, 4.XII.2003, A. González-Cruz & F. Prieto, JA-CUSSTA 2913; Sierra de Grazalema, Pinar de San Cristóbal, in *Pinus* forest, 1.V.1985, G. Moreno & al., GDAC 24479; **Córdoba:** Arroyo Tijeras, on *Populus* wood, 5.III.1994, B. Moreno, GDAC 39066; Hornachuelos, Embalse del Retortillo, in forest of *Quercus suber*, *Q. ilex* & *Ulmus*, on fallen branches, 18.XI.2003, T. Illescas-Ferrezuelo, JA-CUSSTA 5639; Huéneja, under *Populus* & *Alnus*, terrestrial, 22.IX.1996, A. Capilla, GDAC 44838; Priego de Córdoba, Vega, Los Morales-Membrilleras, in mixed forest of *Cydonia oblonga* & *Populus nigra*, on wood,

15.XII.2002, J. Gómez & al., JA-CUSSTA 731; **Gipuzkoa:** Añi, on *Fagus* trunk, 9.VII.1997, P. Pasabán, ARAN s.n.; **Girona:** Llagostera, on *Eucalyptus* wood, II.1997, A. Rocabrana & M. Tabarés, SCAT 3220; **Granada:** Alhambra de Granada, in *Quercus ilex* forest, 18.XI.1980, E. Gil, GDAC 8769; ibidem, 13.XI.1980, R. Galán & al., Baza, Narvaez, in *Quercus ilex* subsp. *ballota* forest, 30.XI.2003, F.B. Navarro-Reyes & N. Jiménez, JA-CUSSTA 4501; Carretera de Santa Cruz, on *Populus* log, 27.XI.1980, R. Galán & al., GDAC 11340; Cortijo Santa Isabel, in *Quercus ilex* forest, 26.I.1982, A. Ortega & al., GDAC 12280; Dehesa del Camarate, in *Quercus ilex* forest, 20.XI.1980, R. Galán & A. Ortega, GDAC 8870; Huétor, Santillán, Arroyo de Fardes, Fuente de los Potros, in *Quercus rotundifolia* forest, on wood, 1.XI.2002, A. Ortega, JA-CUSSTA 1620; **Huelva:** Galaroza, Talenque de Navahermosa, on *Quercus pyrenaica* stump, 30.XI.1997, L. Romero de la Osa, MA-Fungi 41067; Navahermosa, on *Quercus suber* wood, 5.XI.2003, L.A. Parra, LOU-Fungi 18242; **Jaén:** Cambil, Gibrálberca, in *Quercus ilex* subsp. *ballota* forest, on wood, 29.X.2003, F. Jiménez, JA-CUSSTA 3215; Mata-Bejid, in *Quercus ilex* forest, 2.XII.1987, A. Ortega, GDAC 31814; Santa Elena, Ribera de la Aliseda, in mixed forest of *Alnus glutinosa*, *Ulmus minor* & *Pinus pinaster*, on fallen branches, 26.XI.2003, J. Reyes-García, JA-CUSSTA 3282; Santo Tomé, Los Vilchetes, in *Quercus* forest, 23.XI.2002, A. Martínez-Macarro, JA-CUSSTA 2205; **La Rioja:** Bergasa, in *Populus* forest, terrestrial, 17.IV.1988, A. Caballero, ACAB 966; Santa Lucía, on buried *Quercus ilex* wood, 29.V.1988, A. Caballero, ACAB 1029; Villarroja, terrestrial, 8.VI.1988, A. Caballero, ACAB 1104; Las Ruedas de Ocón, in *Fagus sylvatica* forest, on wood remnants, 16.XII.1989, A. Caballero, ACAB 1327; El Rasillo, in *Quercus* forest, on wood remnants, 9.XI.1991, A. Caballero, ACAB 1607; Villarroja, in *Quercus ilex* forest, terrestrial, 15.V.2004, A. Caballero, ACAB 2807; Zarzosa, on unidentified stump, 29.V.2004, A. Caballero, ACAB 2822; **León:** Cuevas de Valporquero, on unidentified wood, 22.X.1995, L. Cabo, LOU-Fungi 5829; ibidem, F.D. Calonge, MA-Fungi 31332; **Málaga:** Cortes de la Frontera, El Ramblazo, in forest of *Quercus canariensis* & *Quercus suber*, on wood, 1.III.2003, A. González-Cruz, JA-CUSSTA 951; Parauta, Los Quejigares, in mixed forest of *Pinus pinaster*, *Quercus ilex* subsp. *ballota* & *Abies pinsapo*, on wood, 3.XI.2003, A. González-Cruz, F. Prieto-García, JA-CUSSTA 2688; **Mallorca:** Bunyola, Sa Comuna de Bunyola, in mixed forest of *Quercus ilex* & *Pinus halepensis*, on wood, 3.XII.2001, J. Siquier, JLS 1315; Calvia, Serre de Na Burguesa, in burned *Pinus halepensis* forest, 19.XI.1994, J. Siquier, JLS 106P; Capdepera, Cala Agulla, in *Pinus halepensis* forest, in sand dunes, on wood, 8.XI.1994, J. Siquier, JLS 696B; Carretera de Calviá a Puigpungent, habitat unknown, 21.XI.1992, T. Saez, MA-Fungi 29735; Palma de Mallorca, Serra de Merrill, in *Pinus halepensis* forest, on burned remnants, 30.X.1994, J. Siquier, JLS 200P; Palma de Mallorca, between Son Vida and Sa Vileta Cemetery, in *Pinus halepensis* forest, on burned remnants, 9.XI.1994, J. Siquier, JLS 131P; ibidem, JLS 77P; **Navarra:** Aralar, on buried *Fagus* wood, 22.V.1997, P. Pasabán, ARAN s.n.; Erro, on roadside, 13.VI.1992, Z.E. Aranzadi, ARAN 5019020; **Sevilla:** Alanís, Cortijo de la Adelfilla, under *Quercus ilex*, 22.X.2002, N. Rodríguez-Ramos, COFC-C 4506; Cazalla de la Sierra, La Atalaya, on *Quercus suber*, wood 27.XI.2003, N. Rodríguez-Ramos, COFC-F 2942; Constantina, Dehesa Botones y

Oreganal, on *Quercus ilex* subsp. *ballota* wood, 22.X.2003, N. Rodríguez-Ramos, COFC-F 2937; *ibidem*, COFC-F 2930; Constantina, Navalvillar, on *Quercus suber* wood, 22.X.2003, N. Rodríguez-Ramos, COFC-F 2940; *ibidem*, 21.III.2002, N. Rodríguez-Ramos, COFC-F 2958; Guadalcanal, Hamapega, on *Quercus ilex* subsp. *ballota* wood, 26.XI.2003, N. Rodríguez-Ramos, COFC-F 2941; San Nicolás del Puerto, Cerro El Hierro, on *Quercus suber* wood, 14.XII.2002, A. J. Montes García, COFC-F 2128; **Tarragona**: Passanant, under *Pinus halepensis*, 30.XI.1986, N. Cabezas & P. Carbo, SCAT 175; **Valladolid**: Herrera de Duero, on *Populus* wood 13.I.1996, A. García et. al., MA-Fungi 54272; **Vizcaya**: Baquio, on unidentified wood, 3.XI.1978, G. Moreno & E. Pérez Moral, MA-Fungi 14736.

Subsection *Mixtini* Singer ex Singer, Lloydia 21: 257. 1958

32. *Pluteus podospileus* Sacc. & Cub. in Sacc., Syll. Fung. 5: 672: 1887

In coniferous (*Pinus*) or deciduous (*Quercus*) forests, in parks, gardens and flowerpots. On wood remnants or humus.

Fruiting during autumn (September-December), more rarely in summer (July).

Collections examined—**SPAIN**: **Gipuzkoa**: Tolosa, in flowerpot, on humus, 19.VI.2002, P.Pasabán, ARAN s.n.; **Granada**: Alhambra de Granada, in *Quercus ilex* forest, 27.XI.1980, R. Galán & al., GDAC 9760; **Madrid**: Madrid, Parque del Oeste, habitat unknown, 6.X.2001, L.A. Parra, LAP 110; **Mallorca**: Santayí, Parc Natural de Mongragó, Camí des Mirador, in *Pinus halepensis* forest, 10.XII.2004, J. Siquier, JLS 1890; **Sevilla**: Constantina, Navalvillar, habitat unknown, 5.XI.2003, J.M. Fernández-Rodríguez, COFC 2929.

33. *Pluteus thomsonii* (Berk. & Broome) Dennis, Trans. Brit. Mycol. Soc. 31: 206. 1948

On wood of broad-leaved trees (*Populus*, *Quercus*, *Fagus*; *Ulmus*) or terrestrial.

Recorded all over the year.

Collections examined—**SPAIN**: **Almería**: Nacimiento del río Andarax, habitat unknown, 30.XI.1983, F. D. Calonge, MA-Fungi 5843; **Barcelona**: Pruit (Osona), camí Coma-serra, on *Fagus sylvatica* wood, 21.VIII.1999, A. Rocabruna & M. Tabarés, SCAT 3518; **Burgos**: Aranda de Duero, Colegio Claret, on *Ulmus* stump, 12.V.1992, L.A. Parra, LAP 2; **Cádiz**: Zahara, Arroyomolinos, in mixed forest of *Populus* & *Eucalyptus camaldulensis*, on wood, 2.XII.2003, A. González-Cruz, & F.D. Calonge, JA-CUSSTA 2885; **Córdoba**: Villaviciosa de Córdoba, Fuente Vieja, in forest of *Quercus suber* & *Q. ilex*, on wood, 15.I.2004, T. Illescas, JA-CUSSTA 5569; **Granada**: Alhambra de Granada, on sawdust, 14.XI.1996, A: Ortega, GDAC 44839; **La Rioja**: Las Ruedas de Ocón, on *Fagus sylvatica* branch, 3.X.1987, A. Caballero, ACAB 789; Ortigosa de Cameros, on *Quercus ilex* wood, 14.V.1988, A. Caballero, ACAB 1007; **León**: Valle de las Casas, on *Quercus* stump 21.VII.2002, A. García Blanco et. al., MA-Fungi 54927; **Málaga**: El Burgo, Mirador del guarda forestal, in mixed forest of *Pinus pinaster*, P.

halepensis & *Quercus ilex* subsp. *ballota*, on wood, 3.XII.2003, A. González-Cruz & F. Prieto-García, JA-CUSSTA 2702; **Huelva**: Ribera del río Múrtiga, on *Populus* wood, 5.XI.2003, N. Rodríguez-Ramos, LOU-Fungi 18238; **Navarra**: Borda, Bernete, in *Fagus* forest, terrestrial, 7.X.1995, P. Pasabán, ARAN s.n.; ibidem, on *Fagus* branches, ARAN s.n.; Imoz, on *Fagus sylvatica* wood 5.VI.1999, J. Uriarte, ARAN 5042186; Urrizola, terrestrial, 7.VIII.1997, P. Pasabán, ARAN s.n.; **Valladolid**: Sieteiglesias de Trabanco, on *Populus alba* stump, 2.X.1999, A. García-Blanco & al., MA-Fungi 54629.

Acknowledgements

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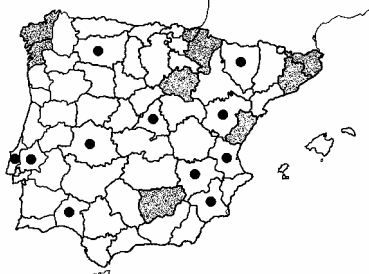
Fig. 1. Provinces of the Iberian Peninsula and Balearic Islands



Table 1. Provinces of the Iberian Peninsula and Balearic Islands

ANDORRA		Córdoba	Co	Palencia	P	Mallorca	Ml
Andorra	And	A Coruña	C	Pontevedra	Po	Menorca	Mn
		Cuenca	Cu	La Rioja	Lo		
SPAIN		Girona	Ge	Salamanca	Sa	PORTUGAL	
Álava	Vi	Granada	Gr	Segovia	Sg	Algarve	Ag
Alacant	A	Guadalajara	Gu	Sevilla	Se	Alto Alentejo	AAI
Albacete	Ab	Guiptúzcoa	SS	Soria	So	Baixo Alentejo	BAI
Almería	Al	Huelva	H	Tarragona	T	Beira Alta	BA
Asturias	O	Huesca	Hu	Teruel	Te	Beira Baixa	BB
Ávila	Av	Jaén	J	Toledo	To	Beira Litoral	BL
Badajoz	Ba	León	Le	Valencia	V	Douro Litoral	DL
Barcelona	B	Lleida	L	Valladolid	Va	Estremadura	E
Burgos	Bu	Lugo	Lu	Vizcaya	Bi	Minho	Mi
Cáceres	Cc	Madrid	M	Zamora	Za	Ribatejo	R
Cádiz	Ca	Málaga	Ma	Zaragoza	Z	Tras-os-Montes e Alto Douro	TM
Cantabria	S	Murcia	Mu	Islas Baleares	PM		
Castelló	Cs	Navarra	Na	Formentera	Fo		
Ciudad Real	CR	Ourense	Or	Ibiza	Ib		

Section *Pluteus*



1. *Pluteus atomarginatus*



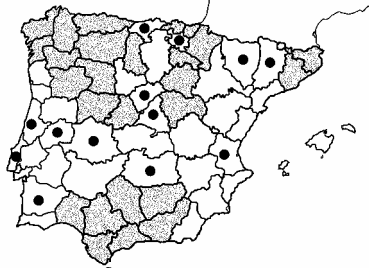
2. *Pluteus atropungens*



3. *Pluteus brunneidiscus*



4. *Pluteus brunneoradiatus*



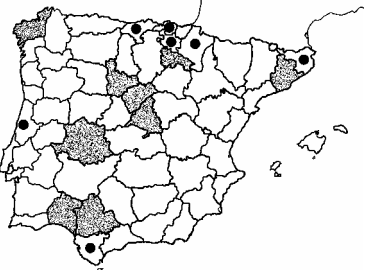
5. *Pluteus cervinus*



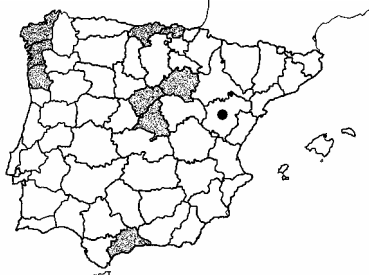
6. *Pluteus nothopellitus*



7. *Pluteus pellitus*



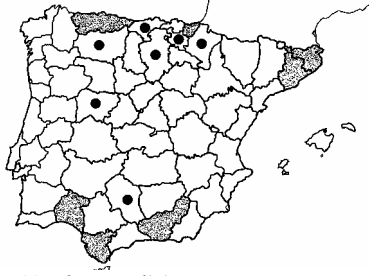
8. *Pluteus petasatus*



9. *Pluteus pouzarianus* var. *pouzarianus*



10. *Pluteus pouzarianus* var. *albus*

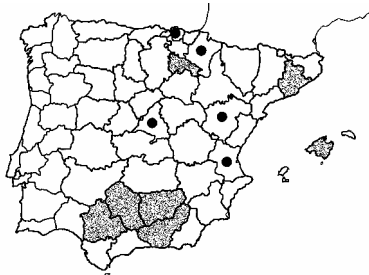


11. *Pluteus salicinus*



12. *Pluteus sandalioticus*

Section *Villosi*



13. *Pluteus ephebeus*



14. *Pluteus hispidulus* var. *hispidulus*

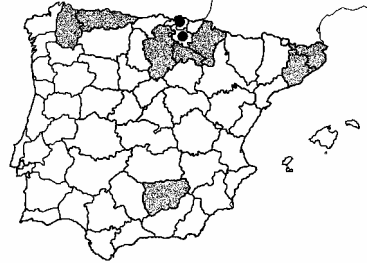


15. *Pluteus hispidulus* var. *cephalocystis*

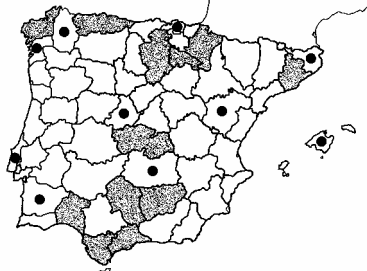
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16. *Pluteus exiguus*



17. *Pluteus leoninus*

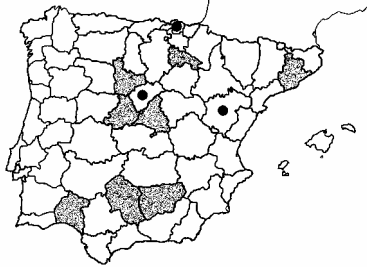


18. *Pluteus plautus*



19. *Pluteus umbrosus*

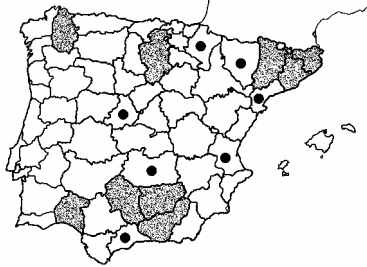
Section *Celluloderma*: Subsection *Eucellulodermini*



20. *Pluteus aurantiorugosus*



21. *Pluteus chrysophaeus*



22. *Pluteus cinereofuscus*



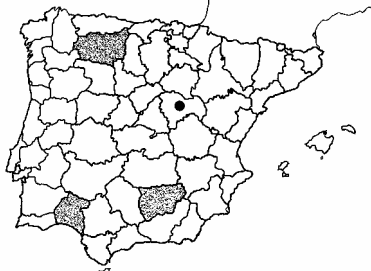
23. *Pluteus cyanopus*



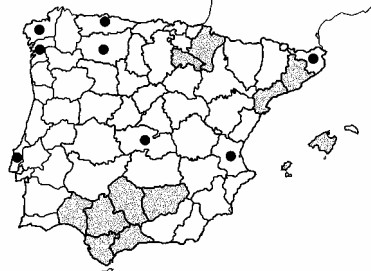
24. *Pluteus diettrichii*



25. *Pluteus insidiosus*



26. *Pluteus luctuosus*



27. *Pluteus nanus*



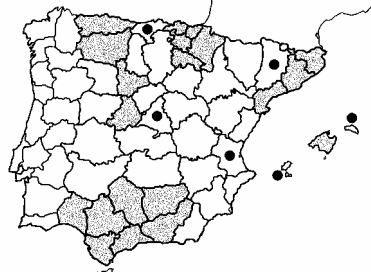
28. *Pluteus pallescens*



29. *Pluteus phlebophorus*

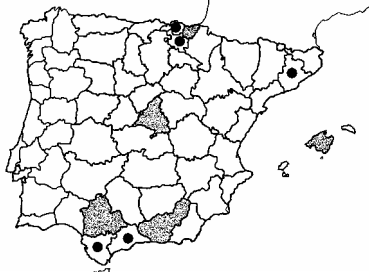


30. *Pluteus poliocnemis*

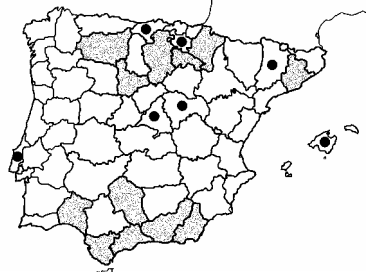


31. *Pluteus romellii*

Section *Celluloderma*: Subsection *Mixtini*



33. *Pluteus podospileus*



34. *Pluteus thomsonii*