

# Bibliographic inventory of middle atlas fungi: Catalogue of Middle Atlas fungal flora.

Bouchra Larouz, Saifeddine El kholfy, Amina Ouazzani Touhami, Rachid Benkirane & Allal Douira

*Laboratoire de Botanique et de Protection des Plantes, UFR de Mycologie, Département de Biologie, Faculté des Sciences, BP. 133, Université Ibn Tofail, Kénitra, Maroc.*

*Corresponding author email: [douirallal@hotmail.com](mailto:douirallal@hotmail.com); [bio\\_2007@hotmail.fr](mailto:bio_2007@hotmail.fr)*

*Key words: Morocco, Middle Atlas, fungal Flora, Biodiversity, Inventory, Basidiomycetes.*

---

## 1 SUMMARY

The Middle Atlas is considered as an area that offers an important natural resource. Yet, the condition of its mycoflora is not utilized because of the lack of data.

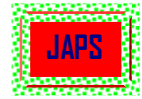
This fungal flora has a richness of 1032 species belonging to the Division Basidiomycota, divided into 24 orders, 68 families and 184 genera. The present catalog of fungal flora constitutes a large contribution to the knowledge of the biodiversity of fungi in Middle Atlas. The species are completed and updated with new science and arranged according to the main mycological classification.

---

## 2 INTRODUCTION

The completion of the inventory of each region of Morocco will attract the attention of mycologists on the status of species, their substrates and ecological zones where they have already been explored. The catalog of higher fungi of Morocco and especially that of the Middle Atlas will allow the development of mycological research to build a regional and national red list. This catalog will also be able to make the comparison with lists of other countries in order to estimate the international status of the species concerned. To this day, three catalogs of fungal species have been made: the catalog of the Rif by Aït Aguil, (2005) that of Mamora by El Assfour, (2006) and finally the Central Plateau by Haïmed, (2007). A look at the species displayed in these catalogs shows that the highest numbers of fungal species are housed in the Middle Atlas, so requires major prospecting and mycological research. The mycoflora of the middle Atlas occupies a large place and a particular importance at the national level, given its abundance and variety of its species. The Researches conducted previously are not

exhaustive. For this reason, a bibliographic inventory is necessary in the first part of this study to clarify and address gaps. To develop such an overview of a subject where the documentation is rare and previous research which dates back some thirty years appears initially difficult. But successive visits to the libraries of some research centers in Morocco (INRA, IAV, IS, SEF.) and the connection with some foreign mycologists (Joseph Astier, Patrick Laurent, Paul Pirot) and persistence to bring this bibliography were eventually published by the flowing work of some mycologists during their visit to Morocco. In this bibliographical study the various steps set can acquire the necessary expertise to the project advanced. The current names of the different species have been indicated between brackets before the species. All the information relating to plants on or under which the fungi have been collected, were indicated before each species, followed by the names of localities where the species has been harvested. The abbreviation (LNS) means that the species is indicated in the Middle Atlas, but the locality was



not specified by the authors; (SNS) means substrate not indicated; (C): Edible; (CI): Unknown Edibility; (CM): Poorly Edible; (EC): Excellent Edible; (NC): Not Edible; (I): Toxic; (V): Venomous; (CNS): Edibility Not Reported; (Bul. Soc. Sci. Nat. & Phy.): Bulletin of the Society of Natural Sciences and Physics of Morocco; (C. R. Soc. Sci. Nat. & Phy.): Report of the Society of Natural Sciences and Physics of Morocco. Some taxa are preceded by a single asterisk (\*) indicating that these species are only

reported in the catalog of the herbarium of the scientific institute. Meanwhile, those that are preceded by double asterisks (\*\*) are cited only in the Moroccan Fungi of Maire and Werner. For each species, its bibliographic source where it was enumerated or described is given after all the information that was updated by new science. The species are arranged according to the main classification of the fungal flora. The catalog of the fungal flora of the Middle Atlas is as follows:

### 3 THE CATALOG OF THE FUNGAL FLORA OF THE MIDDLE ATLAS:

#### Subdivision: Basidiomycotina

#### Class: Basidiomycetes

#### Order: Agaricales

#### Family: Agaricaceae

*Agaricus arvensis* Schaeff., (1774), sensu Cooke, (1885), (= *Agaricus osecanus* Pilát, 1951). Bull. Soc. Sci. Nat. Malç., 1937

*Agaricus campestris* L., (1753), Scop., (1772), Schwein., (1822), sensu Cooke, (1885), (= *Agaricus bisporus* (J. E. Lange) Imbach, 1946). Bull. Soc. Sci. Nat. Malç., 1937.

*Agaricus semotus* Fr., (1863). Bull. Soc. Sci. Nat. Malç., 1937

*Arachnion album* Schwein, (1822); in Azrou, in October. Bull. Sci. Nat. & Phy. Of Morocco. Malç., 1937.

*Bovista plumbea* Pers., (1795); in Azrou. Soc. Sci. Nat. & Phy. Malç., 1959.

\**Calvatia caelata* (Bull.) Morgan, (1890), (= *Lycoperdon utriforme* Bull., 1791); wasteland near Mrirt & Toumliline. Malç., 1952.

*Calvatia candida* (Rostk.) Hollós, (1904). Soc. Sci. Nat. & Phy. Malç., 1959.

*Calvatia cyathiformis* (Bosc) Morgan, (1890); in Azrou. Bull. Sci. Nat. & Phy. Malç., 1937.

*Calvatia hiemalis* Soc. Sci. Nat. & Phy. Malç., 1959.

\**Calvatia fragilis* (Vittad.) Morgan, (1890); plate of Seheb, above Azrou, Malç., 1952.

\**Calvatia lilacina* (Mont. & Berk.) Henn., (1904); grassy clearings of cedar forests above Azrou, Malç., 1955, 60, 68.

*Coprinus arenarius* Pat., (1896), (= *Xerocoprinus arenarius* (Pat.) Maire, (1907)); in the steppe silty in Boumalne, CNS.

*Coprinus comatus* (O.F. Müll.) Pers., (1797), (= *Agaricus comatus* O.F. Müll., (1780), *Agaricus cylindricus*

Sowerby, (1799), *Agaricus fimetarius* Bolton, (1788), *Agaricus ovatus* Schaeff., (1762), *Coprinus ovatus* (Schaeff.) Fr., (1838), *Coprinus comatus* var. *ovatus* (Schaeff.) Quél., (1866), *Coprinus comatus* var. *caprimammillatus* Bogart, (1975); in the gardens, pastures and woodlands, LNS, C.

*Coprinus comatus* var.?. In pastures and woodlands, LNS, CNS.

*Coprinus comatus* f. *sphaerocephalus* J.E. Lange, (1938).

*Coprinus digitalis* (Batsch) Fr., 1838. On dung in the thickets of *Quercetum ilicis* bottom of the forest of Azrou, CNS.

*Coprinus disseminatus* (Pers.) Gray, (1821), (= *Coprinellus disseminatus* (Pers.) J.E. Lange, 1938); on *Salix australis* in the region of Azrou, CNS.

*Coprinus ephemerus* (Bull.) Fr., (1838), (= *Coprinellus ephemerus* (Bull.) Redhead, Vilgalys & Moncalvo, (2001); on a cow dung, in the cedar forest of mixed Boujirhirh, CNS.

*Coprinus filamentifer* Kühner, (1957), (= *Coprinopsis filamentifer* (Kühner) Redhead, Vilgalys & Moncalvo, 2001); of horse manure near Azrou, CNS.

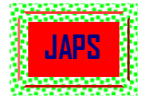
*Coprinus gonophyllus* Quél., (1884), (= *Coprinopsis gonophylla* (Quél.) Redhead, Vilgalys & Moncalvo, 2001); on a square coal in Boujirhirh, CNS.

*Coprinus hemerobius* Fr., (1838), (= *Parasola hemerobia* (Fr.) Redhead, Vilgalys & Hopple, 2001).

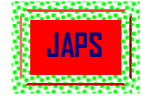
*Coprinus insignis* Peck., (1874), (= *Coprinopsis insignis* (Peck) Redhead, Vilgalys & Moncalvo, (2001); on *Quercus faginea*, *Q. rotundifolia* and *Cedrus* in the region of Ifrane, Azrou and Jbel Hebri, T.

*Coprinus lagopus* (Fr.) Fr., (1838), (= *Coprinopsis lagopus* (Fr.) Redhead, Vilgalys & Moncalvo, 2001); on land in the clearings of Azrou's forest, S.

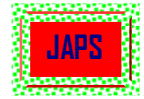
*Coprinus micaceus* (Bull.) Fr., (1838), (= *Coprinellus micaceus* (Bull.) Vilgalys, Hopple & Jacq. Johnson, (2001)); on *Quercus rotundifolia* in Azrou, CNS.



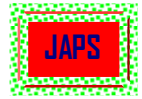
- Coprinus patouillardii* Quél., (1884), (= *Coprinus cordisporus* T. Gibbs, (1908), *Coprinus patouillardii* sensu Dennis, Orton & Hora, (2005), *Coprinopsis cordispora* (T. Gibbs) P.M. Kirk ined., (2012); ); on a cow dung in Boujirhirh, CNS.
- Coprinus picaceus* (Bull.) Gray, (1821), (= *Coprinopsis picacea* (Bull.) Redhead, Vilgalys & Moncalvo, 2001); on the ground, among dead leaves and under *Quercus rotundifolia* in the region of Azrou, CNS.
- Coprinus plicatilis* (Curtis) Fr., (1838), (= *Parasola plicatilis* (Curtis) Redhead, Vilgalys & Hopple, in Redhead, Vilgalys, Moncalvo, Johnson & Hopple, (2001).
- Coprinus radians* (Desm.) Fr., (1838), (= *Coprinus hortorum* Métrod, 1940), (= *Coprinellus radians* (Desm.) Vilgalys, Hopple & Jacq. Johnson, 2001); leafed trees, in particular *Quercus suber* and *Q. rotundifolia*, CNS.
- Coprinus sterquilinus* (Fr.) Fr., (1838); in fresh meadows or on the ground of smoked gardens, LNS, C.
- Coprinus utrifer* Joss., (1948), (= *Coprinus utrifer* Joss. ex Watling, 1972), (= *Coprinopsis utrifer* (Joss. ex Watling) Redhead, Vilgalys & Moncalvo, 2001); on cow dung, LNS & CNS.
- Crucibulum laeve* (Huds.) Kambly, (1936); on *Quercus rotundifolia*. Soc. Sci. Nat. & Phy. Malç. & Bert., 1967.
- Cyathus olla* (Batsch) Pers., (1801). Soc. Sci. Nat. & Phy. of Morocco. Malç. & Bert., 1967.
- Cyathus stercoreus* (Schwein.) De Toni, (1888). Soc. Sci. Nat. & Phy. Malç., 1959.
- Cystoderma amianthinum* (Scop.) Fayod, (1889); on *Quercus rotundifolia* in the forest of Azrou, CNS.
- Cystoderma cinnabarinum* (Alb. & Schwein.) Fayod, (1889), (= *Cystodermella cinnabarina* (Alb. & Schwein.) Harmaja, 2002); under *Cedrus* at Moudmam & under *Pinus pinaster* at Massif of Tamrabt, CNS.
- Cystoderma fallax* A.H. Sm. & Singer, (1945); under *Cedrus* in the region of Azrou, CNS.
- Cystoderma granulosum* (Batsch ) Fayod, (1889, (= *Cystodermella granulosa* (Batsch) Harmaja, 2002); under *Quercus rotundifolia* in Azrou, CNS.
- Disciseda candida* (Schwein.) Lloyd, (1902). Soc. Sci. Nat. & Phy. Malç., 1959.
- Gyrophragmium delilei* Mont., (1843); at October in Azrou.
- Lepiota acutesquamosa* var. *furcata* Kühner, (1936), (= *Echinoderma asperum* (Pers.) Bon, 1991); under *Quercus rotundifolia* in the forest of Azrou, R.
- \*\**Lepiota amianthina* (Scop.) P. Karst., (1879), (= *Cystoderma amianthinum* (Scop.) Fayod, 1889); Azrou, 1700 m
- \**Lepiota amylospora* Malençon, (1970); in mossy grass at the edge of the lower *Quercetum ilicis* of Azrou, CNS.
- Lepiota brunneoincarnata* Chodat & C. Martin, (1889); under the oaks, LNS, S.
- Lepiota chyeolaria* (Bull.) P. Kumm., (1871), sensu Rea Brit. Basidio. p. 69 (1922), (= *Lepiota magnispora* Murrill, 1912); in oak forests and under *Acacia*, *Pinus*, *Cedrus* and *Abies pinsapo*, LNS, C.
- Lepiota chyeolaria* var. *alba* Bres., (1882), (= *Lepiota erminea* (Fr.) Gillet, 1874); under *Quercus rotundifolia* in the forest of Azrou, CNS.
- Lepiota chyeolaria* var. *chyeolaria* (Bull.) P. Kumm., (1871); under *Quercus faginea*, *Q. rotundifolia* et *Cedrus* in the forest of Jaaba, Ifrane and Azrou, CNS.
- Lepiota chyeolaria* var. *latispora* Kühner, (1956), (= *Lepiota chyeolaria* var. *latispora* Kühner ex Wasser, (1987), *Lepiota subgracilis* Wasser, 1978); under *Quercus rotundifolia* in the region of Azrou, CNS.
- Lepiota cristata* Barla, (= *Lepiota cristata* (Bolton) P. Kumm., 1871); under *Quercus rotundifolia* in the region of Azrou and Ifrane, S.
- Lepiota cystophora* Malençon, (1970); in the thickets and bushes of *Quercetum ilicis* clear in Ifrane and ravine Toumliline, CNS.
- Lepiota echinella* Quél. & G.E. Bernard, (1888), (= *Lepiota echinella* var. *Echinella* Quél. & G.E. Bernard, 1888); in the short grass, at the bottom of *Quercetum ilicis* of Azrou, CNS.
- Lepiota eriophora* Peck var. *asperula* (Atk.) Malençon & Bertault, (1970); in the *Quercetum ilicis* of Azrou, CNS.
- Lepiota excoriata* (Schaeff.) P. Kumm., (1871), (= *Macrolepiota excoriata* (Schaeff.) Wasser, 1978); In Azrou. Bull. Soc. Sci. Nat. Malç., 1937.
- Lepiota excoriata* var. *typica* Maire, (1937); in pastures, scrub, oak forests, under *Acacia*, *Pinus* and *Cedrus*, LNS, CNS.
- Lepiota fulvella* Rea, (1918), (= *Lepiota boudieri* Bres., 1881); under *Quercus rotundifolia* in the forest of Azrou, CNS.
- Lepiota helveola* Bres., (1882), (= *Lepiota helveola* Barla, (1888), *Lepiota helveola* sensu Rea, (1922), *Lepiota helveola* sensu Reid, (1985), *Lepiota brunneolilacea* Bon & Boiffard, (1972), *Lepiota brunneoincarnata* Chodat & C. Martín, 1889) ; in forests of oak and cedar in Ifrane, T.
- Lepiota ignipes* Locq., (1952), Locq. ex Bon., (1978), (= *Lepiota castanea* Quél., 1881); LNS, SNS & CNS.



- Lepiota lilacea* Bres., (1892), (= *Lepiotula lilacea* (Bres.) Wasser, 1976); in the grass clearings of the forest of Azrou, CNS.
- Lepiota mastoidea* (Fr.) P. Kumm., (1871), (= *Macrolepiota mastoidea* (Fr.) Singer, 1951); in oak forests, plantation of Acacia and Eucalyptus, and even in the cedar forest, LNS, CNS.
- Lepiota melanotricha* Malençon & Bertault, (1970), (= *Leucoagaricus melanotrichus* var. *melanotrichus* (Malençon & Bertault) Trimbach, 1975); on the ground, in the bush at Cistus, Erica, Myrtle and arbutus woodlands or open forest of hardwoods and conifers in Azrou, CNS.
- Lepiota metulispora* sensu auct., Berkeley & Broome, (Berk. & Broome) Sacc., (1887), (= *Lepiota magnispora* Murrill, 1912); LNS, SNS and CNS.
- Lepiota naucina* (Fr.) P. Kumm., (1871), (= *Leucoagaricus leucothites* (Vittad.) Wasser, 1977); in the bush, wasteland, grassy areas of woodland of Azrou and Ifrane, C.
- Lepiota procera* (Scop.) Gray, (1821), (= *Macrolepiota procera* (Scop.) Singer, 1948); in pastures and thickets, forests of *Quercus*, *Cedrus* and *Pinus*, LNS and CNS.
- Lepiota pyrochroa* Malençon, (1970); on twigs and on a slope to the ravine of slate Toumliline, CNS.
- Lepiota rhacodes* (Vittad.) Quél., (1872), (= *Chlorophyllum rhacodes* (Vittad.) Vellinga, 2002); under oaks, Eucalyptus and Pine in the region of Azrou and Ifrane, EC.
- Lepiota seminuda* (Lasch) P. Kumm., (1871), (= *Cystolepiota seminuda* (Lasch) Bon, 1976); under *Quercus rotundifolia* in the region of Azrou and Toumliline, CNS.
- Lepiota serena* sensu Lange, (= *Leucoagaricus sericifer* (Locq.) Vellinga, 2000), (Fr.) Sacc., (1880), (= *Leucoagaricus serenus* (Fr.) Bon & Boiffard 1974); in a grassy track, cedar mixed with *Quercus rotundifolia* of Azrou, CNS.
- Lepiota serena* var. *erioderma* Malençon, (1970); among the dead leaves of *Quercetum ilicis* of Azrou, CNS.
- Lepiota sericatella* Malençon, (1970), (= *Leucoagaricus sericifer* (Locq.) Vellinga, 2000); in the *Quercetum ilicis* of Azrou, CNS.
- Lepiota setulosa* J. E. Lange, (1935), (= *Lepiota echinella* Quél. & G. E. Bernard, 1888); LNS, SNS & CNS.
- Lepiota subincarnata* J. E. Lange, (1940); under *Quercus faginea* & *Q. rotundifolia* in the forest of Jaaba and Col of Zad, CNS.
- Lepiota sublittoralis* Kühner, (1936), Kühner ex Hora, (1960), (= *Leucoagaricus sublittoralis* (Kühner ex Hora) Singer, 1969); in *Quercetum ilicis* of Azrou, CNS.
- Lycoperdon cyathiforme* Bosc, (1811), (= *Calvatia cyathiformis* (Bosc) Morgan, 1890); in Azrou, Malç., 1937
- Lycoperdon furfuraceum* J. F. Gmel., (1792), Batsch, (1783), Schaeff., (1770), (= *Bovista aestivalis* (Bonord.) Demoulin, 1979); in October in the region of Azrou, Malç., 1937
- Lycoperdon hirtum* Batsch, (1783), Bull., (1788), (Pers.) Mart., (1817), Bonord., (1851). Soc. Sci. Nat. & Phy. Malç., 1959.
- Lycoperdon perlatum* Pers., (1796); in Azrou, Malç., 1937
- Lycoperdon pusillum* Fr., Cooke, sensu auct. Mult., (= *Lycoperdon dermoxanthum* Vittad., 1843), sensu auct. NZ, (= *Bovista aestivalis* (Bonord.) Demoulin, 1979), Hedw., (1780), Batsch, (1789), (= *Bovista pusilla* (Batsch) Pers., 1801). Soc. Sci. Nat. & Phy. of Morocco. Malç. & Bert., 1967.
- Lycoperdon pyriforme* Schaeff., (1774), Willd., (1787), Schumach., (1803), Vent., (1812). Soc. Sci. Nat. & Phy. Malç., 1959.
- \*\**Lycoperdon umbrinum* Hornem., (1823), sensu auct., (= *Lycoperdon molle* Pers., 1801), Pers., (1801), (= *Lycoperdon umbrinum* Pers., 1801); under *Cedrus* at Jbel Hebri, 1900 m.
- Montagnites candollei* Fr., (1838), Speg., (1914); in October Azrou.
- Mycenastrum corium* (Guers.) Desv., (1842). Soc. Sci. Nat. & Phy. Malç., 1959.
- Psalliota arvensis* (Schaeff.) Gillet, (1878), (= *Agaricus arvensis* Schaeff., 1774); in the glades and pastures of Azrou, EC.
- Psalliota augusta* (Fr.) Quél., (1872), (= *Agaricus augustus* Fr., 1838). C. R. Soc. Sci. Nat. & Phy. LNS, SNS & CNS. Malç., (1959).
- Psalliota campestris* (L.) Quél., (1872), (= *Agaricus campestris* var. *campestris* L., 1753); in the forests of Jaaba & Azrou, EC.
- Psalliota comtula* (Fr.) Quél., (1872), (= *Agaricus comtulus* Fr., 1838), (= *Agaricus huijsmanii* Courtec., 2008); into the woods and grassy clearings at *Quercus suber*, *Q. faginea* & *Q. rotundifolia*, in regions of Ifrane & Timhadit, C.
- Psalliota meleagris* var. *obscurata* (Maire) F. H. Møller, (1952), (= *Agaricus moelleri* Wasser 1976); in the bushes and coppice of *Quercus faginea* & *Q. rotundifolia*, in the region of Azrou, T.



- Psalliota nivescens* F. H. Møller, (1952), (= *Agaricus osecanus* Pilát 1951); under *Quercus rotundifolia*, in the forest of Azrou, CNS.
- Psalliota semota* (Fr.) Ricken, (1915), (= *Agaricus semotus* Fr., 1863), sensu NCL, (1960), (= *Agaricus dulcidulus* Schulzer, 1874); under *Quercus suber*, *Q. rotundifolia*, *Q. faginea*, *Pinus* & *Cedrus* in the region of Kissarite & Col of Tanout-ou-Fillal, C.
- Psalliota sylvatica* (Schaeff.) P. Kumm., (1871), (= *Agaricus sylvaticus* Schaeff. 1833); among the coppice and bushes with standards of *Quercus faginea* from Azrou, C.
- Psalliota sylvicola* (Vitt.) Richon & Roze, (1885), (= *Agaricus sylvicola* (Vittad.) Peck 1872); forests of *Pinus* & *Quercus*, LNS, C.
- \**Secotium agaricoides sensu* Hollòs, (= *Leratiomyces erythrocephalus* (Tul. & C. Tul.) Beever & D.-C. Park, 2008), (Czern.) Hollòs, (1902), (= *Chlorophyllum agaricoides* (Czern.) Vellinga, 2002); pastures above Azrou. Malç., (1940).
- Secotium acuminatum* Mont., (1846); under Cedar of Ifrane Soc. Nat. Phy. 1944, 1945 n° 6. Malç., (1937).
- Secotium arizonicum* Shear & Griffithsm (1902), (= *Endoptychum arizonicum* (Shear & Griffiths) Singer & A. H. Sm., 1958); under cedar of Ifrane. C. R. Soc. Nat. Phy., 1944, 1945. Werner, Malç., (1937).
- Tulostoma brumale* Pers., (1794), Bertero, sensu auct. NZ, (= *Tulostoma simulans* Lloyd, 1906). Soc. Sci. Nat. & Phy. of Morocco. Malç., 1967.
- Family: Amanitaceae**
- Amanita baccata* (Fr.) Gillet, (1874). C. R. Soc. Sci. Nat. Malç., 1937. in Azrou.
- Amanita boudieri* Barla, (1887); under *Quercus rotundifolia* at Azrou, C.
- Amanita citrina* (Schaeff.) Pers., (1797), sensu Stevenson, (= *Amanita phalloides* (Vaill. ex Fr.) Link, 1833); under the oaks, CM.
- Amanita codinae* (Maire) Bertault, (1955); in the *Quercus* of Azigza & Aguelmane, C.
- Amanita gemmata* (Fr.) Bertill., (1866); under *Cedrus atlantica* of Azrou, S
- Amanita gemmata* f. *amici* (Gillet) E.-J. Gilbert., (1941); in the Cedars of Azrou, S.
- Amanita inaurata* Secr., (1833), Secr. ex Gillet, (1874), (= *Amanita ceciliae* (Berk. & Broome) Bas, 1984); in wooded scrub and oak clear at *Quercus rotundifolia* & *Q. suber*, EC.
- Amanita lividopallescens* (Secr. ex Boud.) Kühner & Romagn., (1953); under *Abies pinsapo* mixed with *Quercus faginea*, C.
- Amanita muscaria* (L.) Lam., (1783); under *Cedrus*, LNS, T.
- Amanita pantherina* (DC.) Krombh., (1846), sensu Gonnermann & Rabenhorst, (1869); in all oak, LNS, V.
- Amanita phalloides* Secr., (Vaill. ex Fr.) Link, (1833); in all oak, LNS, V.
- Amanita rubescens* Pers., (1797), (= *Amanita rubescens* var. *rubescens* (Pers.), 1797); under the oaks and conifers, LNS, C.
- Amanita vaginata* (Bull.) Lam., (1783), sensu Stevenson, (= *Amanita pekeoides* G.S. Ridl., 1991), (= *Amanita nebula* G.S. Ridl., 1991); under the oaks, LNS, C.
- Amanita vaginata* f. *plumbea* (Schaeff.) L. Maire, (1910), (Schaeff.) E.-J. Gilbert, (1918). C. R. Soc. Sci. Nat. & Phy. Malç., 1959. LNS, SNS & CNS.
- Amanita verna* Secr., (Bull.) Lam., (1783), sensu Rea, (1922), (= *Amanita virosa* (Fr.) Bertill., 1866); in the oaks, LNS, M.
- Amanita vittadinii* (Moretti) Sacc., (1877); in lower edge of *Quercetum ilicis* at Azrou, C.
- Lepidella boudieri* (Barla) E.-J. Gilbert & Kühner, (1928), (= *Amanita boudieri* Barla, 1887). C. R. Soc. Sci. Nat. & Phy. Malç., 1959. LNS, SNS & CNS.
- Lepidella codinae* Maire, (1933). C. R. Soc. Sci. Nat. & Phy. Malç., 1959. LNS, SNS & CNS.
- Lepidella vittadinii* (Moretti) E.-J. Gilbert, (1925), (= *Amanita vittadinii* (Moretti) Sacc., 1887). C. R. Soc. Sci. Nat. & Phy. Malç., 1959. LNS, SNS & CNS.
- Torrendia pulchella* Bers., (1902), (= *Amanita torrendii* Justo, 2010); in Azrou. Malç., 1937.
- Family: Bolbitiaceae**
- Bolbitius fragilis* (L.) Fr., (1838), (= *Bolbitius titubans* var. *titubans* (Bull.) Fr., 1838); under *Quercus rotundifolia* in forests of Azrou, CNS.
- Bolbitius reticulatus* (Pers.) Ricken, (1915); on decaying wood of *Quercus faginea* in the forest of Jaaba, CNS.
- \*\**Bolbitius vitellinus* (Pers.) Fr. var. *fragilis* (L.) J. Favre, (1948), (= *Bolbitius titubans* var. *titubans* (Bull.) Fr., 1838); under *Quercus rotundifolia* L. : Azrou, 1600 m.
- Bolbitius vitellinus* var. *vitellinus* (Pers.) Fr., (1838); edge of the forest of *Quercus rotundifolia* in Azrou, CNS.
- Conocybe appendiculata* J. E. Lange & Kühner, (1935), J. E. Lange & Kühner ex Watling, (1971), (= *Conocybe velata* (Velen.) Watling, 2004); in the grass at Toumliline, CNS.
- Conocybe appendiculata* f. *macrospora* Kühner, (1935), (= *Conocybe dentatmarginata* Watling, 1980); in the grass of a forest road in tray of Seheb, CNS.



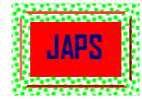
- Conocybe blattaria* (Fr.) Kühner, (1935), sensu auct. eur., (= *Conocybe vexans* Orton, 1960); in the forest of Azrou, CNS.
- Conocybe cylindracea* Maire & Kühner, (1935), Maire & Kühner ex Singer, (1959); in a grassy of clearing forest of Azrou, CNS.
- Conocybe filaris* (Fr.) Kühner, (1935); at the edge of a forest road above Azrou, CNS.
- Conocybe laricina* (Kühner) Kühner, (1935), (= *Conocybe dumetorum* (Velen.) Svrček, 1956); on cedar at Ich-Ouaharrouq, CNS.
- Conocybe mesospora* var. *brunneola* Kühner, (1935), (= *Conocybe brunneola* Kühner ex Kühner & Watling, 1982); in a grassy track of *Quercetum* of Azrou, CNS.
- Conocybe ochracea* (Kühner) Singer, (1959), sensu NCL, (1960), Phillips, (1981), (= *Conocybe velutipes* (Velen.) Svrček, 1999), sensu auct., (= *Conocybe siennophylla* (Berk. & Broome) Singer, 1955); in a grassy clearing of *Quercetum ilicis* of Azrou, CNS.
- Conocybe ochracea* (Kühner) Singer, (1959), forme *macrospore* bisporique (?); in the grass of a path of *Quercetum ilicis* in Azrou, CNS.
- Conocybe pilosella* (Pers.) Kühner, (1935), sensu Rea, 1922, (= *Conocybe pubescens* (Gillet) Kühner, (1935); in the wet slope of *Quercetum ilicis* of Azrou, CNS.
- Conocybe pseudopilosella* (Kühner) Kühner & Romagn., (1953), Kühner & Watling, (1980), (= *Conocybe pulchella* (Velen.) Hauskn. & Svrček, 1999), sensu auct. brit. p.p., (= *Conocybe pubescens* (Gillet) Kühner, 1935).
- Conocybe rickenii* (Jul. Schäff.) Kühner, (1935); under the coppices of *Quercus rotundifolia*, above of Ain-Toumliline, CNS.
- Conocybe semiglobata* Kühner & Watling, (1980); in the grass grazed, beside the lake of Dayet Aaoua, CNS.
- Conocybe siliginea* f. *siliginea* (Fr.) Kühner, (1935); in the clearings of *Quercetum ilicis* of Azrou, CNS.
- Conocybe siliginea* var. *ochracea* Kühner, (1935), (= *Conocybe ochracea* (Kühner) Singer, 1959).
- Conocybe subpubescens* P. D. Orton, (1960), Kühner, (1949), sensu auct. brit. p.p., (= *Conocybe pulchella* (Velen.) Hauskn. & Svrček, 1999), sensu auct., (= *Conocybe pubescens* (Gillet) Kühner, 1935); in a grassy clearing of *Quercetum ilicis* of Azrou, CNS.
- Conocybe tenera* (Schaeff.) Fayod, (1889), sensu auct. brit. p.p., (= *Conocybe pulchella* (Velen.) Hauskn. & Svrček, 1999); in the grazing areas around Dayet Aaoua; the cedar forests of Boujirhirh and clearings of *Quercetum* of Azrou, CNS.
- Conocybe teneroides* (J. E. Lange) Kühner, (1935), (= *Conocybe blattaria* (Fr.) Kühner, 1935), sensu auct., (= *Conocybe percincta* P. D. Orton, 1960); in the moss of wet slopes of *Quercetum ilicis* in Azrou, CNS.
- Conocybe vestita* (Fr.) Kühner, (1935); in the Slope wet of the forest of Azrou, S.
- Panaeolus acuminatus* (Schaeff.) Quél., (1874); in the clear bushes, lawns and pastures covered and smoked with the flocks, S.
- Panaeolus campanulatus* (L.) Quél., (1872), (= *Panaeolus papilionaceus* var. *papilionaceus* (Bull.) Quél., (1872), sensu auct. brit., (= *Panaeolus papilionaceus* var. *parvisporus* Ew. Gerhardt, 1996); on herbivore excrement, S.
- Panaeolus foenicicii* (Pers.) J. Schröt., (1926), (= *Panaeolina foenicicii* (Pers.) Maire, 1933); in the clearings.

#### Family: Clavariaceae

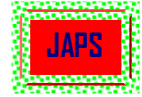
- Clavaria abietina* Pers., (1794), (= *Ramaria abietina* (Pers.) Quél., 1888), sensu Fries (1821) p.p., (= *Ramaria eumorpha* (P. Karst.) Corner, 1950); in Ifrane's cedar. C. R. Soc. Sci. Nat. & Phy. du Maroc Werner, 1937.
- Clavaria botrytis* Pers., (1797), (= *Ramaria botrytis* (Pers.) Ricken, 1918); in Ifrane's cedar. C. R. Soc. Sci. Nat. & Phy. of Morocco Werner, 1937.
- Clavaria cedretorum* (Maire) Trotter, (1925); in the forest of Azrou. C. R. Soc. Sci. Nat. & Phy. of Morocco Malç., 1937.
- \**Clavaria pallida* Schumach, (1803), Berk. & M. A. Curtis, (1868) Bres., (1906), Schaeff., (1774), (= *Ramaria pallida* (Schaeff.) Ricken, 1920).
- Clavaria pistillaris* Schumach., (1803), Bolton, (1790), Lour., (1970), Schaeff., (1763), L., (1753), (= *Clavariadelphus pistillaris* (L.) Donk, 1933); in October Azrou.
- Clavaria truncata* Lumn., (1791), Schmidel, (1796), Quél., (1886), Lovejoy, (1910), (= *Clavariadelphus truncatus* (L.) Donk, 1933); in October Azrou.
- Clavaria stricta* Pers., (1797), (= *Ramaria stricta* (Pers.) Quél., 1888), sensu Bourdot & Galzin: 98 (1928), (= *Ramaria bourdotiana*, 1937); in October Azrou.

#### Family: Cortinariaceae

- Cortinarius albobiolaceus* (Pers.) Fr., (1838); under *Quercus rotundifolia* at the Col of Tanout-ou-Fillal, CNS.
- Cortinarius anomalus* (Pers.) Fr., (1838); under *Quercus rotundifolia* of Azrou & Toumliline, CNS.

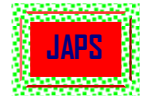


- \*\**Cortinarius anomalus* var. *azureus* (Fr.) Krieglst., (1991), (= *Cortinarius anomalus* (Pers.) Fr., 1838); under the *Cedrus*, Ifrane. 1700 m.
- \*\**Cortinarius anomalus* subsp. *eunomalus* Maire, (1937); under *Quercus* L: Azrou, 1700 m.
- Cortinarius argentatus* (Pers.) Fr., (1838), sensu Kauffmann, (= *Cortinarius argenteopileatus* Nezdobjm., 1983); in mixed forest of *Quercus rotundifolia* and *Cedrus* above Azrou, CNS.
- Cortinarius aurasiacus* Pat., (1902); in limestone cedar forests of Ifrane, Taililoute, Ras el Ma, Azrou, Moudmam, Ich-Ouaharrouq & the plate of Seheb, CNS.
- Cortinarius azureus* Fr., (1838), (= *Cortinarius anomalus* (Pers.) Fr., 1838); under *Cedrus* of Ifrane & under *Quercus rotundifolia* of Azrou, C.
- Cortinarius balteatocumatilis* Rob. Henry, (1939), Rob. Henry ex P. D. Orton, (1960), sensu auct. brit., (= *Cortinarius largus* Fr., 1838), under *Quercus rotundifolia* at the ravine of Toumliline, C ?
- Cortinarius balteatus* (Fr.) Fr., (1838), sensu auct., (= *Cortinarius balteatocumatilis* Rob. Henry ex P. D. Orton, 1960); under *Quercus faginea* at Moudmam & Jaaba, C.
- Cortinarius bivelus* (Fr.) Fr., (1838); under *Quercus faginea* in the forest of Jaaba, C.
- Cortinarius bovinus* Fr., (1838), sensu Lange, (1938), (= *Cortinarius bulbosus* Gray, 1821); under *Quercus rotundifolia* in the forest of Azrou, CNS.
- Cortinarius brunneus* (Pers.) Fr., (1838), sensu Cooke, (1887), (= *Cortinarius disjungendus* P. Karst., 1893).
- Cortinarius brunneus* var. *brunneus* (Pers.) Fr., (1838); in the mixed forest of *Quercus rotundifolia* and *Cedrus* between Ifrane and Azrou, CNS.
- Cortinarius bulliardii* (Pers.) Fr., (1838); under *Quercus rotundifolia*, LNS & CNS.
- Cortinarius caeruleus* W. Saunders & W. G. Sm., (Schaeff.) Fr., (1838), (= *Cortinarius caeruleus* (Schaeff.) Fr., 1838), sensu Marchand, Moser, NCL (1960) p.p, (= *Cortinarius terpsichores* Melot, 1989); in verge of cedar mixed of *Acer monspessulanum* and *Ilex aquifolium* at Azrou, CNS.
- Cortinarius caeruleus* var. *cyaneus* Bres., (1930), (= *Cortinarius cyaneus* (Bres.) M. M. Moser, 1967). Soc. Sci. Nat. & Phy. Malç., 1959.
- Cortinarius caesiocyaneus* var. *juranus* Rob. Henry, (1939); in a marl bottom littered with bushes of *Viburnum tinus*, under cover of *Quercus rotundifolia* in the forest of Azrou, CNS.
- Cortinarius caligatus* Malençon, (1970); around the oak trees on limestone hills in the forest of Azrou & the Col of Zad, CNS.
- Cortinarius calocbrous* (Pers.) Gray, (1821), sensu Rea (1922), Cooke, (= *Cortinarius arquatus* (Alb. & Schwein.) Fr., 1838); under *Quercus rotundifolia* in the Col of Tanout-ou-Fillal; also under *Pinus pinaster* at Tamrabt, CNS.
- Cortinarius calocbrous* f. *violascens* Rob. Henry, (1943), Rob. Henry ex Bidaud, Moënné-Locc. & Reumaux, (2001); in the forest of Azrou under *Quercus rotundifolia* & *Cedrus*, CNS.
- Cortinarius calocbrous* forma ?; under *Quercus rotundifolia* in Ifrane, CNS.
- Cortinarius candelaris* Fr., (1838), sensu auct. mult., (= *Cortinarius rigens* (Pers.) Fr., 1838); under the *cedrus*. Soc. Sci. Nat. & Phy. Malç & Bert., 1960
- Cortinarius castaneus* (Bull.) Fr., (1838); under *Quercus rotundifolia* of Azrou & Ifrane, CNS.
- Cortinarius cedretorum* Maire, (1914); in the cedar forests, sometimes under *Quercus rotundifolia* and also under *Cedrus*, LNS & CNS.
- Cortinarius cedretorum* var. *suberetorum* Maire, (1937); under *Quercus faginea* at Tamrabt, LNS & CNS.
- \*\**Cortinarius claricolor* (Fr.) Fr., (1838), sensu Lange, (1938), (= *Cortinarius vulpinus* (Velen.) Rob. Henry, 1947), sensu Orton, (1955), (= *Cortinarius durus* P. D. Orton, 1960); under the *Cedrus*: Ifrane, 1650-1700 m; Azrou, 1700 m.
- Cortinarius claroflavus* Rob. Henry, (1952); under the green oaks of Azrou, CNS.
- \*\**Cortinarius collinitus* (Pers.) Fr., (1838); under the *Quercus*: Azrou, 1600 m; forest of Jaaba, 1500.
- Cortinarius collinitus* var. *typicus* (Pers.) Fr., (1838); in oak forests of Azrou, CNS.
- Cortinarius colus* Fr., (1838); under *Quercus rotundifolia* in the forest of Azrou, CNS.
- Cortinarius cotoneus* Fr., (1838); under *Quercus rotundifolia* of Azrou & the Col of Tanout-ou-Fillal, CNS.
- Cortinarius crystallinus* Fr., (1838), sensu Cooke, Lange, auct., (= *Cortinarius emollitus* Fr., 1838), sensu NCL, (1960), (= *Cortinarius barbatus* (Batsch) Melot, 1989); in *Quercetum ilicis* above Azrou, CNS.
- Cortinarius cumatilis* Fr., (1838); under *Quercus faginea* on coarse limestone in the forest of Jaaba, CNS.
- Cortinarius cumatilis* f. *robustus* (M. M. Moser) Nespiak, (1975). C. R. Soc. Sci. Nat. & Phy. Malç & Bert., 1967. LNS, SNS & CNS.



- Cortinarius cyanopus* Serc. ex Fr., (1838), sensu Cooke, (= *Cortinarius largus* Fr., 1838); under *Cedrus* at Ràs-el-Mâ & under *Juniperus oxycedrus* in the bottom of *Quercetum ilicis* of Azrou, CNS.
- Cortinarius decipiens* (Pers.) Fr., (1838); under *Quercus faginea* at Kissarite, CNS.
- Cortinarius dibaphus* var. *bresadolae* (M. M. Moser) Quadr., (1985); under *Quercus rotundifolia* in the forest of Azrou, CNS.
- Cortinarius dionysae* Rob. Henry, (1933); under Cedars pure or mixed of *Quercus rotundifolia* at Ras el Ma, CNS.
- Cortinarius duracinus* Fr., (1838), (= *Cortinarius rigens* (Pers.) Fr., 1838); in the Cedars, LNS & CNS.
- Cortinarius elatior* Fr., (1838); under *Quercus rotundifolia* of Azrou, C.
- \*\**Cortinarius erythrinus* (Fr.) Fr., (1838), sensu Ricken, (1915), (= *Cortinarius vernus* H. Lindstr. & Melot, 1994); under *Quercus*, Azrou, 1600 m.
- Cortinarius fasciatus* Fr., (1938), sensu Lange, (1938), (= *Cortinarius fulvescens* Fr., 1838); under *Pinus pinaster* at Tamrabt, CNS.
- Cortinarius firmus* Fr., (1838), (variété violascente ?); in a clump of *Quercus rotundifolia* at Toumliline, CNS.
- Cortinarius fulgens* (Alb. & Schwein.) Fr., (1838), sensu NCL (1960), (= *Cortinarius olearioides* Rob. Henry, 1987); under the oaks in the forest of Jaaba & the Col of Tanout-ou-Fillal, CNS.
- Cortinarius fulmineus* Fr., (1838), sensu NCL (1960), auct. mult., (= *Cortinarius olearioides* Rob. Henry, 1987), sensu Rea, (1922), (= *Cortinarius elegantior* (Fr.) Fr., 1838); in the *Quercetum ilicis* of Azrou, CNS.
- Cortinarius glaucopus* (Schaeff.) Fr., (1838), sensu Rea, (1922), (= *Cortinarius amoenolens* Rob. Henry ex P. D. Orton, 1960); under *Quercus rotundifolia* of Azrou, CNS.
- Cortinarius herculeus* Malençon, (1958); in the Cedars, LNS & CNS.
- Cortinarius hinnuleus* Fr., (1838); under *Quercus rotundifolia*, LNS & CNS.
- Cortinarius impennis* Fr., (1838); in the forest of Azrou, SNS & CNS.
- Cortinarius infractus* (Pers.) Fr., (1838), Berk., (1860), (= *Cortinarius praestans* Cordier, 1870); under hardwoods than in the pure or mixed cedar forests of Azrou, Ifrane, Taïliloute, Michlifene, CM.
- Cortinarius ionochlorus* Maire, (1937); in a limestone very stony, among the *Quercus rotundifolia*, above Azrou, CNS.
- Cortinarius ionochlorus* var. *leucophyllus* Malençon, (1970); under *Quercus rotundifolia* of Azrou, Ifrane & the Col of Tanout-ou-Fillal, CNS.
- \*\**Cortinarius largus* Fr., (1838), sensu auct. brit., (= *Cortinarius patibilis* var. *scoticus* Brandrud, 1997); 2005.
- Cortinarius multiformis* (Fr.) Fr., (1838), sensu NCL, (= *Cortinarius polymorphus* Henry 1985); under *Quercus faginea* un the forest of Jaaba & under *Quercus rotundifolia* sometimes mixed with *Cedrus* in the region of Azrou, Ifrane, Taïliloute & Moudmam, CNS.
- Cortinarius nemorensis* (Fr.) J. E. Lange, (1940), (= *Cortinarius varicolor* (Pers.) Fr., 1838), sensu Lange, (1938) & sensu auct. brit., (= *Cortinarius largus* Fr., (1838); in cedar mixed in Ras el Ma, CM.
- Cortinarius ochropallidus* Rob. Henry, (1936), (= *Cortinarius talus* Fr., 1838). Soc. Sci. Nat. & Phy. Malç., 1959.
- Cortinarius odorifer* Britzelm, (1885); in the Cedars of Azrou & Ifrane, CNS.
- Cortinarius parvus* Rob. Henry, (1935), (= *Cortinarius calochrous* var. *parvus* (Rob. Henry) Brandrud, 1992); at the bottom of *Quercetum ilicis* of Azrou, CNS.
- Cortinarius prasinus* (Schaeff.) Fr., (1838); in a young cedar mixed of *Acer monspesulanum* & *Ilex aquifolium* above Azrou, CNS.
- Cortinarius psammocephalus* (Bull.) Fr., (1838), sensu auct., (= *Cortinarius angelesianus* A. H. Sm., 1944). Soc. Sci. Nat. & Phy. Malç., 1959.
- Cortinarius rufoolivaceus* (Pers.) Fr., (1838); under *Quercus faginea* & *Q. rotundifolia* in the region of Azrou & the forest of Jaaba, CNS.
- Cortinarius saturninus* (Fr.) Fr., (1838); LNS, SNS & CNS.
- Cortinarius scaurus* (Fr.) Fr., (1838); under *Quercus rotundifolia* in the region of Azrou, CNS.
- Cortinarius scobinaceus* Malençon & Bertault, (1970); under *Pinus pinea* at Tamrabt, CNS.
- Cortinarius squameoradicans* Bellivier, (1952), Bellivier ex Cheype, (1997). Soc. Sci. Nat. & Phy. Malç., 1959.
- Cortinarius sodagnitus* Rob. Henry, (1935); in pure or mixed cedar forests at Azrou, Ifrane, Ras el Ma & the Col of Tanout-ou-Fillal, CNS.
- Cortinarius subferrugineus* (Batsch) Fr., (1838); under the oaks of Azrou, CNS.
- Cortinarius trivialis* J. E. Lange, (1940); under the oaks, LNS & CNS.
- Cortinarius uraceus* Fr., (1838), sensu Lange, (1938), A. A. Pearson (1949), (= *Cortinarius vernus* H. Lindstr. & Melot, 1994); sous les cèdres de Moudmam, CNS.





*Cortinarius variicolor* (Pers.) Fr., (1838); en cédraie mêlée de Ras el Ma, E.C.

*Cortinarius venetus* (Fr.) Fr., (1838). Soc. Sci. Nat. & Phy. Malç., 1959.

**Family : Cyphellaceae**

\**Cyphella alboviolascens* (Alb. & Schwein.) P. Karst., (1870), (= *Lachnella alboviolascens* (Alb. & Schwein.) Fr., 1849); *Cytisus battandieri* in forest of Jaaba, Malç. & Bert., 1952, 65

\**Cyphella anomala* (Pers.) Pat., (1900), (= *Cyphellopsis anomala* (Pers.) Donk, 1931); on *Quercus rotundifolia*, high of Toumliline.

*Cyphella griseopallida* Weinm., (1836), (= *Calyptella griseopallida* (Weinm.) Park.-Rhodes, 1954); on *Cytisus balansae* & *Pinus pinaster*. Bull. Soc. Sci. Nat. & Phy. Malç. & Bert., 1967

*Cyphella nivea* P. Crouan & H. Crouan, (1867), Fuckel., (1870), (Quél.) Bourdot & Galzin, (1928); on *Quercus faginea*. Bull. Soc. Sci. Nat. & Phy. Malç. & Bert., 1967

\**Cyphella poriaeformis* (Pers.) Bourdot & Galzin, (1927), (= *Resupinatus poriaeformis* (Pers.) Thorn, Moncalvo & Redhead, 2006); on *Quercus rotundifolia*, Michlifene. Malç. & Bert., 1953, 66.

**Family: Entolomataceae**

*Clitopilus birneolus* (Fr.) Kühner & Romagn., (1953), (= *Rhodocybe birneola* (Fr.) P. D. Orton, 1960); under *Pinus pinaster* at the Massif of Tamrabta, CNS.

*Clitopilus hobsonii* (Berk. & Broome) P. D. Orton, (1960); on bark of dead stumps in Ifrane, Tioumliline & Mermel, CNS.

*Clitopilus pertenuis* Malençon, (1975); on *Cytisus battandieri*, *Rubus ulmifolius* in Azrou, CNS.

*Clitopilus pleurotelloides* (Kühner) Joss., (1941), (= *Clitopilus hobsonii* (Berk. & Broome) P. D. Orton, 1960); on *Quercus rotundifolia*, LNS & CNS. C. R. Soc. Sci. Nat. & Phy. Malç., 1959.

*Clitopilus popinalis* (Fr.) P. Kumm., (1871), (= *Rhodocybe popinalis* (Fr.) Singer, 1951); among the cedar of Ifrane & Melcaïd, NC.

*Clitopilus prunulus* (Scop.) P. Kumm., (1871); in Azrou. Bull. Soc. Sci. Nat. & Phy. Malç., 1937.

*Clitopilus truncatus* var. *mauretanicus* Maire, (= *Clitopilus truncatus* var. *mauretanicus* Maire, 1924); in *Quercus rotundifolia* of Azrou, CNS.

*Clitopilus truncatus* var. *truncatus* (Schaeff.) Kühner & Romagn., (1953); under *Quercus rotundifolia* & *Cedrus* of Azrou, C.

*Clitopilus truncatus* var. *subvermicularis* Maire. C. R. Soc. Sci. Nat. & Phy. Malç., 1959.

*Entoloma chypeatum* (L.) P. Kumm., (1871); in Azrou. Bull. Soc. Sci. Nat. & Phy. Malç., 1937.

*Entoloma lividum* sensu auct., (Bull.) Quél., (1871), (= *Entoloma sinuatum* (Bull.) P. Kumm., 1871); in Azrou. Bull. Soc. Sci. Nat. & Phy. Malç., 1937.

*Entoloma rhodopolium* Berk. & Broome, (1871), (Fr.) P. Kumm., (1871), sensu auct. brit., (= *Entoloma sericatum* (Britzelm.) Sacc., 1895); C. R. Soc. Sci. Nat. & Phy. Malç., 1959.

*Entoloma sericeum* (Bull.) Quél. 1872. C. R. Soc. Sci. Nat. & Phy. Malç., 1959

*Entoloma undatum* (Fr.) M. M. Moser, (1978). Bull. Soc. Sci. Nat. & Phy. Malç., 1937.

*Leptonia lampropus* (Fr.) Quél., (1872), (= *Entoloma lampropus* (Fr.) Hesler, 1967), sensu NCL (1960), non Fr., (= *Entoloma sodale* Kühner & Romagn. ex Noordel. 1982). C. R. Soc. Sci. Nat. & Phy. Malç., 1960.

*Nolanea Mammosa* (L.) Sacc., (1887), (= *Entoloma mammosum* (L.) Hesler, 1967), sensu auct., brit. p. p., (= *Entoloma hebes* (Romagn.) Trimbach, 1981), sensu NCL (1960) p.p. *vide* Orton (Mycologist 1991), (= *Entoloma kuehnerianum* Noordel., 1985). C. R. Soc. Sci. Nat. & Phy. Malç., 1959.

*Rhodocybe birneola* (Fr.) P. D. Orton, (1960). C. R. Soc. Sci. Nat. & Phy. Malç. & Bert., 1967. LNS, SNS & CNS.

*Rhodophana nitellina* (Fr.) Kühner, (1971), (= *Rhodocybe nitellina* (Fr.) Singer, 1947); in the forest of Azrou, SNS & CNS.

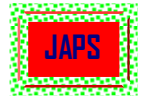
*Rhodophyllus cancrinus* (Quél.) Quél., (1886), (= *Entoloma neglectum* (Lasch) Arnolds, 1982); on the earth of a brushy slope above Azrou, CNS.

*Rhodophyllus clandestinus* (Fr.) Quél., (1886), (= *Entoloma clandestinum* (Fr.) Noordel., 1980); on the extreme edge of an ancient fire, in the *Quercetum ilicis* of Azrou, CNS.

*Rhodophyllus chypeatus* (L.) Quél., (1886), (= *Entoloma chypeatum* f. *chypeatum* (L.) P. Kumm., 1871); in the brush and the forests of *Quercus* of Ifrane & Azrou, C.

*Rhodophyllus juncinus* Kühner & Romagn., (1954), (= *Entoloma juncinum* (Kühner & Romagn.) Noordel., 1979); on *Quercetum ilicis* of Azrou, CNS.

*Rhodophyllus lampropus* (Fr.) Quél., (1886), (= *Entoloma lampropus* (Fr.) Hesler, 1967); under *Quercus faginea* in the forest of Jaaba, CNS.



*Rhodophyllus lividus* (Bull.) Quél., (1886), (= *Entoloma sinuatum* (Bull.) P. Kumm., 1871); under *Quercus rotundifolia* of Azrou, V.

*Rhodophyllus mammosus* (L.) Quél., (1886), (= *Entoloma mammosum* (L.) Hesler, 1967); under the Cedars & the *Quercus rotundifolia* of Azrou, Ifrane & Col of Zad, NR.

*Rhodophyllus mammosus* var. *sericoides* Kühner, (1954), (= *Entoloma kuehnerianum* Noordel., 1985) Malçın & Bert. C. R. Soc. Sci. Nat. & Phy. Malç. & Bert., 1967. LNS, SNS & CNS.

*Rhodophyllus rhodopolius* (Fr.) Quél., (1886), (= *Entoloma rhodopolium* (Fr.) P. Kumm., 1871); under *Quercus rotundifolia* of Azrou, T.

*Rhodophyllus rugosus* (Malç.) Romag.; in the grass of lawns over Azrou, CNS.

*Rhodophyllus sericeus* (Bull.) Quél. var. *typicus* K. & R; in the pastures and grassy clearings of Azrou, Ifrane & Jbel Hebri, C.

*Rhodophyllus undatus* var. *odorus* J. Favre, (1948); in the clearings and the oak groves of Azrou, CNS.

*Rhodophyllus tristis* (Bres.) Malençon & Bertault, (1970); en orée supérieure de cédraie au-dessus d'Azrou, CNS.

#### Family: Hydnangiaceae

*Laccaria laccata* (Scop.) Cook, (1884), sensu Stevenson, (= *Laccaria proxima* (Boud.) Pat., 1887), (= *Laccaria obiensis* (Mont.) Singer, 1947). Bull. Soc. Soci. Nat. Malç., 1937.

#### Family: Hygrophoraceae

*Hygrophorus acutoconicus* (Clem.) A. H. Sm, (1947), (= *Hygrocybe acutoconica* var. *acutoconica* (Clem.) Singer, 1951); under the Hollydans in the *Quercetum ilicis* pure or mixed of *Quercus lusitanica* & the Cedars of Azrou, D.

*Hygrophorus arbustivus* Fr., (1836); under *Quercus rotundifolia* & *Q. lusitanica*, or in mixed cedar forests of Ifrane, Azrou, C.

*Hygrophorus carneogriseus* Malençon, (1971), (= *Cleistocybe carneogrisea* (Malençon) Vizzini, 2009); under the Cedars & the *Pinus pinaster* in the region of Ifrane, Taïliloute & Tamrabt, CNS.

*Hygrophorus chrysodon* (Batsch) Fr., (1838); under the Cedars & the oaks of Azrou, forest of Khenifra, Ifrane & Jbel Hebri.

*Hygrophorus conicus* (Schaeff.) Fr., (1838), (= *Hygrocybe conica* (Schaeff.) P. Kumm., 1871); in Azrou. Bull. Soc. Sci. Nat. Malç., 1937.

*Hygrophorus conicus* var. *chloroides* Malençon, (1975), (= *Hygrocybe conica* var. *conica* (Schaeff.) P. Kumm., 1871); in clear cedar mixed with *Quercus rotundifolia* d'Azrou, C.

*Hygrophorus conicus* var. *nigrescens* (Quél.) Konrad & Maubl., sensu auct., (= *Hygrocybe conica* (Schaeff.) P. Kumm., 1871). C. R. Soc. Sci. Nat. & Phy. Malç., 1959. LNS, SNS & CNS.

*Hygrophorus conicus* var. *conicus* (Scop.) Fr., (1838); in the oaks of Azrou & Ifrane, C.

*Hygrophorus croceus* Bres., (1907). C. R. Soc. Sci. Nat. & Phy. Malç., 1959. LNS, SNS & CNS.

*Hygrophorus cossus* (Sowerby) Fr., (1838), sensu auct., (= *Hygrophorus eburneus* (Bull.) Fr., 1838), sensu auct. brit., (= *Hygrophorus discoxanthus* Rea, 1908); in Azrou. Bull. Soc. Sci. Nat. Malç., 1937.

*Hygrophorus dichrous* Kühner & Romagn., (1953), Hongo, (1958), sensu NCL, (1960), (= *Hygrophorus persoonii* Arnolds, 1979); under *Quercus rotundifolia* of Azrou, Jbel Hebri & Kissarite, C.

*Hygrophorus eburneus* (Bull.) Fr., (1838); in Azrou. Bull. Soc. Sci. Nat. Malç., 1937

\*\**Hygrophorus eburneus* var. *cossus* (Sowerby) Quél., (1888), (= *Hygrophorus cossus* (Sowerby) Fr., 1838); under the *Quercus*, Azrou, 1600 m.

*Hygrophorus insipidus* (J.E. Lange) S. Lundell, (1956), (= *Hygrocybe insipida* (J.E. Lange ex S. Lundell) M.M. Moser, 1967); under *Cedrus* of Plate of Seheb, CNS.

*Hygrophorus leporinus* Fr., (1838), sensu Cooke, Rea, (1922), (= *Hygrophorus nemoreus* (Pers.) Fr., 1838); among the holly bushes under the cover of *Quercus faginea*, dans la forêt d'Azrou.

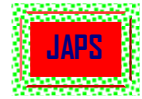
*Hygrophorus limacinus* (Scop.) Fr., (1838), Kalchbr., sensu Kühner & Romagnesi, (= *Hygrophorus latitabundus* Britzelm., 1899), sensu auct., (= *Hygrophorus persoonii* Arnolds, 1979); in Azrou. Bull. Soc. Sci. Nat. Malç., 1937.

*Hygrophorus marzuolus* (Fr.) Bres., (1893); in the Cedars of Ifrane, C.

*Hygrophorus miniatus* (Fr.) Fr., (1838), (= *Hygrocybe miniata* (Fr.) P. Kumm., 1871); in mixed forest of *Pinus pinaster* & *Quercus rotundifolia* at Tamrabt, CNS.

*Hygrophorus nigrescens* (Quél.) Quél., (1888), sensu auct., non Quél., (= *Hygrocybe conica* (Schaeff.) P. Kumm., 1871); under the holly bushes & *Viburnum tinus* in forest of Azrou, C.

*Hygrophorus niveus* (Scop.) Fr., (1838), (= *Hygrocybe virginea* var. *virginea* (Wulfen) P. D. Orton & Watling, 1969); in mixed forest of *Quercus rotundifolia* & *Cedrus* of Azrou, C.



*Hygrophorus obrusseus* (Fr.) Sacc., (1887), (= *Hygrocybe obrussea* (Fr.) Wünsche, 1877), sensu NCL, (1960), (= *Hygrocybe citrinovirens* (J. E. Lange) Jul. Schäff., 1949); under *Quercus rotundifolia* of Azrou, CNS.

*Hygrophorus olivaceoalbus* (Fr.) Fr., (1838) sensu Lange, (= *Hygrophorus persoonii* Arnolds, 1979); in Ifrane & Timhadit, SNS & CNS. C. R. Soc. Sci. Nat. & Phy. Malç. & Bert., 1960.

*Hygrophorus penarius* Fr., (1838); under *Quercus rotundifolia* of Azrou.

*Hygrophorus pseudodiscoideus* (Maire) Malençon & Bertault, (1975). C. R. Soc. Sci. Nat. & Phy. Malç. & Bert., 1967. LNS, SNS & CNS.

*Hygrophorus purpurascens* (Alb. & Schwein.) Fr., (1838), Gonn. & Rabenh., (1869); under the Cedars, LNS, C.

*Hygrophorus reae* Maire, (1910), (= *Hygrocybe mucronella* (Fr.) P. Karst., 1879); under *Quercus rotundifolia* of Azrou & Ifrane, CNS.

*Hygrophorus russula* (Schaeff.) Kauffman, (1918); under *Cedrus* & *Quercus rotundifolia* of Azrou & Ifrane, CNS.

#### Family: Inocybaceae

*Crepidotus autochthonus* J. E. Lange, (1938); on *Acer monspessulanum* at Jbel Hebri & on *Quercus rotundifolia* at Tichout-bou-Tazert, CNS.

*Crepidotus cesatii* (Rabenh.) Sacc., (1877), (= *Crepidotus cesatii* var. *cesatii* (Rabenh.) Sacc., 1877); on *Rubus ulmifolius* at Seheb, CNS.

*Crepidotus fragilis* Joss., (1937), (= *Crepidotus autochthonus* J. E. Lange, 1938) Malç. Soc. Sci. Nat. & Phy. 1967. on *Acer* (?)

*Crepidotus herbarum* Peck, (Peck) Sacc., (1887), (= *Crepidotus epibryus* (Fr.) Quél. 1888); on bursts of cedar, twigs of *Quercus rotundifolia* & the *Cytisus battandieri* at Azrou, Moudmam, Jaaba & Tamrabt, CNS.

*Crepidotus luteolus* Sacc., (1887); on remnants of *Quercus rotundifolia* at Azrou, CNS.

*Crepidotus microcarpus* Malençon, (1975); on dead branches of *Cytisus battandieri* at Moudmam & Melcaïd, CNS.

*Crepidotus variabilis* (Pers.) P. Kumm., (1871); on *Quercus rotundifolia* at Azrou, Ifrane, Moudmam & Kissarite, CNS.

*Inocybe aterospora* Quél., (1979); under *Pinus pinaster* in the Massif of Tamrabt, V.

*Inocybe bongardii* (Weinm.) Quél., (1872), (= *Inocybe bongardii* var. *bongardii* (Weinm.) Quél., 1872); under *Quercus rotundifolia* at Azrou, CNS.

*Inocybe brunnea* K. Syme, (1992), Quél., (1880), sensu auct., (= *Inocybe phaeoleuca* Kühner 1986); generally under *Quercus rotundifolia* in the forest of Azrou and under *Pinus pinaster* at Tamrabt, V.

*Inocybe cervicolor* (Pers.) Quél., (1886); under *Quercus rotundifolia* at Azrou, CNS.

*Inocybe corydalina* Quél., (1875), (= *Inocybe corydalina* var. *corydalina* Quél., 1875); under *Quercus rotundifolia* in the forest of Azrou, S.

*Inocybe descissa* (Fr.) Quél., (1872), sensu NCL, (1960), (= *Inocybe phaeodisca* var. *phaeodisca* Kühner, 1955). Soc. Sci. Nat. & Phy. Malç., 1959.

*Inocybe descissa* var. *brunneoatra* R. Heim., (1931), (= *Inocybe fuscidula* var. *fuscidula* Velen., 1920); in the *Quercetum ilicis* of Azrou & in the lawns stripped of the lower edge, CNS.

*Inocybe dolichospora* Malençon, (1970); under the Cedar at Boujirhirh, CI.

*Inocybe dulcamara* Sacc., (Pers.) P. Kumm., (1871); on old fire places in *Quercetum ilicis* at Azrou, S.

*Inocybe fastigiata* (Schaeff.) Quél., (1872), (= *Inocybe rimosa* (Bull.) P. Kumm., 1871); under *Quercus* & *Pinus* at Azrou & Ras el Ma, V.

*Inocybe fastigiata* var. *cerina* Malençon, (1970); under *Quercus rotundifolia* at Azrou, CNS.

*Inocybe fastigiata* f. *subcandida* Malençon, (1970); in the *Quercetum ilicis* of Azrou, CNS.

*Inocybe fastigiata* var. *superba* (Fr.) P. Karst.; in the forest of Azrou, CNS.

*Inocybe friesii* R. Heim., (1931), (= *Inocybe nitidiuscula* f. *nitidiuscula* (Britzelm.) Lapl., 1894); under *Pinus pinaster* at Tamrabt & under *Quercus rotundifolia* at Azrou, CNS.

*Inocybe gausapata* Kühner, (1955), (= *Inocybe flocculosa* (Berk.) Sacc., 1887); in the *Quercetum ilicis* at Azrou and under *Quercus suber* at El-Khatouate, CNS.

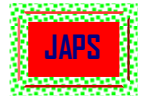
*Inocybe geophylla* (Fr.) P. Kumm., (1871); under *Cedrus*, *Pinus* & *Quercus* of Ifrane, Azrou & the Col of Zad, V.

*Inocybe grammocephala* Malençon, (1970); in the small moss at the lower edge of *Quercetum ilicis* d'Azrou, CI.

*Inocybe grammopodia* Malençon, (1970); under the cedars of Azrou, Plate of Seheb & Ich-Ouaharrouq, CI.

*Inocybe hirtella* Bres., (1884), sensu NCL (1960) p.p., J. E. Lange, (1938), (= *Inocybe muricellata* Bres. 1905); dans les bois de chênes d'Azrou, V.

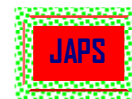
*Inocybe jurana* (Pat.) Sacc., (1887), (= *Inocybe adaequata* (Britzelm.) Sacc. 1887); under *Quercus rotundifolia* in



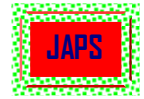
- the forest of Azrou & the Col of Tanout-ou-Fillal, S.
- Inocybe maculata* Boud., (1885); under *Quercus rotundifolia* & *Q. lusitanica* in the forest of Azrou, R.
- Inocybe obscura* (Pers.) Gillet, (1874), sensu auct., (= *Inocybe cincinnata* var. *major* (S. Petersen) Kuyper, 1989); under *Quercus rotundifolia* in the forest of Azrou, V.
- Inocybe ochrofulva* Malençon, (1970); under *Quercus rotundifolia* in bottom of the the ravine of Toumliline, CI.
- Inocybe orbata* Malençon, (1970); in pure or mixed cedar forest in the region of Ifrane and Azrou, S.
- Inocybe pyriodora* (Pers.) P. Kumm., (1871), sensu auct. mult., NCL (1960), (= *Inocybe fraudans* (Britzelm.) Sacc., 1887); under the oaks of Azrou, CI.
- Inocybe pyriodora* subsp. *incarnata* (Bres.) Konarrd & Maubl., (1926), (= *Inocybe fraudans* (Britzelm.) Sacc., 1887); under *Quercus rotundifolia* in the forest of Azrou, CNS.
- Inocybe queletii* Konrad, (1929); under the Cedars of Jbel Hebri, S.
- Inocybe roseipes* Malençon, (1970); under the Cedars of Moudmam & Jbel Hebri, CI.
- Inocybe rufula* Malençon, (1970), Malençon ex Alessio, (1986); under the Cedars of Azrou, CI.
- Inocybe sambucina* (Fr.) Quél., (1872); under the cedars in the region of Ifrane, Ras el Ma & Boujirhirh, V.
- Inocybe scabelliformis* Malençon, (1970); under the Cedars in the forest of Azrou, Ich Ouaharrouq & Plate of Seheb, S.
- Inocybe valida* Malençon, (1979); in the forest at *Quercus faginea* mixed of *Quercus rotundifolia*, *Acer monspessulanum*, and a few rare cedars, above Azrou, CI.
- Inocybe* sp. N° 1522; under *Ilex aquifolium* in the forest of Azrou, CNS.
- Inocybe* sp. N° 1532; on a very old place charcoal at the lower edge of *Quercetum ilicis* of Azrou CNS.
- Inocybe* sp. N° 2148; the middle of a bush planted with young *Quercus*, at the entry of the forest Jaaba, CNS.
- Inocybe* sp. N° 2255; under *Crataegus* above Azrou, CNS.
- Inocybe* sp. N° 2106; under *Cedrus* of Ifrane, CNS.
- Naucoria carpophila* (Fr.) Quél., (1872), (= *Flammulaster carpophilus* var. *carpophilus* (Fr.) Earle ex Vellinga, 1986); on various wood debris of *Quercus rotundifolia*, *Q. faginea* & *Q. pyrenaica*, LNS, CNS.
- Naucoria centunculus* (Fr.) P. Kumm., (1871), (= *Simocybe centunculus* var. *centunculus* (Fr.) P. Karst., 1879); on rotting wood and twigs of *Quercus rotundifolia*, in the forest of Azrou, Toumliline & Bou Ikhittene, CNS.
- Naucoria conspersa* (Pers.) P. Kumm., (1871), (= *Tubaria conspersa* (Pers.) Fayod, 1889), sensu Lange, (= *Naucoria subconspersa* Kühner ex P. D. Orton, 1960); in the roadside ditches, LNS & CNS.
- Naucoria decolorata* Malençon ex R. Galán, G. Moreno & A. Ortega, (1983); on dead wood of *Cytisus battandieri* at Boujirhirh, CNS.
- Naucoria erinaceus* (Fr.) Gillet, (1876), (= *Phaeomarasmium erinaceus* (Pers.) Scherff. ex Romagn., 1937); on *Quercus* sp., in the forest of Jaaba, CNS.
- Naucoria haustellaris* (Fr.) Kühner & Romagn., (1953), (= *Simocybe haustellaris* (Fr.) Watling, 1981); on a dead branch near Azrou, CNS.
- Naucoria minutalis* (Romagn.) Kühner & Romagn., (1953), (= *Tubaria minutalis* Romagn., 1937); on earth-clay schistose of a shaded slope, in the bottom of the ravine of Toumliline, CNS.
- Naucoria pellucida* Murrill, (1912); on various plant debris, LNS & C.
- Naucoria rimulincola* (Lasch) Sacc., (Rabenh.) Sacc., (1887), (= *Phaeomarasmium rimulincola* (Rabenh.) P. D. Orton 1960); on *Quercus rotundifolia* in the forest of Jaaba, Azrou & Kissarite, CNS.
- Naucoria* ? N° 1505. In a stream at Oued Toumliline, CNS.
- Naucoria semiorbicularis* (Bull.) Quél., (1875), (= *Agrocybe pediades* (Fr.) Fayod, 1889), Malençon, (1937); in Azrou.
- Pellidiscus pallidus* (Berk. & Broome) Donk, (1959). Bull. Soc. Sci. Nat. & Phy. Malç. & Bert., 1967; on *Cytisus battandieri*.
- Phaeomarasmium erinaceus* (Fr.) Scherff. ex Romagn., (1937). Soc. Sci. Nat. & Phy. Malç., 1959.
- Phaeomarasmium horizontalis* (Bull.) Kühner, (1935), sensu Kühner, NCL, (1960), (= *Phaeomarasmium rimulincola* (Rabenh.) P.D. Orton, 1960); Soc. Sci. Nat. & Phy. Malç., 1959
- \*\**Tubaria furfuracea* (Pers.) Gillet, (1876); on plant debris: Azrou

#### Family: Lyophyllaceae

- Lyophyllum aggregatum* var. *aggregatum* (Schaeff.) Kühner, (1938); in the Cedars of Azrou, Ifrane, Moudmam & Ich Ouaharrouq, CNS.
- Lyophyllum carbonarium* (Vel.) M. M. Moser, (1953), (= *Tephroclybe anthracophila* (Lasch) P. D. Orton, 1969);



- under *Quercus rotundifolia* & in Cedars of Azrou & Ifrane, C.
- Lyophyllum gambosum* (Fr.) Singer, (1943), (= *Calocybe gambosa* (Fr.) Donk, 1962); under *Quercus rotundifolia* of Azrou, EC.
- Lyophyllum immundum* (Berk.) Kühner, (1938), sensu NCL (1960), non Berkeley, (= *Lyophyllum eustygium* (Cooke) Cléménçon, 1982); under *Quercus rotundifolia* of Azrou, CNS.
- Lyophyllum infumatum* (Bres.) Kühner, (1938); under the Cedars of Azrou, CNS.
- Lyophyllum onychinum* (Fr.) Kühner & Romagn., (1953), (Fr.) Kühner & Romagn. ex Contu, (2009), (= *Rugosomyces onychinus* (Fr.) Raithelh., 1979); under *Cedrus* & *Pinus pinaster* of Azrou, Ifrane, Tamrabt & Trik Adjir, CNS.
- Lyophyllum persicolor* (Fr.) Malençon & Bertault, (1975), (Fr.) Contu, (2000), (= *Rugosomyces persicolor* (Fr.) Bon, 1991); in the lower forest of Azrou, CNS.
- Lyophyllum semitale* (Fr.) Kühner, (1938), (Fr.) Kühner ex Kalamees, (1994); under the cedars pure or mixed of *Quercus rotundifolia* in the region of Azrou & Ifrane, C.
- Lyophyllum sphaerosporum* Kühner & Romagn., (1953), (= *Tephroclype anthracophila* (Lasch) P. D. Orton, 1969). C. R. Soc. Sci. Nat. & Phy. Malç., 1959. LNS, SNS & CNS.
- Lyophyllum striaepileum* (Fr.) Kühner & Romagn., (1953), (Fr.) Kühner & Romagn. ex Kalamees, (1994); under *Quercus rotundifolia* of Azrou & Tioumliline, CNS.
- Lyophyllum ozes* (Fr.) Singer, (1943), (= *Collybia ozes* (Fr.) Sacc., 1887); in Cedars of Boujirhirh & Moudmam, CNS.
- Family: Marasmiaceae**
- Baeospora myosura* (Fr.) Singer, (1938); on cones of *Cedrus* and *Pinus pinaster* of Ifrane, Melcaïd & Tamrabt, CNS.
- Crinipellis stipitaria* (Fr.) Pat., (1889), (= *Crinipellis scabella* (Alb. & Schwein.) Murrill, 1915); on the strains of grasses in the wasteland of Azrou, CNS.
- Macrocyttidia cucumis* f. *minor* Joss., (1933); under *Quercus rotundifolia* of Azrou, CNS.
- Marasmius androsaceus* (L.) Fr., (1838), (= *Gymnopus androsaceus* (L.) J.L. Mata & R.H. Petersen, 2004); in Azrou. Bull. Soc. Sci. Nat. Malç., 1937.
- \**Marasmius brassicolens* Romagn., (1952), (= *Gymnopus brassicolens* (Romagn.) Antonín & Noordel, 1997); on needles of *Quercus rotundifolia*, in forest of Jaaba. Malç. & Bert., 1965, 68.
- Marasmius bresadolae* Kühner & Romagn., (1953), (= *Gymnopus erythropus* (Pers.) Antonín, Halling & Noordel., 1997); on strains of *Cytisus battandieri* & *Quercus rotundifolia* in Azrou, Jaaba & Moudmam, CNS.
- Marasmius buxi* Fr., (1872); on dead leaves of *Buxus balearica* in the region of Boulemane & Guigou, CNS.
- Marasmius dryophilus* var. *lanipes* Malençon & Bertault, (1975); under *Quercus rotundifolia* in the forest of Kissarite, CNS.
- Marasmius epiphyllodes* (Rea) Sacc. & Trotter, (1925); on dead leaves of *Hedera helix* in the forest of Azrou, CNS.
- Marasmius epiphyllus* (Pers.) Fr., (1838); on *Quercus faginea*, *Acer monspessulanum* & *Viburnum lantana* at Tamrabt, Bou Ikhittene, the forest of Azrou and Jaaba, CNS.
- Marasmius fuscopurpureus* (Pers.) Fr., (1838), (= *Gymnopus fuscopurpureus* (Pers.) Antonín, Halling & Noordel. 1997), sensu auct., (= *Gymnopus fagiphilus* (Velen.) Antonín, Halling & Noordel., 1997); under *Quercus rotundifolia* of Azrou, CNS.
- Marasmius globularis* (Weinm.) Fr., (1872), (= *Marasmius nymnei* Berk. & Broome, 1860); under the Cedars & the *Quercus rotundifolia* in the forest mixed of Ifrane, C.
- Marasmius hariolorum* (Bull.) Qué., (1888), (= *Gymnopus hariolorum* (Bull.) Antonín, Halling & Noordel., 1997), sensu Rea, (1922), (= *Gymnopus confluens* (Pers.) Antonín, Halling & Noordel., 1997); LNS, SNS & CNS.
- Marasmius hudsoni* (Pers.) Fr., (1838); on dead leaves of Houx, LNS & CNS.
- Marasmius hybridus* Kühner & Romagn., (1952); under *Quercus rotundifolia* of Azrou, CNS.
- Marasmius littoralis* Qué. & Le Bret., (1880), (= *Marasmius anomalus* Peck 1872). C. R. Soc. Sci. Nat. & Phy. Malç., 1959. LNS, SNS & CNS.
- Marasmius obscurus* Berk., (1856); under *Quercus rotundifolia* at Tizi Tanout-ou-Fillal, CNS.
- Marasmius oreades* (Bolton) Fr., (1838); in the pastures, LNS & C.
- Marasmius prasiosmus* (Fr.) Fr., (1838), sensu auct., (= *Mycetinis quereus* (Britzelm.) Antonín & Noordel., 2008); among the dead leaves of *Quercus rotundifolia* at Jbel Hebri & Mermel, CNS.
- Marasmius splachnoides* (Hornem.) Fr., (1838), sensu auct., (= *Gymnopus quercophilus* (Pouzar) Antonín & Noordel., 2008); on dead leaves of *Arbutus unedo*,



*Myrtus communis* in Ifrane, Azrou, Tanout-ou-Fillal & Trik Adjir, CNS.

*Marasmius terginus* (Fr.) Sacc. (1887), (= *Gymnopus terginus* (Fr.) Antonín & Noordel., 1997). C. R. Soc. Sci. Nat. & Phy. Malç., 1959.

*Marasmius terginus* f. *benoisti* (Boud.); in the oaks of Azrou, Bou Ikhitene, Ifrane, Michlifene & Moudmam, CNS.

#### Family: Mycenaceae

*Mycena acicula* (Schaeff.) P. Kumm., (1871); among the cedar needles or leaves of *Quercus faginea* & *Q. rotundifolia* in the region of Azrou, Ifrane, Jaaba & Toumliline.

*Mycena adonis* (Bull.) Gray, (1821); among the needles and the twigs rotting in the cedar forest of Ras el Ma, CNS.

*Mycena adonis* var. *adonis* (Bull.) Gray, (1821); in a grassy cedar mixed with *Quercus rotundifolia* & *Crataegus oxyacantha* at the Col of Taïliloute, CNS.

*Mycena adonis* var. *rubella* C. R. Soc. Sci. Nat. & Phy. Malç., 1959.

*Mycena alba* (Bres.) Kühner, (1938). C. R. Soc. Sci. Nat. & Phy. Malç. & Bert., 1967.

*Mycena albidolilacea* Kühner & Maire, (1938). C. R. Soc. Sci. Nat. & Phy. Malç. & Bert., 1967.

*Mycena alcalina* (Fr.) P. Kumm., (1871), sensu Rea, (1922), (= *Mycena maculata* P. Karst., 1890) sensu auct. p.p., (= *Mycena stipata* Maas Geest. & Schwöbel, 1987), sensu auct. p.p. syn., (= *Mycena silvae-nigrae* Maas Geest. & Schwöbel, 1987); in the Cedars of the Col of Taïliloute, CNS

*Mycena algeriensis* Maire, (1938); on *Quercus rotundifolia* in the forest of Azrou, CNS.

*Mycena amicta* (Fr.) Quél., (1872); under *Pinus pinaster* at Tamrabt, CNS.

*Mycena atromarginata* (Lasch) P. Kumm., (1871); near a dead cedar at Ras-es-Seheb, CNS. C. R. Soc. Sci. Nat. & Phy. Malç., 1959.

*Mycena avenacea* var. *roseofusca* Kühner, (1938), (= *Mycena olivaceomarginata* (Masse) Masee, 1893); in Cedars of Moudmam, CNS.

*Mycena capillaris* (Schumach.) P. Kumm., (1871), P. Karst., (1905); under *Quercus rotundifolia* in the forest of Azrou, CNS.

*Mycena chlorantha* f. *bispora* Malençon, (1975); on a trunk split of cedar at Ras-es-Seheb, CNS.

*Mycena citrinomarginata* Gillet, (1876); in the Cedars of Bou-Jihrite, Moudmam & Ras-es-Seheb, CNS.

*Mycena corticola* (Schumach.) Quél., (1872), (Pers.) Gray, (1821), sensu Masee, (= *Insiticia roseoflava* (G.

Stev.) E. Horak, 1971), sensu NCL (1960), Kühner (1938), auct. mult., (= *Mycena meliigena* (Berk. & Cooke) Sacc., 1887), sensu auct. brit., (= *Mycena biemalis* (Osbeck) Quél., 1872); on living trunks of many trees with leaves or at needles of Azrou, Ifrane & Jaaba, CNS. Malç & Bert., 1970

*Mycena elegans* (Pers.) P. Kumm., (1871), sensu A, H, Smith., (2005), (= *Mycena flavescens* Velen., 1920), sensu Rea (1922), A.A. Pearson, auct. mult., (= *Mycena aurantiomarginata* (Fr.) Quél., 1872); under *Quercus rotundifolia* of Azrou, C

*Mycena epipterygia* var. *atroviscosa* Malençon, (1989); at the base of cedar trunks & de *Pinus pinaster*, in the region of Azrou & Moudmam, CNS.

*Mycena flavipes* Quél., (1873), (= *Mycena renati* Quél., 1886); on *Quercus faginea* in the region of Azrou, Ifrane, Kissarite & Moudmam, CNS.

*Mycena flavoalba* (Fr.) Quél., (1872); under *Quercus rotundifolia* at Col of Tanout-ou-Fillal, CNS.

*Mycena flavoalba* var. *floridula* (Fr.) ss. Jossierand, (1930); the hollow of a dead cedar at Ras-es-Seheb, CNS.

*Mycena floridula* Quél., (1877), (= *Mycena adonis* var. *adonis* (Bull.) Gray, 1821). Soc. Sci. Nat. & Phy. Malç., 1959.

*Mycena flos-nivium* Kühner, (1952); on rotting trunk of cedar at the Plate of Seheb, CNS.

*Mycena galericulata* (Scop.) Gray, (1821); on the *Quercus* of Azrou & forest of Jaaba, CNS.

*Mycena galericulata* var. *calopus* (Fr.) P. Karst., (1879), (= *Mycena inclinata* (Fr.) Quél., 1872)

*Mycena galopoda* . in Azrou. Bull. Soc. Sci. Nat. Malç., 1937

*Mycena galopus* (Pers.) P. Kumm., (1871); in the oaks, LNS & CNS.

*Mycena galopus* var. *nigra* Rea, (1922). LNS, SNS & CNS.

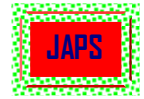
*Mycena inclinata* (Fr.) Quél., (1872); on oak trunks in the forest of Azrou & of Jaaba, CNS.

*Mycena iodiolens* S. Lundell, (1932), (= *Mycena filopes* (Bull.) P. Kumm., 1871). C. R. Soc. Sci. Nat. & Phy. Malç., 1959

*Mycena iodiolens* var. *olivascens* C. R. Soc. Sci. Nat. & Phy. Malç., 1959.

*Mycena lactea* (Pers.) P. Kumm., (1871), (= *Hemimycena lactea* (Pers.) Singer, 1938); on needles of *Pinus pinaster* in the Massif of Tamrabt, CNS.

*Mycena maculata* P. Karst., (1889), Cleland, (1934), (= *Mycena austromaculata* Grgur. & T.W. May, 1997); in the forest of Jaaba on *Quercus faginea*.



*Mycena niveipes* (Murrill) Murrill, (1916); on *Quercus faginea* & *Quercus rotundifolia* in the forest of Jaaba, Azrou & Ifrane, CNS.

*Mycena niveipes* f. *defibulata*, in *Quercus rotundifolia* at Toumliline & Kissarite, CNS

*Mycena olida* Bres., (1887); on fallen trunks of oaks of Azrou & Ifrane, CNS.

*Mycena pelianthina* (Fr.) Quél., (1872); under *Quercus faginea* & *Q. rotundifolia* in the forest of Jaaba & Toumliline, CNS.

*Mycena pura* (Pers.) P. Kumm., (1871); in Azrou. Bull. Soc. Sci. Nat. Malç., 1937.

*Mycena pura* f. *alba* (Gillet) Arnolds, (1982); in the *Quercetum ilicis* of Plate of the Ajellab, CNS.

*Mycena polygramma* (Bull.) Gray, (1821); on *Quercus faginea* & *Q. rotundifolia* in the region of Azrou, Col of Zad & forest of Jaaba, CNS.

*Mycena quercus-ilicis* Kühner, (1938); on *Quercus rotundifolia* of Boulemane & Tamjoute, CNS. C. R. Soc. Sci. Nat. & Phy. Malç, 1960

\*\**Mycena renati* Quél., (1886); under *Quercus faginea* Lamk. : Azrou, 1600.

*Mycena sanguinolenta* (Alb. & Schwein.) P. Kumm., (1871); in Azrou. Bull. Soc. Sci. Nat. Malç, 1937.

*Mycena scabripes* (Murrill) Murrill, (1916), (= *Hydropus scabripes* (Murrill) Singer, 1962); on twigs in the forest mixed with Cedrus & *Quercus rotundifolia*, above Azrou, CNS.

*Mycena scabripes* f. *safranopes* ad. Int.; among the dead leaves of *Quercus rotundifolia*, in the Massif of Tamrabt, CNS.

*Mycena seynesiella* Malençon, (1975); on *Abies pinsapo*, *Cedrus libanotica* ssp. *atlantica* in Azrou, Aïn-Kahla, Kissarite, Ras-es-Seheb & Trik-Adjir, CNS.

*Mycena seynesii* Quél., (1877); in the pine forests of Tamjoute & Tamrabt, CNS.

*Mycena smithiana* Kühner, (1938); on dead leaves de *Quercus rotundifolia* of Azrou & Ifrane, CNS.

*Mycena speirea* (Fr.) Gillet, (1874); on rotten trunk of *Quercus rotundifolia* in the forest of Azrou, CNS.

*Mycena stylobates* (Pers.) P. Kumm., (1871); on *Quercus rotundifolia* & *Rubus ulmifolius* in the forest of Azrou, CNS.

*Mycena viscosa* Secr. ex Maire, (1910), (= *Mycena epipterygia* (Scop.) Gray, 1821). C. R. Soc. Sci. Nat. & Phy. Malç., 1959.

*Mycena vulgaris* (Pers.) P. Kumm., (1871); in the Cedars, LNS & CNS.

*Mycena zephyrus* (Fr.) P. Kumm., (1871); in the Cedars mixed & under the oaks pures of Ifrane, Azrou,

Moudmam, Jbel Hebri, Sidi-M-Guild & Kissarite, CNS.

*Panellus melleo-ochraceus* Malençon, (1975); on fallen branches of *Quercus faginea* in the forest of Azrou, CNS.

*Panellus mitis* (Pers.) Singer, (1936); on fallen branches of Cedars, LNS & CNS.

*Panellus stipticus* (Bull.) P. Karst., (1879); on *Quercus rotundifolia* at Bekrite, CNS.

*Panellus violaceofulvus* (Batsch) Singer, (1936); on fallen branches of Cedars, LNS & CNS.

*Xeromphalina campanella* (Batsch) Maire, (1934); on the dead trunks of cedar, LNS & CNS.

*Xeromphalina fellea* Maire & Malençon, (1945); on twigs of cedar wood in the forest of Azrou, CNS.

*Xeromphalina fulvobulbillosa* (R. E. Fr.) Kühner & Romagn., (1937), (= *Xeromphalina canticinalis* (With.) Kühner & Maire, 1934); in Azrou. Bull. Soc. Sci. Nat. Malç., 1937

#### Family: Phelloriniaceae

\*341 *Phellorinia delestrei* (Durieu & Mont.) E. Fisch., (1899), (= *Phellorinia herculeana* (Pers.) Kreisel, 1961); under Cedars of Ifrane Soc. Sci. Nat. & Phy. 1944, 1945 n° 6. Werner, 1937.

#### Family: Physalacriaceae

*Armillaria mellea* (Vahl) P. Kumm., (1871), sensu Masee, (= *Armillaria novae-zelandiae* (G. Stev.) Boesew., 1977), (= *Armillaria limonea* (G. Stev.) Boesew., 1977), under the pine forests and oak LNS, R.

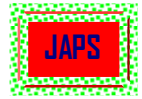
*Flammulina velutipes* (Curtis) Singer, (1951); at the base of the bushes of *Cytisus battandieri* in the region of Azrou, Seheb, Toumliline, Jbel Hebri, Ich Ouaharrouq & Michlifene, C.

*Oudemansiella badia* (Lucand) M. M. Moser, (1955), (= *Xerula pudens* (Pers.) Singer, 1951); under *Cedrus* & *Quercus rotundifolia* of Azrou, Ich-Ouaharrouq & Toumliline.

*Oudemansiella radicata* (Relhan) Singer, (1936), (= *Xerula radicata* (Relhan) Dörfelt, 1975), sensu Horak, (= *Oudemansiella japonica* var. *colensoi* (Dörfelt) Pegler & T.W.K. Young, 1987); under the oaks & the Cedars of Azrou, Ifrane & Moudmam, C.

#### Family: Pleurotaceae

*Hobenuelbelia atrocaerulea* (Fr.) Singer, (1951); on *Quercus rotundifolia* of Ifrane, CNS.



*Hohenbuehelia geogenia* (DC.) Singer, (1951), (= *Hohenbuehelia petaloides* (Bull.) Schulzer, 1866), sensu Rea, (1922), (= *Hohenbuehelia tremula* (Schaeff.) Thorn & G.L. Barron, 1986); under *Cedrus* & *Quercus rotundifolia* of Azrou & Ifrane, C.

*Pleurotus dryinus* (Pers.) P. Kumm., (1871); on *Quercus rotundifolia* at Azrou, C.

*Pleurotus dryinus* (Pers.) P. Kumm. var. *luteosaturatus* Malençon, (1975); on *Cedrus libanotica* ssp. *atlantica* in the region of Azrou, CNS.

*Pleurotus eryngii* var. *caespitosoterrestres* Henn., (1901); on strains of *Eryngium campestre* at Moudmam, CNS.

*Pleurotus eryngii* (DC.) Quél., (1874); in Azrou. Bull. Soc. Sci. Nat. Malç., 1937.

*Pleurotus eryngii* var. *ferulae* (Lanzi) Sacc., (1878); on strains of large Umbellifer at Azrou & Ifrane, C.

*Pleurotus eryngii* var. *fuscus* (Battara) Maire, (1937); on strains of *Eryngium campestre* at Azrou, Ifrane & the forest of Jaaba, C.

*Pleurotus lignatilis* (Pers.) P. Kumm., (1871), (= *Ossicaulis lignatilis* (Pers.) Redhead & Ginns, 1985); on *Cedrus* at Azrou, C.

*Pleurotus kavinii* Pilát, (1931), (= *Resupinatus kavinii* (Pilát) M. M. Moser, 1978). C. R. Soc. Sci. Nat. & Phy. Malç., 1959. LNS, SNS & CNS.

*Pleurotus ostreatus* (Jacq.) P. Kumm., (1871), sensu Cooke, (= *Pleurotus cornucopiae* (Paulet) Rolland, 1910), sensu Stevenson, (= *Pleurotus australis* Sacc., 1891), (= *Pleurotus purpureo-olivaceus* (G. Stev.) Segedin, P.K. Buchanan & J.P. Wilkie, 1995); on *Quercus rotundifolia* in the forest of Azrou, C.

*Pleurotus ostreatus* f. *salignus* (Pers.) Pilát, (1935), (= *Pleurotus ostreatus* (Jacq.) P. Kumm., 1871); on trunks of ivy (*Hedera helix*) at Aïn Kherzouza, CNS.

#### Family: Pluteaceae

*Pluteus cervinus* (Schaeff.) P. Kumm., (1871); on *Cedrus* in Azrou, CNS.

*Pluteus chrysophaeus* (Schaeff.) Quél., (1872), sensu auct., (= *Pluteus phlebophorus* (Ditmar) P. Kumm., 1871); on *Quercus faginea* & *Q. rotundifolia* in the forest of Azrou and Plate of Seheb, CNS.

*Pluteus cinereofuscus* J. E. Lange, (1917); on dead twigs of *Fraxinus angustifolia*, or on land among the twigs and dead leaves, in cool at the edge of waters in Azrou & Ifrane, CNS.

*Pluteus leoninus* (Schaeff.) P. Kumm., (1871), sensu Rea, (1922), Cooke, (= *Pluteus aurantiorugosus* (Trog) Sacc., 1896); on *Quercus faginea* in the forest of Azrou, CNS.

*Pluteus lutescens* (Fr.) Bres., (1929), (= *Pluteus romellii* (Britzelm.) Sacc., 1895); on woody debris in mixed forest of *Cedrus* & *Quercus faginea* in the forest of Azrou, CNS.

*Pluteus satur* Kühner & Romagn., (1956). C. R. Soc. Sci. Nat. et Phy. Malç. & Bert., 1967. LNS, SNS & CNS.

*Pluteus semibulbosus* (Lasch) Quél., (1875), sensu NCL, (1960), Brit., (= *Pluteus inquilinus* Romagn., 1979); on *Quercus rotundifolia*, LNS & CNS.

*Volvaria speciosa* (Fr.) P. Kumm., (1871), (= *Volvariella gloiocephala* (DC.) Boekhout & Enderle, 1986); in wasteland and roadway ditches in Ifrane, C.

#### Family: Psathyrellaceae

*Lacrymaria velutina* (Pers.) Konrad & Maubl., (1925). Bull. Soc. Sci. Nat. Phy. Malç., 1937. In Azrou.

\*\**Psathyrella appendiculata* (Bull.) Maire & Werner, (1938), (= *Psathyrella candolleana* (Fr.) Maire, 1913); base of trunks of *Quercus*: Azrou & Ifrane, 1650 m.

*Psathyrella atomata* (Fr.) Quél., (1872), sensu auct., (= *Psathyrella potteri* A.H. Sm., 1972). C. R. Soc. Sci. Nat. Phy. Malç., 1959.

*Psathyrella bipellis* (Quél.) A. H. Sm., (1946); on the old strains of *Quercus rotundifolia* à Azrou, CNS.

\*\* *Psathyrella candolleana* (Fr.) Maire, (1913); on the earth and plant debris: Azrou, 1600 m.

*Psathyrella casca* (Fr.) Konrad & Maubl., (1949). C.R. Soc. Sci. Nat. Phy. Malç., 1959.

\**Psathyrella excelsa* (Malençon) Fouchier, (1995); on splinters of wood and twigs of *Quercus* in the forest of Azrou, CNS.

*Psathyrella fragilissima* (Kauffman) A. H. Sm., (1972), (= *Coprinosis marcescibilis* (Britzelm.) Örstadius & E. Larss., 2008); in the grass of a forest track of *Quercetum ilicis* in Azrou, CNS.

*Psathyrella fusca* (Schumach.) A. Pearson, (1952). C. R. Soc. Sci. Nat. Phy. Malç., 1959.

*Psathyrella gracilis* (Fr.) Quél., (1872); in grassy places in Azrou, CNS.

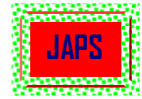
*Psathyrella jerdonii* (Berk. & Broome) Konrad & Maubl., (1949), (= *Psathyrella caput-medusae* (Fr.) Konrad & Maubl., 1949). C. R. Soc. Sci. Nat. Phy. Malç., 1959.

\*\**Psathyrella helobia* (Kalchbr.) Maire, (1937); on plant debris: Azrou.

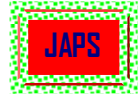
\*\**Psathyrella hydrophila* (Bull.) Maire, (1937), (= *Psathyrella piluliformis* (Bull.) P.D. Orton, 1969); Azrou, 1600 m.

*Psathyrella langei* (Malençon) Contu, (2007); on rotting trunks of *Quercus rotundifolia*, at Michliffene, CNS.



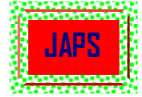


- Psathyrella longicauda* P. Karst., (1891); in a coppice of *Quercus rotundifolia* in the forest of Azrou, CNS.
- Psathyrella marcescibilis* var. *elata* (Malençon & Bertault) Citérin & Bon, (1995); of strains, twigs or woody debris of *Quercus rotundifolia* in cool or sheltered of the forest of Azrou, CNS.
- Psathyrella prona* (Fr.) Gillet, (1878); in the lawns of Azrou, CNS.
- Psathyrella pseudogracilis* (Romagn.) M.M Moser, (1967); on woody debris in the forest of Azrou, CNS.
- Psathyrella radicellata* Malençon. ex Pacioni, (1988); a the lower limit of *Quercetum ilicis* of Azrou & on the burnt areas, CNS.
- Psathyrella spadicea* (Schaeff.) Singer, (1951); at the base of living trunks of conifers and hardwoods in the region of Azrou & Moudmam, CNS.
- Psathyrella subatrata* (Batsch) Gillet, (1878), (= *Parasola conopilus* (Fr.) Örstadius & E. Larss., 2008). C. R. Soc. Sci. Nat. Phy. Malç., 1959.
- Psathyrella velutina* (Pers.) Singer, (1951), (= *Lacrymaria lacrymabunda* (Bull.) Pat., 1887); under *Quercus faginea* accompanied with *Acer monspessulanum* & *Ilex aquifolium*, in forest of Azrou, C.
- Family: Strophariaceae**
- Agrocybe aegerita* (V. Brig.) Singer, (1951), (= *Agrocybe cylindracea* (DC: Fr.) Maire, 1938); on declining trees, LNS, C.
- Agrocybe dura* (Bolton) Singer, (1936), sensu NCL (1960), auct. mult., (= *Agrocybe molesta* (Lasch) Singer, 1978); in turf, pastures, gardens and crops of Azrou, CM, NR.
- Agrocybe pediades* sensu Horak, (Fr.) Fayod, (1889), (= *Agrocybe splendoides* Migliozi & Coccia, 1993); in pastures of Azrou, Toumliline, Seheb & Jbel Hebri, C.
- Agrocybe praecox* (Pers.) Fayod, (1889), sensu Horak, (= *Leucoagaricus leucothites* (Vittad.) Wasser, 1977).
- \*\**Agrocybe semiorbicularis* (Bull.) Fayod, (1889), (= *Agrocybe pediades* (Fr.) Fayod, 1889); pastures and scrub; Azrou, 1600 m.
- Agrocybe vernacti* (Fr.) Singer, (1936), sensu auct. brit., (= *Agrocybe pediades* (Fr.) Fayod, 1889); in the pastures in Azrou, CNS.
- Dryophila adiposa* (Batsch) Quél., (1886), (= *Pholiota adiposa* (Batsch) P. Kumm., 1871); at the base of dead trunks of *Cedrus* in the region of Azrou, Melcaïd, Mermel, Kissarite & Sidi-M-Guild, C.
- Dryophila lenta* (Pers.) Quél., (1886), (= *Pholiota lenta* (Pers.) Singer, 1951); under *Pinus pinaster* at Tamrabt, C.
- Dryophila ochroflavida* Malençon, (1970), (= *Meotomycetes dissimulans* (Berk. & Broome) Vizzini, 2008); in the *Quercetum ilicis* of Toumliline, CNS.
- Dryophila olivacea* Maire & Malençon, (1970), (= *Meotomycetes dissimulans* (Berk. & Broome) Vizzini, 2008); among the plant debris decomposed at Toumliline, CNS.
- Dryophila spumosa* (Fr.) Quél., (1886), (= *Pholiota spumosa* (Fr.) Singer, 1951); on fallen trunks of *Quercus rotundifolia*, LNS et C.
- Galera badipes* (Pers.) Ricken, (1915), (= *Galerina badipes* (Pers.) Kühner, 1935); under *Cedrus* & *Pinus pinaster* at Ifrane, Azrou & Tamrabt, CNS.
- Galera hypnorum* (Batsch) Quél., (1872), (Schrank) P. Kumm., (1871), (= *Galerina hypnorum* (Schrank) Kühner, 1935); in damp moss at Azrou and Kissarite, CNS.
- Galera graminea* Velen., (1922), (= *Galerina graminea* (Velen.) Kühner, 1935). Malç. Soc. Sci. Nat. & Phy. n°2, 1959
- Galera laevis* var. *glabrata* Malençon & Bertault, (1970); among the damp moss near Oued Toumliline, CNS.
- Galera marginata* (Batsch ) P. Kumm., (1871); (= *Galerina marginata* (Batsch) Kühner, 1935); under *Cedrus* of Azrou, Ifrane, Kissarite, Col of Zad & Moudmam and also under *Pinus pinaster* at Tamrabt, C
- Galera sideroides* (Bull.) Kühner & Romagn., (1935), (= *Galerina sideroides* (Bull.) Kühner, 1935); under *Pinus pinaster* at Tamrabt, CNS.
- Geophila aeruginosa* (curtis) Quél., (1886), (= *Clitocybe odora* (Bull.) P. Kumm., 1871); under *Pinus pinaster* at Tamrabt, Inof.
- Geophila atrorufa* (Schaeffer) Quélet. LNS, SNS & CNS.
- Geophila coronilla* (Bull.) Quél., (1886), (= *Stropharia coronilla* (Bull.) Quél., 1872); at the edges of forests of Azrou, Boulemane, Ifrane, Jbel Hebri & Moudmam, Inof.
- Geophila coprophila* var. *subcoprophila* (Britzelm.) Kühner & Romagn., (1953), (= *Psilocybe subcoprophila* (Britzelm.) Sacc., 1895); on the excrement of Cattle, LNS, CNS.
- Geophila cyanescens* Kühner & Romagn., (1953); under *Cedrus*, *Quercus rotundifolia* & *Rubus ulmifolius* at Azrou, Ifrane, Boujirhirh, Ras el Ma, Michlifene, Moudmam & Melcaïd, V.

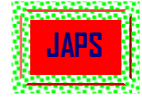


- Geophila fascicularis* (Huds.) Quél., (1886), (= *Hypholoma fasciculare* var. *fasciculare* (Huds.) P. Kumm., 1871)
- Geophila merdaria* (Fr.) Quél., (1886), (= *Psilocybe merdaria* (Fr.) Ricken, 1912); on dung of various animals in the forest of Ifrane & Toumliline, CNS.
- Geophila semiglobata* (Batsch) Quél., (1886), (= *Stropharia semiglobata* (Batsch) Quél., 1872); on excrement of various animals in Azrou, S.
- Geophila squamosa* (Pers.) Quél., (1886), (= *Leratiomyces squamosus* var. *squamosus* (Pers.) Bridge & Spooner, 2008); in the forest of oaks in Ifrane, Kissarite & Moudmam, C.
- \**Gymnopilus carbonarius* (Fr.) Murrill, (1912), (= *Pholiota highlandensis* (Peck) A.H. Sm. & Hesler, 1968); Azrou, 1600 m.
- Gymnopilus sapineus* (Fr.) Murrill, (1912); on *Cedrus* of Ifrane, NC.
- Gymnopilus penetrans* (Fr.) Murrill, (1912); on *Cedrus* & *Pinus pinaster* of Azrou, Ifrane, Boujirhirh, Moudmam & Tamrabt, CNS.
- Gymnopilus sapineus* (Fr.) Murrill, (1912); on *Cedrus* of Ifrane, NC.
- Gymnopilus spectabilis* (Fr.) Singer, (1951), (= *Phaeolepiota aurea* (Matt.) Maire, 1928), sensu A. H. Smith (1949), auct., (= *Gymnopilus junonius* (Fr.) P. D. Orton, 1960); on bursts of cedar, LNS & CM.
- Hebeloma anthracophilum* Maire, (1910); on old coal-seater in the forest of Jaaba, R.
- Hebeloma cistophilum* Maire, (1928); among the Cistus and scrub forests of Jaaba, Tamrabt & Azrou, CI.
- Hebeloma crustuliniforme* (Bull.) Quél., (1872); in the oak of the forest of Jaaba, Ifrane, Azrou & Moudmam, CM.
- Hebeloma eburneum* Malençon, (1970); always near the cedars of Azrou, Ifrane and Jbel Hebri, R.
- Hebeloma fastibile* (Pers.) P. Kumm., (1871), sensu NCL, (1960), Lange, (1938), (= *Hebeloma sordidum* Maire, 1914); in the cedar forest of Ras es Seheb, S.
- Hebeloma longicaudum* (Pers.) P. Kumm., (1871), sensu NCL (1960), auct., (= *Hebeloma leucosarx* P. D. Orton, 1960), sensu auct. p.p., (= *Hebeloma incarnatum* A. H. Sm., 1984), sensu Kühner & Romagnesi, 1953), (= *Hebeloma circinans* (Quél.) Sacc., 1891); in clearer oak forests of Azrou & Ifrane, CM.
- Hebeloma mesophaeum* (Pers.) Quél., (1872); in forests of oak, cedar or pine pure mixed of Azrou, NR.
- Hebeloma pallidum* Malençon, (1970), P. Kumm., (1871); in mixed forests (*Cedrus*, *Pinus*, *Quercus*) of Azrou, Ifrane, & Col of Tanout-ou-Fillal, CI.
- Hebeloma sarcophyllum* (Peck) Sacc., (1887); under the oaks in the forest of Jaaba & Azrou, CI.
- Hebeloma sinapizans* (Fr.) Sacc., (1887), sensu Lange, (= *Hebeloma laterinum* (Batsch) Vesterh, 2005); under the pure oaks, Pines, cedars, Holly & Cytises in Azrou, Moudmam, Tamrabt, Col of Tanout-ou-Fillal & Col of Zad, T.
- Hebeloma sordidum* Maire, (1914); under the Cedars & *Quercus rotundifolia* of Jbel Hebri & Azrou, CM.
- Hebeloma strophosum* (Fr.) Sacc., (1887), (= *Hebeloma mesophaeum* (Pers.) Quél., 1872); in the woods of pines and the cedars, in Tamrabt & Col of Taililoute, R.
- Hebeloma versipelle* (Fr.) Gillet, (1876), sensu NCL (1960); in the bushes of *Quercetum ilicis* pure or mixed of cedars in Azrou & Col of Tanout-ou-Fillal, NR.
- Hymenogaster luteus* Vittad., (1831), (Massee) G. Cunn., (1934), (= *Protoglossum luteum* Massee, 1891); under *Quercus rotundifolia*. Soc. Sci. Nat. & Phy. of Morocco, Malç., 1967.
- Hypholoma hydrophilum* (Bull.) Quél., (1872), (= *Psathyrella piluliformis* (Bull.) P.D. Orton, 1969), Malç. Soc. Sci. Nat. & Phy., 1959.
- Hypholoma fasciculare* (Huds.) P. Kumm., (1871), sensu Massee, (= *Hypholoma acutum* (Cooke) E. Horak, 1971). Bull. Soc. Sci. Nat. Malç., 1937. Azrou.
- Pachylepyrium funariophilum* (M. M. Moser) Singer, (1965); in Cedars pure or mixed in the region of Azrou, Ifrane & Moudmeme, CSV.
- Pholiota marginata* (Batsch) Quél., (1872), (= *Galerina marginata* (Batsch) Kühner, 1935), sensu Massee, (= *Galerina patagonica* Singer, 1953). Bull. Soc. Sci. Nat. Malç., 1937. Azrou.
- Pholiotina blattaria* (Fr.) Fayod, (1889), (= *Conocybe blattaria* (Fr.) Kühner, 1935). Soc. Sci. Nat. & Phy. Malç., 1959.
- Pholiotina funariophila* M. M. Moser, (1953), M. M. Moser, (1954), (= *Pachylepyrium funariophilum* (M.M. Moser) Singer, 1965). Soc. Sci. Nat. & Phy. Malç., 1959.
- Pholiotina teneroides* Singer, (1936), (J. E. Lange) Singer, (1969), (= *Conocybe blattaria* (Fr.) Kühner, 1935). Soc. Sci. Nat. & Phy. Malç., 1959.
- Pholiotina togularis* (Bull.) Fayod, (1889), (= *Conocybe togularis* (Bull.) Kühner, 1935). Soc. Sci. Nat. & Phy. Malç., 1959.

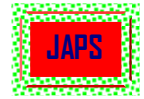
- Flammula carbonaria* Speg., (1912), (Fr.) P. Kumm., (1871), (= *Pholiota highlandensis* (Peck) A.H. Sm. & Hesler, 1968). Bull. Soc. Sci. Nat. Malç., 1937. Azrou
- Flammula lenta* (Pers.) P. Kumm., (1871), (= *Pholiota lenta* (Pers.) Singer, 1951). Soc. Sci. Nat. et Phy. Malç., 1960. On strain of *Quercus faginea*.
- Flammula sapinae* (Fr.) P. Kumm., (1871), (= *Gymnopilus sapineus* (Fr.) Murrill, 1912). Bull. Soc. Sci. Nat. Malç., 1937. Azrou.
- \*\**Psilocybe sarcocephala* (Fr.) Gillet, (1878), (= *Psathyrella spadicea* (Schaeff.) Singer, 1951); under *Quercus faginea* Lamk. : Azrou, 1600 m.
- Stropharia coranilla* W. Saunders & W. G. Sm. Bull. Soc. Sci. Nat. Malç., 1937. Azrou.
- Stropharia merdaria* (Fr.) Quél., (1872), (= *Psilocybe merdaria* (Fr.) Ricken, 1912), sensu Rea, (1922), (= *Psilocybe moelleri* Guzmán, 1978). Soc. Sci. Nat. & Phy. Malç., 1959.
- Stropharia semiglobata* (Batsch) Quél., (1872). Soc. Sci. Nat. & Phy. Malç., 1959
- Stropharia squamosa* (Pers.) Quél., (1873), (= *Leratiomyces squamosus* var. *squamosus* (Pers.) Bridge & Spooner, 2008). Bull. Soc. Sci. Nat. Malç., 1937. Azrou.
- Family: Tricholomataceae**
- Clitocybe adirondackensis* (Peck) Sacc., (1887). C. R. Soc. Sci. Nat. & Phy. Malç., 1959.
- \**Clitocybe aggregata* (Schaeff.) Gillet, (1874), (= *Lyophyllum decastes* (Fr.) Singer, 1951); SNS, Azrou & Ifrane, Malç., 1957.
- Clitocybe alexandri* (Gillet) Gillet, (1884); under *Quercus faginea*, *Q. rotundifolia* & *Cedrus* in the forest of Jaaba, Azrou & Ifrane, C.
- Clitocybe amoenolens* Malençon, (1975); in the limestone cedar pure or mixed of *Quercus rotundifolia* & *Ilex aquifolium* in the region of Azrou & Ifrane, CI.
- Clitocybe brumalis* (Fr.) Quél., (1872); under *Cedrus*, LNS, C.
- Clitocybe candicans* (Pers.) P. Kumm., (1871); under the *Quercus* of Azrou, V.
- Clitocybe cerussata* (Fr.) P. Kumm., (1871), (= *Clitocybe phyllophila* (Pers.) P. Kumm., 1871). Bull. Soc. Sci. Nat. Malç., 1937. in Azrou.
- Clitocybe dealbata* (Sowerby) Gillet., (1874), sensu auct. mult., NCL, (1960), (= *Clitocybe rivulosa* (Pers.) P. Kumm., 1871); in the pastures, LNS, T.
- Clitocybe diatretra* (Fr.) P. Kumm., (1871); under *Cedrus* in Azrou & under *Pinus pinaster* at Tamrabt, CNS.
- Clitocybe ericetorum* (Pers.) Fr., (1872), (= *Lichenomphalia umbellifera* (L.) Redhead, Lutzoni, Moncalvo & Vilgalys, 2002); in the pastures of Azrou, S.
- Clitocybe expallens* (Pers.) P. Kumm., (1871), (= *Pseudoclitocybe expallens* (Pers.) M. M. Moser, 1967); in Azrou. Bull. Soc. Sci. Nat. Malç., 1937.
- Clitocybe fallaciosa* Speg., (1891). C. R. Soc. Sci. Nat. & Phy. Malç., 1959. LNS, SNS & CNS.
- Clitocybe flaccida* (Sowerby) P. Kumm., (1871), (= *Lepista flaccida* (Sowerby) Pat., 1887), sensu Bresadola, (= *Clitocybe bresadolana* Singer, 1937); under *Acacia*, *Cedrus*, *Pinus* & *Quercus* of Azrou, Ifrane, Ain-Kahla & Tamrabt. S.
- Clitocybe flaccida* var. *fibrillosa* Malençon, (1975); under *Cedrus* of Ras-es-Seheb, CNS.
- Clitocybe geotropa* (Bull.) Quél., (1872), (= *Infundibulicybe geotropa* (Bull.) Harmaja, 2003); under *Quercus rotundifolia* of Azrou, C.
- Clitocybe gibba* (Pers.) P. Kumm., (1871); under the oaks but also in mixed forests of cedars and pines, LNS, C.
- Clitocybe hydrogramma* (Bull.) P. Kumm., (1871), sensu auct. mult., NCL, (1960), (= *Clitocybe phaeophthalma* (Pers.) Kuyper, 1981); under the cedars and oaks of Azrou, Ifrane, Kissarite & Seheb, NC.
- Clitocybe hydrogramma* var. *wernerii* Malençon, (1942); under *Quercus faginea* in the forest of Jaaba, CNS.
- \*\**Clitocybe infumata* (Bers.) Kaufm., (1927), (= *Lyophyllum infumatum* (Bres.) Kühner, 1938); under the *Cedrus* : Azrou, 1700 m.
- Clitocybe infundibuliformis* (Schaeff.) Quél., (1872), sensu NCL (1960), auct., (= *Clitocybe gibba* (Pers.) P. Kumm., 1871), sensu auct., (= *Lepista flaccida* (Sowerby) Pat., 1887); in Azrou. Bull. Soc. Sci. Nat. Malç., 1937.
- Clitocybe inornata* (Sowerby) Gillet, (1874); under *Pinus pinaster* of Tamrabt, *Cedrus* of Ifrane, Kissarite & under *Quercus rotundifolia* of Azrou CM, NR.
- Clitocybe inversa* (Scop.) Quél., (1872), (= *Lepista flaccida* (Sowerby) Pat., 1887). C. R. Soc. Sci. Nat. & Phy. Malç., 1959. LNS, SNS & CNS.
- \*\**Clitocybe mellea* (Vahl) Ricken, (1915), (= *Armillaria mellea* (Vahl) P. Kumm., 1871); on the trunks of *Quercus*, *Pinus*: forest of Jaaba, 1500 m ; Azrou, 1600 m.
- Clitocybe nebularis* (Batsch) P. Kumm., (1871); in the oaks of Azrou and the forest of Jaaba, C.
- Clitocybe odora* (Bull.) P. Kumm., (1871); under the oaks & Cedars of Azrou, Ifrane, Col of Tanout-ou-Fillal & Col of Zad, CNS.



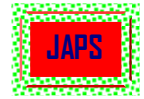
- Clitocybe olearia* (DC.) Maire, (1933), (= *Omphalotus olearius* (DC.) Singer, 1946); on *Quercus rotundifolia*, LNS, CNS. C. R. Soc. Sci. Nat. & Phy. Malç. & Bert. 1967.
- Clitocybe phyllophila* (Pers.) P. Kumm., (1871); among the pile of leaves & under the bushes in oak forests, LNS, V.
- Clitocybe pseudoclusilis* (Joss. & Konrad) P. D. Orton, (1960), (= *Gamundia striatula* (Kühner) Raithelh., 1983); in the oaks of Azrou, CNS.
- Clitocybe rivulosa* (Pers.) P. Kumm., (1871); in the pastures of Ifrane & Timhadit, V.
- Clitocybe senilis* (Fr.) Gillet, (1874), sensu Rea, (1922), (= *Rhodocybe popinalis* (Fr.) Singer, 1951); under *Quercus rotundifolia* near Azrou, CNS.
- Clitocybe umbilicata* (Schaeff.) P. Kumm., (1871), sensu NCL, (1960), Ricken, (= *Clitocybe subspadicea* (J. E. Lange) Bon & Chevassut, 1973); under the oaks of Azrou & forest of Jaaba, CNS.
- Clitocybe vermicularis* (Fr.) Quél., (1872); in the Cedars of Melcaïd, C.
- Clitocybula lenta* (Maire) Malençon & Bertault, (1975), (= *Leucoinocybe lenta* (Maire) Singer, 1943); on strains of *Quercus suber* & *Q. rotundifolia* at Imouzzere-du-Kanndar, CNS.
- Collybia acervata* (Fr.) P. Kumm., (1871), (= *Connopus acervatus* (Fr.) K.W. Hughes, Mather & R.H. Petersen, 2010), sensu auct., (= *Gymnopus erythropus* (Pers.) Antonín, Halling & Noordel., 1997); in Azrou. Bull. Soc. Sci. Nat. Malç., 1937.
- Collybia butyracea* (Bull.) P. Kumm., (1871), (= *Rhodocollybia butyracea* (Bull.) Lennox, 1979); on the Cedars of Ifrane, CNS.
- Collybia cirrhata* (Schumach.) Quél., (1872), sensu Cooke, (= *Collybia cookei* (Bres.) J. D. Arnold 1935); in Azrou. Bull. Soc. Sci. Nat., 1937.
- Collybia clusilis* (Fr.) Sacc., (1887), sensu auct., (= *Pseudoomphalina pachyphylla* (Fr.) Knudsen, 1992), sensu Kühner & Romagnesi, (= *Gamundia striatula* (Kühner) Raithelh., 1983). C. R. Soc. Sci. Nat. & Phy. Malç., 1959. LNS, SNS & CNS.
- Collybia conigena* (Pers.) P. Kumm., (1871); on cones of *Cedrus*, LNS & CNS. C. R. Soc. Sci. Nat. & Phy. Malç., 1959.
- Collybia cookei* (Bres.) J. D. Arnold, (1935); on the old decaying Agarics, in the forest of Jâaba & Azrou, CNS.
- Collybia dryophila* (Bull.) P. Kumm., (1871), (= *Gymnopus dryophilus* (Bull.) Murrill, 1916); in Azrou. Bull. Soc. Sci. Nat. Malç., 1937.
- Collybia lenta* (Maire) Maire, (1933), (= *Leucoinocybe lenta* (Maire) Singer, 1943); on *Quercus rotundifolia*, LNS & CNS. C. R. Soc. Sci. Nat. & Phy. Malç. & Bert., 1967.
- Collybia longipes* P. Kumm., (1872), (= *Xerula pudens* (Pers.) Singer, 1953). C. R. Soc. Sci. Nat. et Phy. Malç., 1959. LNS, SNS & CNS.
- Collybia rosella* Velen., (1920). C. R. Soc. Sci. Nat. et Phy. Malç., 1959. LNS, SNS & CNS.
- Collybia tuberosa* (Bull.) P. Kumm., (1871). LNS, SNS & CNS.
- Collybia velutipes* (Curtis) P. Kumm., (1871), (= *Flammulina velutipes* var. *velutipes* (Curtis) Singer, 1951); in Azrou. Bull. Soc. Sci. Nat. Malç., 1937.
- Delicatula crispula* (Quél.) Pat. 1900, (Quél.) Kühner & Romagn., (1953), (= *Hemimycena hirsuta* (Tode) Singer, 1986); on dead branches and rotting leaves of *Rubus ulmifolius* at around of Azrou, CNS.
- Delicatula gracilis* (Quél.) Kühner & Romagn., (1953), (= *Hemimycena gracilis* (Quél.) Singer, 1943); in Ras-es-Seheb, SNS, CNS.
- Delicatula ignobilis* (Joss.) Kühn. & Romagn., (1953); on *Quercus rotundifolia* in the forest of Azrou, CNS.
- Delicatula persimilis* Malençon, (1975); on the needles of cedar in Ras-es-Seheb, CNS.
- Delicatula pithyophila* Malençon, (1975), (= *Hemimycena pithyophila* Malençon ex A. Ortega & Esteve-Rav., 1996); on the needles of *Cedrus* above Azrou, CNS.
- Lepista amara* (Alb. & Schwein.) Maire, (1930), sensu auct., (= *Leucopaxillus gentianens* (Quél.) Kotl., 1966); in Azrou. Bull. Soc. Sci. Nat. Malç., 1937
- \**Lepista barbara* Maire, (1926); forest of Jâaba. Malç., 1965.
- glaucocana* (Bres.) Sing., (1951); into the brush and woodland of Tagounit-du-Seheb, EC.
- Lepista luscina* (Fr.) Singer, (1951), sensu auct., (= *Lepista panaeolus* (Fr.) P. Karst., 1879); under *Quercus*, *Cedrus* & *Pinus* of Moudmeme, Toulmliline & Azrou, C.
- Lepista nuda* (Bull.) Cooke, (1871); under *Quercus*, *Cedrus* & *Pinus*, LNS, EC.
- Lepista inversa* (Scop.) Pat., (1887), (= *Lepista flaccida* (Sowerby) Pat., 1887); in Azrou. Bull. Soc. Sci. Nat. Malç., 1937
- Lepista panaeolus* (Fr.) P. Karst., (1879). C. R. Soc. Sci. Nat. & Phy. Malç., 1959.
- Lepista paradoxa* (Costantin & L. M. Dufour) Maire, (1926), (= *Leucopaxillus paradoxus* (Costantin & L. M. Dufour) Boursier [as '*paradoxa*'] 1925), in Azrou.. Bull. Soc. Sci. Nat. Malç., 1937



- Lepista saeva* (Fr.) P. D. Orton, (1960), (= *Lepista personata* (Fr.) Cooke, 1871); under *Quercetum ilicis* of Azrou & Trik Adjir, C.
- Lepista sordida* (Schumach.) Singer, (1951); in the pastures of Azrou & Ifrane, C.
- Leucopaxillus albissimus* var. *barbarus* (Maire) Singer & A. H. Smith., (1943); in the *Quercetum ilicis* of Azrou, Ifrane & Jaaba, CNS.
- Leucopaxillus albissimus* var. *lentus* (H. Post) Singer & A. H. Sm., (1943); under *Quercus lusitanica* mixed with *Sorbus Aria* & *Acer monspessulanum* at Ain Kherzouza, CNS.
- Leucopaxillus albissimus* var. *paradoxus* (Costantin & L.M. Dufour) Singer & A.H. Sm., (1943), (= *Leucopaxillus paradoxus* (Costantin & L.M. Dufour) Boursier, 1925); in the *Quercetum ilicis* of Azrou, CNS.
- Leucopaxillus albissimus* var. *subhirtus* (Peck) Singer & A. H. Sm., (1943); under *Quercus lusitanica* at Ain Kherzouza, CNS.
- Leucopaxillus amarus* (Alb. & Schwein.) Kühner, (1928), sensu NCL (1960), (= *Leucopaxillus gentianeus* (Quél.) Kotl., 1966); under hardwoods than under conifers in Ifrane, Azrou, Ich Ouaharrouq, Jbel Hebri, Aguelmane & Tamrabt, NC.
- Leucopaxillus barbarus* (Maire) Kühner, (1926). C. R. Soc. Sci. Nat. & Phy. Malç., 1959. LNS, SNS & CNS.
- Leucopaxillus lentus* f. *olympianus* C. R. Soc. Sci. Nat. & Phy. Malç., 1959. LNS, SNS & CNS.
- Leucopaxillus lepistoides* (Maire) Singer, (1939); at the Plate of Timhadite in the high pastures, C. Malç & Bert., 1970.
- Leucopaxillus paradoxus* (Costantin & L.M. Dufour) Boursier, (1925). SNS, forest of Azrou. Malç., 1937.
- Melanolenca arcuata* (Bull.) Singer, (1935), sensu Singer (1935), Phillips (1981), (= *Melanolenca poliolenca* (Fr.) Kühner & Maire, 1934); under *Cedrus* of Azrou, Bou-Ikhittene, Ich Ouaharrouq & Ifrane, CNS.
- Melanolenca bataillei* Malençon, (1975); in the Cedars of Boujirhirh, Melcaïd, Moudmam & Râs-el-Mâ, CNS.
- Melanolenca brevipes* (Bull.) Pat., (1900), sensu NCL, (1960), (= *Melanolenca langei* (Boekhout) Bon, 1990). C. R. Soc. Sci. Nat. & Phy. Malç. & Bert., (1967). LNS, SNS & CNS.
- Melanolenca cognata* (Fr.) Konrad & Maubl., (1927); under *Cedrus* of Azrou, Bou Ikhittene & Seheb.
- Melanolenca electropoda* Maire & Malençon, (1975); in the Cedars pures or mixed of Azrou, Ifrane, Kissarite & Tamrabt, CNS.
- Melanolenca excissa* (Fr.) Singer, (1935); in the Cedars of Azrou, C. Malç. & Bert., 1970.
- Melanolenca grammopodia* (Bull.) Murrill, (1914); in the clearings of Azrou, C. Malç. & Bert., 1970.
- Melanolenca humilis* (Pers.) Pat., (1900). C. R. Soc. Sci. Nat. & Phy. Malç., 1959.
- Melanolenca melaleuca* (Pers.) Murrill, (1911), sensu NCL (1960), auct. mult., (= *Melanolenca poliolenca* (Fr.) Kühner & Maire, 1934); under *Quercus*, *Cedrus* & *Pinus* LNS, CM.
- \*\**Melanolenca oreina* (Fr.) Kühner & Maire, (1934); under the *Cedrus*, 1630-1700 m.
- Melanolenca vulgaris* (Pat.) Pat., (1897), (= *Melanolenca poliolenca* (Fr.) Kühner & Maire, 1934), sensu auct., (= *Melanolenca melaleuca* (Pers.) Murrill, 1911); in Azrou. Bull. Soc. Sci. Nat. Malç., 1937.
- Myxomphalia maura* (Fr.) H.E. Bigelow, (1959), (Fr.) Hora, (1960); under *Cedrus*, *Pinus*, *Quercus* in the forest of Jaaba, Azrou, Michlifene & Moudmam, C.
- Omphalia clusilis* (Fr.) Kühner & Romagn., (1953), sensu Kühner & Romagnesi, (= *Gamundia striatula* (Kühner) Raithelh., 1983). C. R. Soc. Sci. Nat. et Phy. Malç., 1959. LNS, SNS & CNS.
- Omphalia cyathiformis* (Bull.) Quél., (1872), (= *Pseudoclitocybe cyathiformis* (Bull.) Singer, 1956) C. R. Soc. Soci. Nat. & Phy. Malç. & Bert., 1967.
- Omphalia maura* (Fr.) Gillet, (1876), (= *Myxomphalia maura* (Fr.) Hora, 1960). Bull. Soc. Soci. Nat. Malç., 1937
- Omphalia obbata* (Fr.) Kühner & Romagn., (1953), (= *Pseudoclitocybe obbata* (Fr.) Singer, 1962). C. R. Soc. Nat. & Phy. Malç. & Bert., 1960
- Omphalia umbilicata* (Schaeff.) Quél., (1875), (= *Clitocybe umbilicata* (Schaeff.) P. Kumm., 1871). Bull. Soc. Soci. Nat. Malç., 1937. in Azrou.
- \**Omphalina abiegna* (Berk. & Broome) Singer, (1951), (= *Chrysomphalina grossula* (Pers.) Norvell, Redhead & Ammirati, 1994). C. R. Soc. Soci. Nat. & Phy. Malç., 1959.
- Omphalina oniscus* (Fr.) Quél., (1888), (= *Arrbenia onisca* (Fr.) Redhead, Lutzoni, Moncalvo & Vilgalys, 2002); in the region of Azrou, SNS & CNS.
- Omphalina rosella* (M.M. Moser) M.M. Moser, (1953), (M. M. Moser) M. M. Moser ex Redhead, Ammirati & Norvell, (1996), (= *Contumyces rosellus* (M.M. Moser) Redhead, Moncalvo, Vilgalys & Lutzoni, 2002); in wastelands & lawns of Azrou, CNS.
- Phyllotopsis nidulans* (Pers.) Singer, (1936); on *Quercus faginea* in the forest of Azrou, CNS.



- Pseudoclitocybe cyathiformis* (Bull.) Singer, (1956); under *Abies pinsapo*, *Cedrus* & *Pinus pinaster* of Ifrane & Col of Taïliloute, CNS.
- Pseudoclitocybe expallens* (Pers.) M. M. Moser, (1967); dans les chênaies claires, mêlées ou non de cèdres in the clear oak, mixed or not of cedars at Azrou, Ifrane, Kissarite & forest of Jaaba, CNS.
- Pseudoclitocybe obbata* (Fr.) Singer, (1962); under the oaks of the forest of Jaaba, CNS.
- Resupinatus physaroides* Malençon, (1975); on the trunks of *Juniperus oxycedrus* in the forests of Dayet Hachlaf, Ifrane, Tamrabt & Trik Adjir, CNS.
- Rhodopaxillus nitellinus* (Fr.) Singer, (1936), (= *Rhodocybe nitellina* (Fr.) Singer, 1947). C. R. Soc. Sci. Nat. & Phy. Malç., 1959.
- \*\**Rhodopaxillus truncatus* var. *mauretanicus* Maire, (1926); under the *Cedrus*: Azrou, 1700 m.
- Ripartites albidocarnatus* (Britzelm.) Konrad & Maubl., (1946); in Cedars of Melcaïd, Ras-es-Seheb & Ich Ouaharrouq, CNS.
- Ripartites tricholoma* (Alb. & Schwein.) P. Karst., (1879); in the Cedars in the region of Ifrane-Azrou, CNS
- Tricholoma acerbum* (Bull.) Vent., (1872); in the forest of Azrou, CM.
- Tricholoma aggregatum* (Schaeff.) Ricken, (1915), (= *Lyophyllum decastes* (Fr.) Singer, 1951); in Azrou. Bull. Soc. Sci. Nat. Malç., 1937.
- Tricholoma albobrunneum* (Pers.) P. Kumm., (1871), sensu auct. brit., (= *Tricholoma ustaloides* Romagn., 1954), (= *Tricholoma ustale* (Fr.) P. Kumm., 1871), sensu Ricken, (1915), (= *Tricholoma batschii* Gulden, 1999); under *Pinus pinaster* at Tamrabt, CM.
- Tricholoma atosquamosum* Sacc., (1887), sensu Lange [Fl. Ag. Dan. 1: 53 & pl. 22D (1935)]; under *Quercus faginea* & in Cedars pures or mixed with *Quercus rotundifolia* in Ifrane, Azrou, Mermel, Moudmam, Kissarite & Taïliloute, C.
- \*\**Tricholoma atosquamosum* var. *Atosquamosum* Sacc., (1887); under the *Cedrus*: Azrou, 1700 m.
- \*\**Tricholoma atosquamosum* var. *squarrulosum* (Bres.) Mort. Chr. & Noordel., (1999); under the *Cedrus*: Ifrane, 1630 m.
- Tricholoma aurantium* (Schaeff.) Ricken, (1914); under *Pinus pinaster* at Tamrabt, CM.
- Tricholoma caligatum* (Viv.) Ricken, (1914); under the Cedars of Azrou, Boujirhirh, Ifrane, Ich Ouaharrouq, Taïliloute & Seheb, C.
- Tricholoma cedretorum* (Bon) A. Riva, (2000); special at Cedar of Azrou, Ain-Leuh, Ifrane, Tarmharite, CI.
- Tricholoma cingulatum* (Almfelt) Jacobashch, (1890); pine forest of Tamrabt, C.
- \*\* *Tricholoma equestre* (L.) P. Kumm., (1871); under the *Cedrus* : Ifrane, 1700 m ; Azrou, 1700 m.
- Tricholoma flavovirens* (Pers.) S. Lundell, (1942); under *Cedrus* of Azrou, Ifrane, Boujirhirh, Mermel, Kissarite & Sidi M-Guild, C.
- Tricholoma focale* (Fr.) Ricken, (1914), sensu Riva p. p. (1998), Galli (1999), (= *Tricholoma robustum* (Alb. & Schwein.) Ricken, 1915); in the limestone pine forest of Tamrabt, CM.
- Tricholoma georgii* (L.) Quél., (1872), (= *Calocybe gambosa* (Fr.) Donk, 1962). C. R. Soc. Sci. Nat. & Phy. Malç., 1959. LNS, SNS & CNS.
- \*\**Tricholoma lignatile* (Fr.) Maire; on *Cedrus* : Azrou, 1700 m.
- Tricholoma onychinum* (Fr.) Gillet., (1874), (= *Rugosomyces onychinus* (Fr.) Raithelh., 1979). Bull. Soc. Sci. Nat., 1937. in Azrou
- Tricholoma orirubens* Quél., (1872). C. R. Soc. Sci. Nat. & Phy. Malç., 1959.
- Tricholoma pessundatum* (Fr.) Quél., (1872); in the Cedars of Ain-Leuh, Ain Kahla, Azrou & Tamrabt, CM.
- Tricholoma portentosum* (Fr.) Quél., (1873); in mixed forest near Moudmam, C.
- Tricholoma saponaceum* (Fr.) P. Kumm., (1871); under *Quercus rotundifolia* & *Cedrus* of Azrou, Ifrane & Kissarite. R.
- Tricholoma saponaceum* var. *lavedanum* Rolland, (1891). C. R. Soc. Sci. Nat. & Phy. Malç., 1959. LNS, SNS & CNS.
- Tricholoma saponaceum* f. *nympharum* Malençon, (1975); under the Cedars at Ras el Ma, CNS.
- Tricholoma scalpturatum* (Fr.) Quél., (1872); under *Quercus rotundifolia* of Tanout-ou-Fillal, Azrou, Ifrane & Taïliloute, C.
- Tricholoma scalpturatum* var. *argyraceum* (Bull.) Kühner & Romagn., (1953); sous *Quercus rotundifolia* d'Azrou, CNS.
- Tricholoma sulphureum* (Bull.) P. Kumm., (1871); under *Quercus rotundifolia* of Azrou, Ifrane & Jaaba, IM.
- Tricholoma squarrulosum* Bres., (1892), (= *Tricholoma atosquamosum* var. *squarrulosum* (Bres.) Mort. Chr. & Noordel., 1999); in Azrou. Bull. Soc. Sci. Nat. Malç., 1937.
- Tricholoma sulphurescens* Bres., (1905); under *Pinus pinaster* intermingled with a few *Quercus rotundifolia* au Massif de Tamrabt.
- Tricholoma terreum* (Schaeff.) P. Kumm., (1871); under *Cedrus*, *Pinus pinaster* & *Quercus rotundifolia* at Azrou, Jbel Hebri, Ifrane, Kissarite & Tamrabt, EC.

**Order: Auriculariales****Family: Auriculariaceae**

\**Auricularia mesenterica* (Dicks.) Pers., (1822); on *Quercus rotundifolia*, Michlifene Pilât, Malç., 1936, 53.

\**Bourdotia cinerella* Boudort & Galzin, (1920), (= *Basidiodendron caesiocinereum* (Höhn. & Litsch.) Luck-Allen, 1963); on death *Cedrus*, mixed forest around Moudmam (Azrou) Malç., 1952.

\**Bourdotia deminuta* (Bourdot) Bourdot & Galzin, (1928), on *Pinus pinaster*, Tamrabt (between Sefrou & Ifrane) Malç., 1952.

\**Bourdotia galzinii* (Bres.) Trotter, (1913), (= *Exidiopsis galzinii* (Bres.) Killerm, 1928); on *Quercus rotundifolia*, Michlifene Malç., 1953.

\**Eichleriella spinulosa* (Berk. & M. A. Curtis) Burt, (1915), sensu auct. brit., (= *Eichleriella deglubens* (Berk. & Broome) Lloyd., 1913); on *Cytisus battandieri*, forest of jaaba, Malç., 1952.

*Exidia pithya* Fr., (1822); on *Cedrus* Bull. Soc. Sci. Nat. & Phy. Malç. & Bert., 1967

\**Exidia thuretiana* (Lév.) Fr., (1874); on *Ilex aquifolium*, at Jbel Hebri, on branches of Holly and *Ilex aquifolium* (Michlifene) & Boujirhirh; on Holly, Moudmam, Malç. & Bert., 1951, 52, 53, 63, 64.

\**Sebacina calcea* (Pers.) Bres., (1898), (= *Exidiopsis calcea* (Pers.) K. Wells., 1962); under dead branch of cedar, station of Ifrane; on *Quercus rotundifolia*, forest of Azrou and on dead branch of cedar, Azrou; on *Quercus rotundifolia*, Tamrabt between Sefrou & Ifrane; on *Quercus rotundifolia*, Michlifene, Ifrane. Malç., 1951, 52, 53, 67.

*Sebacina fugacissima* Bourdot & Galzin, (1909), (= *Microsebacina fugacissima* (Bourdot & Galzin) P. Roberts, 1993); on *Ilex aquifolium*. Bull. Soc. Sci. Nat. & Phy. Malç. & Bert., 1967.

*Sebacina laccata* Bourdot & Galzin, (1923), (= *Exidiopsis effusa* Bref., 1888); on *Quercus rotundifolia*. Bull. Soc. Sci. Nat. & Phy. Malç. & Bert., 1967.

**Order: Boletales****Family: Boletaceae**

*Boletus aestivalis* (Paulet) Fr., (1838), (= *Boletus reticulatus* Schaeff., 1774); under *Quercus rotundifolia* and until Cedars of Azrou, CNS.

*Boletus crocipodius* Letell., (1838), (= *Lecinum crocipodium* (Letell.) Bresinsky & Manfr. Binder, 2003). C. R. Soc. Sci. Nat. & Phy. Malç. & Bert., 1967. LNS, SNS & CNS.

*Boletus edulis* Bull., (1782), Rostk., (1838); in oaks in the region of Azrou, CNS.

*Boletus erythropus* Pers., (1796), sensu auct. mult., (= *Boletus luridiformis* var. *luridiformis* Rostk., 1844), sensu Persoon [Syn. Met. Fung.: 513 (1801)], (= *Boletus queletii* Schulzer, 1885); cork oak forest on scrub, El Khatouat ; SNS, Ifrane, Werner, Malç., 1937, 68.

*Boletus erythropus* var. *cedretorum* Maire, (1916); under *Cedrus* at Boujirhirh, Ich Ouaharrouq, Ifrane, Jbel Hebri, Melcaïd, Moudmam, Ras el Ma, Ras-es-Seheb & Sidi M guild, CNS.

*Boletus fragrans* Vittad., (1835); under *Quercus suber* in Azrou, CNS.

*Boletus impolitus* Fr., (1838); under *Quercus rotundifolia* of Ifrane & Melcaïd, CNS.

*Boletus leptopus* C. R. Soc. Sci. Nat. et Phy. Malç. & Bert. 1960. under the *Pinus pinaster* at Timhadit & Ifrane, CNS.

*Boletus luridus* Sowerby, Schaeff., (1774), Viv., (1834); under *Quercus rotundifolia* in Azrou & Tanout-ou Fillal, CNS.

*Boletus rhodoxanthus* (Krombh.) Kallenb., (1925); under *Quercus suber* at Azrou, CNS.

*Boletus satanas* Lenz., (1831), Rostk., (1838); under *Quercus faginea* in Azrou, CNS.

*Lecinum crocipodium* (Letell.) Watling, (1961); in the woods of *Quercus suber* at Azrou & Tanout-ou-Fillal, CNS

*Tubiporus appendiculatus* (Fr.) Maire, (1937) var. *pallescens*. Soc. Sci. Nat. & Phy. Malç., 1959.

*Tubiporus edulis* (Bull.) P. Karst., (1881). Soc. Sci. Nat. & Phy. Malç. & Bert., 1959.

*Tubiporus edulis* var. *reticulatus* Soc. Sci. Nat. & Phy. Malç. & Bert., 1959.

\*\**Tubiporus erythropus* (Pers.) Maire, (1937), (= *Boletus erythropus* var. *erythropus* Pers., 1796); under the *Cedrus* :Ifrane, 1700 m

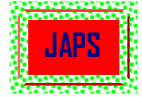
*Tubiporus fragrans* (Vittad.) Ricken, (1918), (= *Boletus fragrans* Vittad., 1835). Soc. Sci. Nat. & Phy. Malç., 1959.

\*\**Tubiporus luridus* (Schaeff.) P. Karst., (1881), (= *Boletus luridus* var. *luridus* Schaeff., 1774); under *Quercus suber* L. & *Q. rotundifolia* L. : Azrou, 1600 m *Tubiporus purpureus* (Fr. & Hök) Maire, (1937). Soc. Sci. Nat. & Phy. Malç., 1959.

*Tubiporus satanas* (Lenz) Maire, (1937), (= *Boletus satanas* Lenz, 1831). Soc. Sci. Nat. & Phy. Malç., 1959.

*Xerocomus chrysenteron* (Bull.) Quél., (1888), (= *Boletus chrysenteron* Bull., 1791); under the oaks in the forest of Jaaba, Mermel, Moudmam, Ras-es-Seheb, CNS.

*Xerocomus chrysenteron* var. *versicolor* Soc. Sci. Nat. & Phy. Malç., 1959.



*Xerocomus rubellus* (Krombh.) Quél., (1896), (= *Boletus rubellus* Krombh., 1836); under the *Quercus* of Azrou, CNS.

*Xerocomus subtomentosus* (L.) Quél., (1821), (= *Boletus subtomentosus* L., 1753); wood of *Quercus* at Ahermoumou & Azrou, CNS.

*Xerocomus subtomentosus* var. *spadice* Soc. Sci. Nat. & Phy. Malç., 1959.

#### Family: Coniophoraceae

\**Coniophora betulae* P. Karst., (1896), (= *Coniophora arida* (Fr.) P. Karst., 1868); on *Quercus rotundifolia* at Tamrabt. Malç., 1951, 52, 53.

\**Coniophora cerebella* (Pers.) Pers., (1801), (= *Coniophora puteana* (Schumach.) P. Karst., 1868); on dead *Cedrus*, Azrou, Malç., 1950.

\**Coniophora olivacea* Sacc., Masee, (1889), (Fr.) P. Karst., 1879); on wood and dead bark of Cedars at Boujirhirh, near Ifrane, Malç., 1943.

#### Family: Diplocystidiaceae

*Astraeus hygrometricus* (Pers.) Morgan, (1889); in the month of October in Azrou. Malç., 1937.

#### Family: Gomphidiaceae

*Gomphidius viscidus* (L.) Fr., (1838), sensu auct., (= *Chroogomphus rutilus* (Schaeff.) O. K. Mill., 1964). Soc. Sci. Nat. & Phy. Malç., 1959.

#### Family: Gyroporaceae

*Gyroporus castaneus* (Bull.) Quél., (1886); in the clearer oaks of Azrou & Ifrane, CNS.

#### Family: Paxillaceae

*Melanogaster tuberiformis* Corda, (1831); sous *Quercus rotundifolia*. Soc. Sci. Nat. & Phy. Malç., 1959.

\*\**Melanogaster variegatus* (Vittad.) Tul. & C. Tul., (1851); under *Quercus rotundifolia* at Dayet Aaoua, 1700 m.

#### Family: Rhizopogonaceae

*Rhizopogon rubescens* (Tul. & C. Tul.) Tul. & C. Tul., (1845), (= *Rhizopogon roseolus* (Corda) Th. Fr., 1909), sensu auct. brit. p.p., (= *Rhizopogon ochraceorubens* A.H. Sm., 1966).

#### Family: Sclerodermataceae

*Pisolithus tinctorius* (Mont.) E. Fisch., (1900), (Pers.) Coker & Couch., (1928), (= *Pisolithus arbizus* (Scop.) Rauschert, 1959). Soc. Sci. Nat. & Phy. Malç., 1959.

*Scleroderma verrucosum* (Bull.) Pers., (1801); at Azrou in the month of October 1937. Malç., 1937

#### Family: Suillaceae

\**Boletopsis grisea* (Peck) Bondartsev & Singer, (1941); under *Cedrus*, Ifrane & at Ikhitten above Aguelman-n' sidi- Ali Malç., 1960, 65, 67.

*Suillus bellinii* (Inzenga) Watling, (1967); under the pines with double needle, *Pinus pinaster*, *P. halepensis*, *P. pinea* à Tamrabt, CNS.

*Suillus granulatus* (L.) Roussel, (1806); under *Juniperus oxycedrus*, *Pinus halepensis* & *P. pinaster* in Azrou & Tamrabt, CNS.

*Ixocomus granulatus* (L.) Quél., (1888), (= *Suillus granulatus* (L.) Roussel, 1806). Soc. Sci. Nat. & Phy. Malç., 1959.

#### Order: Cantharellales

##### Family: Cantharellaceae

*Cantharellus cibarius* Fr., (1821); in the Oaks, LNS, C. *Cantharellus cibarius* var. *alborufescens* Malençon, (1975), (= *Cantharellus cibarius* Fr., 1821); under *Quercus rotundifolia* in the forest of Azrou, CNS.

#### Order: Corticiales

##### Family: Corticiaceae

*Corticium botryosum* Bres., (1903), (= *Botryobasidium vagum* (Berk. & M.A. Curtis) D.P. Rogers, 1935). Bull. Soc. Sci. Nat. & Phy. Malç. & Bert., 1967. on *Taxus baccata*.

\**Corticium byssinum* P. Karst., (1896), (P. Kart.) Sacc., (1888), (= *Piloderma byssinum* (P. Karst.) Jülich, 1969); on debris very pourri of rusty *Cedrus* by the snowmelt, Seheb (Melcaid). Malç., 1951.

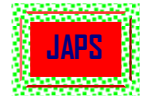
\**Corticium byssinum* var. *xantbella* Bourdot & Galzin, (1928); on dead wood Highly decayed (*Cedrus* ?*Pinus* ?), Tamrabt, region of Sefrou-Ifrane; on burned *Cedrus*, Ich Ouaharrouq, Malç., 1952.

\**Corticium caeruleum* (Lam.) Fr., (1838); dead stems of *Ribes ulmifolius*, *Quercetum* of Azrou. Malç., 1944, 51, 65.

\**Corticium coronilla* Höhn., (1906), (= *Sistotrema coronilla* (Höhn. & Litsch.) Donk ex D.P. Rogers, 1935); under old wood of holly very délignifiés, Boujirhirh, Ifrane, Malç., 1951.

*Corticium flavescens* (Bonord.) G. Winter, (1885), (= *Botryobasidium flavescens* (Bonord.) D.P. Rogers, 1935), Bres., (1905), (= *Athelia teutoburgensis* (Brinkmann) Jülich, 1973), sensu auct., (= *Thanatephorus*





- fusisporus* (J. Schröt.) Hauerslev & P. Roberts, 1996); under holly, Boujirhirh, Ifrane, Malç., 1950.
- \**Corticium pelliculare* var. *merulioides* Bourdot & Galzin, (1928); under decayed Cedar, Ich Ouaharrouq Malç., 1952.
- \**Corticium polygonioides* P. Karst., (1881), (= *Dendrocorticium polygonioides* (P. Karst.) M.J. Larsen & Gilb., 1974); *Quercus rotundifolia*, Azrou & Michlifene, Malç & Bert., 1951, 53, 65, 67.
- \**Corticium serum* (Pers.) Fr., (1874), (= *Hyphodontia sambuci* (Pers.) Erikss., 1958); on *Quercus rotundifolia*; Azrou, Malç., 1952, 67.
- \**Corticium subcoronatum* Höhn. & Litsch., (1907), (= *Botryobasidium subcoronatum* (Höhn. & Litsch.) Donk, 1931); on *Cedrus* at Michlifene, Ifrane; on dead *Cedrus* in the forest of Moudmam, on burned *Cedrus*; Seheb (Melcäd), Azrou, Malç., 1952, 53.
- \**Corticium sulphureum* Pers., (1796), (= *Xenasmatella vaga* (Fr.) Stalpers, 1996); on *Quercus rotundifolia*, death and humid, top of the Toumliline, Azrou, Malç., 1951.
- \**Vuilleminia comedens* (Nees) Maire, (1902); on *Quercus faginea*, forest of jaaba. Bert., 1952, 64, 67.

#### Order: Dacrymycetales

##### Family: Dacrymycetaceae

- Calocera flammea* Wallr., (1833), Fr., (1833), (= *Calocera viscosa* (Pers.) Fr., 1821); in October, Azrou. Bull. Sci. Nat. & Phy. Of Morocco Malç., 1937.
- Calocera palmata* Lloyd, (1920), (Schumach.) Fr., (1838), (= *Calocera cornea* (Batsch) Fr., 1827); in October, Azrou. Bull. Sci. Nat. & Phy. of Morocco Malç., 1937.
- \**Calocera viscosa* (Pers.) Fr., (1821); azrou, 1700 m.
- \**Dacrymyces chrysocomus* (Bull.) Tul., (1853); dead *Cedrus*, Moudmam; dead branch of *Pinus*, Tamsabla (région d'Azrou) Malç., 1952.
- \*\**Dacrymyces deliquescens* (Bull.) Duby, (1830), sensu auct., sensu auct. NZ, (= *Dacrymyces stillatus* Nees, 1816); on rotten wood: Azrou, vers 1600 m.
- \**Dacrymyces punctiformis* Neuhoff, (1934); on *Quercus faginea*, in forest of Jaaba, Malç. & Bert. 1965.

#### Order: Geastrales

##### Family: Geastraceae

- \**Geastrum fimbriatum* Fr., (1829), Tul. & C. Tul., (1842). Mixed forest, at Ifrane; *Pinus pinaster*, in the pine forest of Tamrabt, between Dayat Aaoua and Dayat Hachlaf, Malç., 1951.
- Geastrum lageniforme* Vittad., (1842), Cooke, (1871). Soc. Sci. Nat. & Phy. of Morocco. Malç., 1959.

- Geastrum nanum* var. *nanum* Pers., (1809). Soc. Sci. Nat. & Phy. of Morocco Malç. & Bert., 1967; under *Pinus*.
- Geastrum saccatum* Speg., (1881), Fr., (1829), sensu auct. brit., (= *Geastrum lageniforme* Vittad. [as 'Geaster'], 1842); under *Cedrus* & *Quercus rotundifolia*. Soc. Sci. Nat. & Phy. of Morocco Malç. & Bert., 1967.
- Geastrum rufescens* Pers., (1801), Fr., (1829). Soc. Sci. Nat. & Phy. of Morocco. Malç., 1959.
- Geastrum triplex* Jungh., (1840); in Azrou. Malç., 1937
- Sphaerobolus stellatus* Tode, (1790); on *Nerium oleander* in Azrou. Malç., 1937

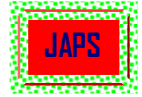
#### Order: Gomphales

##### Family: Gomphaceae

- \**Gautieria trabuti* (Chatin) Pat., (1897); in the Cedars at Ich Ouaharrouq above Azrou & near Ras el Ma (between Azrou & Ifrane). Malç., 1938.
- Gomphus crassipes* (L. M. Dufour) Maire, (1937); in the Cedars of Azrou, Ifrane & Ras el Ma, CNS.
- \*\**Ramaria aurea* (Schaeff.) Quél., (1888); under the *Cedrus* & *Quercus* : Azrou, 1700 m. Maire & Werner, 1937.
- \**Ramaria botrytis* (Pers.) Ricken., (1918). SNS, Ifrane Malç., 1937.
- \**Ramaria cedretorum* (Maire) Malençon, (1958); under *Cedrus*, at the col of Taïlilout, near Ifrane (MA). Malç., 1937
- \*\**Ramaria cedretorum* Maire (sub *Clavariella*) var. *eucedretorum* Werner; under the *Cedrus* : Azrou, 1700 m.
- \*\**Ramaria cedretorum* var. *maroccana* Werner; Ifrane, 1650 m.
- \**Ramaria flavicolor* Malençon, (1958); under the Cedars at Ras es Seheb, Azrou & Ifrane. Malç., 1937, 52, 55, 65, 67
- \*\**Ramaria mairei* Donk, (1933); under the *Cedrus*: Ras el Ma, Ifrane, 1600-1700 m.
- \*\**Ramaria ochraceovirens* (Jungh.) Donk, (1933), (= *Ramaria abietina* (Pers.) Quél., 1888); under the *Cedrus* : Ifrane, 1700 m.
- Ramaria pallida*. Maire, (Schaeff.) Ricken, (1920); in the fforest of Azrou, SNS. Malç., 1937.

##### Family: Hydnaceae

- Hydnum rufescens* Pers., (1800), Schaeff., (1774), sensu auct., (= *Hydnum repandum* L., 1753), (Pers.) Poir., (1808), (= *Abortiporus biennis* (Bull.) Singer, 1944). Bull. Soc. Sci. Nat. & Phy., 1969.
- \**Grandinia brinkmannii* (Bers.) Bourdot & Galzin, (1914), (= *Sistotrema brinkmannii* (Bres.) J. Erikss.,



1948); on old *Ganoderma lucidum* on Cedar at Melcaïd, above Azrou; on old *Ganoderma resinaceum*, on strain of Cedar, at Boujirhirh near Ifrane. Bert., 1951, 64.

**Order: Hymenochaetales**

**Family: Hymenochaetaceae**

\**Hymenochaete rubiginosa* (Dicks.) Lév., (1846); on *Quercus rotundifolia*, forest of Azrou; on *Quercus rotundifolia*, Bou Jhrih near Ifrane. Malç., 1946, 50, 51, 58, 68.

\**Hymenochaete subfuliginosa* Bourdot & Galzin, (1921), (= *Hymenochaete fuliginosa* (Pers.) Lév., 1846); rotten wood of *Cedrus*, above Azrou; on *Cedrus*, Michlifén, Ifrane. Malç., 1939, 52.

\*\**Inonotus hispidus* (Bull.) P. Karst, (1880); on *Quercus faginea* Lamk. : Azrou, 1600 m.

\*\**Inonotus pini* (Brot.) Teixeira, (1992), (= *Porodaedalea pini* (Brot.) Murrill, 1905); on the living trunks of *Cedrus*: cédraies de Kissaria, 1750 m.

\**Phellinus dryadeus* (Pers.) Pat., (1900), (= *Pseudoionotus dryadeus* (Pers.) T. Wagner & M. Fisch., 2001); on *Quercus faginea* Lamk.: forest of Boujirhirh, env. 1700 m.

\**Phellinus friesianus* (Bres.) Bourdot & Galzin, (1928), (= *Fomitiporia punctata* (Fr.) Murrill, 1947); on *Robinia pseudocacia* languishing, Ifrane. Malç., 1953, 58, 65.

\**Xanthochrous pini* (Brot.) Pat., (1897), (= *Porodaedalea pini* (Brot.) Murrill, 1905); on living Cedar, at Moudmam, Malç., 1964, 68.

**Family: Schizoporaceae**

*Irpex pachydon* (Pers.) Bres., (1888), (= *Spongipellis pachydon* (Pers.) Spirin, 2001); on *Quercus rotundifolia*. Bull. Soc. Sci. Nat. & Phy. Malç. & Bert., 1967.

\**Odontia corrugata* (Fr.) Bres., (1897), (= *Hyphodermella corrugata* (Fr.) J. Erikss. & Ryvarden, 1976); on burned wood of *Quercus faginea*, between Ifrane and Azrou. Bert., 1964.

**Order: Hysterangiales**

**Family: Hysterangiaceae**

*Hysterangium cistophilum* (Tul.) Zeller & C. W. Dodge, (1929); under *Cistus*. Soc. Sci. Nat. & Phy. Malç., 1959.

*Hysterangium clathroides* Vittad., (1831); under *Cedrus*. Soc. Sci. Nat. & Phy. Malç., 1959.

**Order: Phallales**

**Family: Phallaceae**

*Colus birudinosus* Cavalier & Séchier, (1835); in Azrou. Bull. Sci. Nat. & Phy. of Morocco. Malç., 1937.

**Order: Polyporales**

**Family: Fomitopsidaceae**

\**Daedalea biennis* (Bull.) Fr., (1821), (= *Abortiporus biennis* (Bull.) Singer, 1944); base of a dead trunk of cedar, in Trik Adjir (MA) Malç., 1967.

\*\**Daedalea quercina* (L.) Pers., (1801); on *Cedrus* & *Quercus* : forest of Jaaba, 1500 m & Ras-el-Ma, 1600 m ; Azrou, 1600 m.

**Family: Ganodermataceae**

\**Ganoderma australe* (Fr.) Pat., (1890); in the hollow of a dead stump of *Quercus rotundifolia*, Azrou, Malç., 1953, 67, 69.

*Ganoderma lucidum* (Curtis) P. Karst., (1881), sensu auct. asiatic., (= *Ganoderma orbiforme* (Fr.) Ryvarden [as 'orbiformum'], 2000); in Azrou. Bull. Soc. Sci. Nat. Malç., 1937.

\**Ganoderma resinaceum* Boud., (1890); on the basis of a trunk death of *Cedrus*, Ich Ouaharrouq.

**Family: Gloeophyllaceae**

\**Gloeophyllum abietinum* (Bull.) P. Karst., (1882); on dead Cedar, Jbel Hebri. Malç. 1951.

\**Gloeophyllum sepiarium* (Wulfen) P. Karst., (1879); on dead trunk of *Cedrus*, Malç., 1947

\**Veluticeps heimii* Malençon, (1939), (= *Campylomyces heimii* (Malençon) Nakasone, 2004); under dead *Quercus rotundifolia*, down the forest of Azrou, Ifrane. Malç., 1939, 41, 45, 50, 52, 67.

**Family: Meruliaceae**

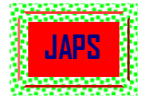
\**Mycoleptodon fimbriatum* (Pers.) Boudrot & Galzin, (1914), (1928); on *Cytisus battandieri*, forest of Jaaba. Malç., 1956, 67.

\**Mycoleptodon ochraceus* (Pers.) Boudrot & Galzin, (1900), (= *Steccherinum ochraceum* (Pers.) Gray, 1821); on *Quercus faginea*, Tichoukt-bou-Tazert between Dayet Jerane & Dayet Hachlaf. Malç., 1956, 67.

**Family: Polyporaceae**

\*\**Coriolus abietinus* (Dicks.) Quél., (1886), (= *Trichaptum abietinum* (Dicks.) Ryvarden, 1972); on *Cedrus* : Ari Hebri, 2000 m, Mair & Werner, 1937.

*Coriolus unicolor* (Bull.) Pat., (1900), (= *Cerrena unicolor* (Bull.) Murrill, 1903); in Azrou. Bull. Soc. Sci. Nat. Malç., 1937.



- Coriolus versicolor* (L.) Quél., (1886), (= *Trametes versicolor* (L.) Lloyd, 1921); in Azrou. Bull. Soc. Sci. Nat. Malç., 1937.
- \**Fomes fomentarius* (L.) J. Kickx f., (1867); on *Acer monspessulanum*, plate of Seheb. Malç., 1951.
- \*\**Fomes marginatus* (Pers.) Fr. var. *pinicola* (Fr.); on *Cedrus*: Azrou, 1700 m.
- \**Geoglossum corticale* Malç. & Bert., on rythidome of *Juniperus oxycedrus*, at Tamrabt, Malç., 1967.
- Geopetalum algidum* C. R. Soc. Sci. Nat. & Phy. Malç. & Bert., 1967. on *Quercus rotundifolia*, LNS & CNS.
- Geopetalum carbonarium* (Alb. & Schwein.) Pat., (1887), (= *Faerberia carbonaria* (Alb. & Schwein.) Pouzar, 1981). C. R. Soc. Sci. Nat. & Phy. Malç., 1959.
- \**Geopetalum geogenium* (DC.) Pat., (1887), (= *Hohenbuehelia petalodes* var. *petalodes* (Bull.) Schulzer, 1866); on the basis of a *Viburnum tinus*, in the forest of Azrou, Malç., 1965.
- \**Hexagonia nitida* Durieu & Mont., (1856); On *Quercus rotundifolia* alive but languishing (Seheb) ; on *Quercus rotundifolia*, au Rhabet el- Behar, Ifrane. Malç., 1936, 47, 52, 54, 55, 58, 67.
- \**Lenzites betulina* f. *flaccida* (Fr.) Bres., (1912), (= *Lenzites betulina* (L.) Fr., 1838); Azrou.
- \**Lenzites sepiaria* (Wulfen) Fr., (1889), (= *Gloeophyllum sepiarium* (Wulfen) P. Karst., 1879); on a dead Cedar, foret of Aïn-Leuh. Malç., 1958, 60, 61, 64.
- \**Leucoporus arcularius* (Batsch.) Quél., (1888), (= *Polyporus arcularius* (Batsch) Fr., 1821); on strains and twigs of *Erica*, *Olea*, *Cistus*, *Quercus* : Bekrit.
- \**Melanopus squamosus* (Huds.) Pat., (1900), (= *Polyporus squamosus* (Huds.) Fr., 1821); on strain of *Cytisus battandieri* Ich Ouaharrouq. Malç., 1950.
- Panus rudis* Fr., (1838), (= *Lentinus strigosus* Fr., 1838); on oak trunks in the forest of Azrou & Michlifene, CNS.
- \**Phaeolus schweinitzii* (Fr.) Pat., (1900); lower part of a dead trunk and burned cedar, Cedar of Ich Ouaharrouq. Bridge, Cooke, Malç. & Bert., 1950, 53, 56.
- Polyporus giganteus* Harz, (Pers.) Fr. 1815, (= *Meripilus giganteus* (Pers.) P. Karst., 1882); in Azrou., Bull. Soc. Sci. Nat., Malç. 1937.
- \**Polyporus griseus* Peck, (1874), (= *Boletopsis grisea* (Peck) Bondartsev & Singer, 1941), Bres., (1912), (= *Trametes cingulata* Berk., 1854); under the Cedars, station of Vegetal Biology, Ifrane. Malç., 1950.
- \*\**Polyporus leucomelas* Lév. (1846), (Pers.) Pers., (1825), (= *Boletopsis leucomelaena* (Pers.) Fayod, 1889); under the *Cedrus*: Ifrane, vers 1700 m ; Azrou, 1700 m. Maire & Werner, 1937.
- \*\**Polyporus officinalis* (Vill.) Fr., (1821), (= *Fomitopsis officinalis* (Vill.) Bondartsev & Singer, 1941); on *Cedrus*: Dayet Hachlef, 1700 m. Maire & Werner, 1937.
- Polyporus rhizophilus* (Pat.), (1894); on roots of living grasses. Bull. Soc. Sci. Nat. et Phy. Malç. & Bert., 1967.
- \*\**Polyporus sulphureus* (Bull.) Fr., (1821), (= *Laetiporus sulphureus* (Bull.) Murrill, 1920); lignicolous (*Quercus faginea* Lamk.). in Azrou, Maire & Werner, 1937.
- \**Poria calcea* Schwein., (1832), Cooke, (1886); (Berk. & Broome) Sacc., (1886), (= *Sidera vulgaris* (Fr.) Miettinen, 2011), (Fr.) Bres., (1908), (= *Antrrodia calceus* (Fr.) Teixeira, 1992); on deaed Cedars, au Michlifene, Ifrane. Malç., 1953.
- \**Poria gilvescens* Bres., (1908), (= *Ceriporiopsis gilvescens* (Bres.) Domański, 1963); on deaed trunk of *Quercus rotundifolia* in the mixed forest above Azrou. Malç., 1950, 52.
- \*\**Trametes gallica* Fr., (1838), (= *Corioloopsis gallica* (Fr.) Ryvarden, 1973); on *Quercus rotundifolia* L. : Ari Hebri ; Azrou, 1900 m.
- \*\**Trametes nitidula* Pat., (1907), (= *Trametes marianna* (Pers.) Ryvarden, 1973); on *Quercus rotundifolia* L. : springs of Oum-er-Rebia, 1250 m.
- \**Trametes trabea* G.H. Otth, (1871), (Pers.) Bers., (1897), (= *Gloeophyllum trabeum* (Pers.) Murrill, 1908); on trunk of *Pinus pinaster*, Pine forest of Tamrabt; on *Cedrus*, Ich Ouaharrouq. Malç., 1952.
- Ungulina annosa* (Fr.) Pat., (1900), (= *Heterobasidion annosum* (Fr.) Bref., 1888). Bull. Soc. Nat. & Phy. Malç. & Bert., 1967
- \**Ungulina marginata* (Pers.) Pat., (1900), (Pers.) Bourdot & Galzin, (1928), (= *Fomitopsis pinicola* (Sw.) P. Karst., 1881); on cedar felled and stored, Azrou. Malç., 1950.
- \**Ungulina officinalis* (Vill.) Pat., (1900), (= *Fomitopsis officinalis* (Vill.) Bondartsev & Singer, 1941); on living Cedar, in the descent of Trik Adjir. Malç., 1967.
- Ungulina quercina* (Schrad.) Pat., (1900), (= *Piptoporus quercinus* (Schrad.) P. Karst., 1881); at Jbel Outka on the underside of a fallen trunk of *Quercus faginea* & *Q. pyrenaica*. J. Bull. Soc. Nat. & Phy. Malç. & Bert., 1967
- \**Ungulina substratosa* Malençon, (1956); on death and burned cedar, at Ich Ouaharrouq, above Azrou. Malç., 1952

**Order: Russulales****Family: Auriscalpiaceae**

*Lentinellus omphalodes* sensu Pearson & Dennis, non Fries, (= *Lentinellus flabelliformis* (Bolton) S. Ito, 1959), (Fr.) P. Karst., (1879), (= *Lentinellus micheneri* (Berk. & M.A. Curtis) Pegler, 1983); in Azrou. Bull. Soc. Sci. Nat. Malç., 1937.

**Family: Hericiaceae**

\**Hericum erinaceus* (Bull.) Pers., (1797); on *Quercus faginea*, Ifrane. Malç., 1953.

**Family: Lachnocladiaceae**

\**Asterostroma ochroleucum* Bers. ex Torrend, (1913), (= *Asterostroma cervicolor* (Berk. & M.A. Curtis) Masee, 1889); on decayed Cedar, Tamrabt between Sefrou & Ifrane Malç., 1952.

\**Asterostromella dura* Bourdot & Galzin, (1920), (= *Dichostereum durum* (Bourdot & Galzin) Pilát, 1926); on *Quercus faginea*, forest of Azrou; *Quercus rotundifolia* death at Michlifene (Ifrane) Malç., 1945.

\**Scytinostroma hemidichophyticum* Pouzar., (1966); on strain of *Quercus faginea* at Boujirhirh, near Ifrane. Boidin, 1951.

\**Vararia pallescens* (Schwein.) D. P. Rogers & H. S. Jacks., (1943), (= *Dichostereum pallescens* (Schwein.) Boidin & Lanq., 1977); on dead wood of *Quercus rotundifolia*, at Michlifene & Boujirhirh, Ifrane. Malç., 1951, 52, 61.

**Family: Peniophoraceae**

\**Gloeocystidium alutaceum* (Schrad. ex J.F. Gmel.) Bourdot & Galzin, (1913), (= *Gloiothele citrina* (Pers.) Ginns & G.W. Freeman, 1994); dead Cedar, Cedars of Ich Ouaharrouq, above Azrou, Malç., 1952, 53.

\**Gloeocystidium luridum* f. *typica* Bourdot & Galzin, (1913); *Quercus rotundifolia* Michliffen; cedar burned, Cedars of Melcaïd, Ich Ouaharrouq & Seheb above Azrou. Malç., 1953.

*Gloeocystidium tenue* (Pat.) Höhn. & Litsch., (1908), (= *Hyphoderma tenue* (Pat.) Donk, 1957); on *Quercus faginea* Bull. Soc. Sci. Nat. & Phy. Malç. & Bert., 1967.

\**Peniophora byssoides* (Pers.) Höhn. & Litsch., (1906), (= *Amphinema byssoides* (Pers.) J. Erikss. 1958); under decayed and burned Cedar, Massif of Tamrabt near Immouzer of Kandar; on decayed *Cedrus*, Tamrabt between Sefrou & Ifrane; on burned *Cedrus*, Ich Ouaharrouq. Malç. & Bert., 1952, 64.

\*\**Peniophora cinerea* (Pers.) Cooke, (187); on dead twigs of *Quercus faginea* Lamk. : Azrou, 1600 m.

\**Peniophora corticalis* (Bull.) Bres., (1897), (= *Peniophora quercina* (Pers.) Cooke, 1879); on *Quercus rotundifolia*, Biological Station of Ifrane. SNS, Pilát, Malç. Bert., 1934, 51, 57, 67.

\**Peniophora glebulosa* (Fr.) Sacc. & P. Syd., (1902), (= *Tubulicrinis glebulosus* (Fr.) Donk, 1956); under *Cedrus*, Michlifene. Malç., 1953.

\**Peniophora gracillima* Ellis & Everh. ex D.P. Rogers & H.S. Jacks., (1943), (= *Tubulicrinis glebulosus* (Fr.) Donk, 1956); on branches of *Pinus*, Tamraba. Malç., 1952.

\**Peniophora greschikii* (Bres.) Bourdot & Galzin, (1928), (= *Fibricium rude* (P. Karst.) Jülich, 1974); on flakes of *Cedrus* Ich Ouaharrouq; on bark (flake) of *Cedrus*, track of Seheb Malç., 1952.

\**Peniophora heterogenea* Bourdot & Galzin., (1913), (= *Scytinostromella heterogenea* (Bourdot & Galzin) Parmasto, 1968); on *Cedrus*, Seheb, Malç., 1952.

\**Peniophora incarnata* (Pers.) P. Karst., (1889); on *Quercus faginea*, forest of Jaaba. Malç. & Bert., 1952, 64, 65.

\**Peniophora incrassata* Malençon, (1952), (= *Chaetoderma incrassatum* (Malençon) Malençon, 1982); on dead wood of *Cedrus* & on subvertical face of a burned *Cedrus* at Ich Ouaharrouq; on *Cedrus*, Tamrabt; burned *Cedrus*, Melcaïd. Bert., 1952, 53, 67.

*Peniophora lycii* (Pers.) Höhn. & Litsch., (1907); on *Nerium oleander* Bull. Soc. Sci. Nat. & Phy. Malç. & Bert., 1967.

*Peniophora mollis* (Bres.) Bourdot & Galzin, (1912), (= *Hypochniciellum molle* (Fr.) Spirin & Zmirit., 2002). Bull. Soc. Sci. Nat. & Phy. Malç. & Bert., 1967; on *Cedrus*.

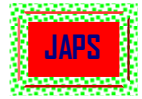
\**Peniophora nuda* (Fr.) Bres., (1897); on *Quercus faginea* in forest of Jaaba. Malç., 1961.

*Peniophora pallidula* (Bres.) Bres., (1913), (= *Hyphodontia pallidula* (Bres.) J. Erikss., 1958); in the humus under *Pinus pinaster*. Bull. Soc. Sci. Nat. & Phy. Malç. & Bert., 1967.

*Peniophora quercina* (Pers.) Cooke, (1879); on *Acer monspesulanum*, *Quercus faginea* & *Quercus rotundifolia*. Bull. Soc. Sci. Nat. & Phy. Malç. & Bert., 1967.

\**Peniophora roumegueri* (Bres.) Bres., (1926), (= *Phlebiopsis roumegueri* (Cooke) Hjortstam, 1987). Malç. & Bert., 1951, 52, 57, 64, 65. On train of *Quercus rotundifolia*, Toumliline.

*Peniophora setigera* (Fr.) Höhn. & Litsch., (1906), (= *Hyphoderma setigerum* (Fr.) Donk, 1957). Bull. Soc. Sci. Nat. & Phy. Malç., 1937



*Peniophora subsulphurea* (P. Karst.) Höhn. & Litsch., (1906); on *Pinus pinaster*, LNS & CNS. Bull. Soc. Sci. Nat. & Phy. Malç. & Bert., 1967

\**Peniophora subulata* (Bourdot & Galzin) Donk, (1931), (= *Tubulicrinis subulatus* (Bourdot & Galzin) Donk, 1956); on Highly decayed wood of *Cedrus*, Ich Ouaharrouq

\**Peniophora velutina* (DC.) Cooke, (1879), (= *Phanerochaete velutina* (DC.) Parmasto, 1968); on Holly, Boujirhirh. Malç., 1950, 52

*Peniophora violaceolivida* (Sommerf.) Masee, (1890). Bull. Soc. Sci. Nat. & Phy. Malç. & Bert., 1967. on *Quercus faginea*.

\**Peniophora* sp.; on burned Cedar, Melcaïd. Malç., 1952, 54.

### Family: Russulaceae

*Lactarius aurantiaco-ochraceus* Lj. N. Vassiljeva, (1950); in the *Quercetum ilicis* of Azrou, CNS.

*Lactarius campboratus* (Bull.) Fr., (1838) ; LNS, SNS & CNS. Signaled by R. MAIRE (*in sched.*).

*Lactarius fuliginosus* (Fr.) Fr., (1838), sensu auct., (= *Lactarius azonites* (Bull.) Fr., 1838), sensu Cooke [Ill. Brit. Fung. 959 (996)], NCL p.p., (= *Lactarius romagnesii* Bon, 1979); under *Quercus suber* of Azrou, CNS.

*Lactarius fulvissimus* Romagn., (1954); under *Quercus faginea*, *Q. rotundifolia* & *Q. suber* at Toumliline, CNS.

*Lactarius insulsus* (Fr.) Fr., (1838), sensu A. A. Pearson, auct. Eur., (= *Lactarius acerrimus* Britzelm., 1893), sensu NCL (1960), Phillips (1981), (= *Lactarius zonarius* (Bull.) Fr., 1838); under the *Quercus* of Azrou, CNS.

*Lactarius quietus* (Fr.) Fr., (1838). Malç. Bull. Soc. Sci. Nat., 1937. in Azrou.

*Lactarius mairei* Malençon, (1939). Bull. Soc. Sci. Nat. Malç., 1937. in Azrou.

*Lactarius mairei* f. *zonatus* (A. Pearson) D.A. Reid 1969, (= *Lactarius mairei* Malençon, 1939). Bull. Soc. Sci. Nat. Malç., 1937. in Azrou.

*Lactarius salmonicolor* R. Heim & Leclair, (1953); under *Pinus pinaster* & *P. pinea* at Tamrabt, CNS.

*Lactarius sanguifluus* (Paulet) Fr., (1838); under the *Pinus* of Imouzzet & Tamrabt, CNS.

*Lactarius semisanguifluus* R. Heim & Leclair, (1950). C. R. Soc. Sci. Nat. & Phy. Malç. & Bert., 1967. LNS, SNS & CNS.

*Lactarius scrobiculatus* (Scop.) Fr., (1838); under *Quercus rotundifolia* of Ifrane, CNS.

\*\**Lactarius subumbonatus* Lindgr., (1845); under *Quercus* : Azrou, 1600 m.

*Lactarius vellereus* (Fr.) Fr., (1838); under *Quercus suber* of Azrou, rarely, CNS.

*Lactarius zonarius* (Bull.) Fr., (1838), sensu NCL (1960), Phillips (1981), (= *Lactarius evosmus* Kühner & Romagn., 1954); under *Quercus rotundifolia* & *Q. suber* at Tamrabt & Tioumliline, CNS.

*Russula acrifolia* Romagn., (1962), (1997); under *Cedrus*, *Pinus* & *Quercus suber* of Ifrane, CNS.

*Russula adusta* (Pers.) Fr., (1838), sensu Krombholz (tab. 70, fig. 12-13); under *Cedrus*, *Pinus* & *Quercus suber* at Moudmam & Tamrabt, CNS.

*Russula aeruginea* Fr., (1863), sensu Cooke = [*Russula parazurea* Jull. Schäff., 1931). C. R. Soc. Sci. Nat. & Phy. Malç., 1959. LNS, SNS & CNS.

*Russula albonigra* (Krombh.) Fr., (1874), sensu NCL (1960), Rayner (1985), (= *Russula anthracina* Romagn., 1962); under *Cedrus*, *Pinus* & *Quercus suber* of Azrou & Moudmam, CNS.

\**Russula alutacea* (Fr.) Fr., (1838); under *Pinus* & *Quercus* of Azrou, CNS.

\*\**Russula amoena* Quél., (1881), sensu A.A. Pearson [Naturalist (1948)], (= *Russula violeipes* Quél., 1898); under the *Quercus*: Azrou, 1600 m.

*Russula amoenicolor* Romagn., (1962); under *Eucalyptus*, *Pinus* & *Quercus* of Azrou, CNS.

*Russula aurata* Fr., (1838); (= *Russula aurea* Pers., 1796); under *Quercus rotundifolia*, *Q. pyrenaica* & *Q. suber* of Azrou.

*Russula azurea* Bres., (1881); under conifers, *Cedrus* & *Pinus* of Azrou, CNS.

*Russula chamaeleontina* (Lasch) Fr., (1838), (= *Russula risigallina* (Batsch) Sacc., 1915); under the *Quercus* of Azrou, CNS.

*Russula chamaeleontina* var. *maxima* (Singer) Romagn., (1967); under *Quercus rotundifolia* of Azrou, CNS.

*Russula cyanoxantha* (Schaeff.) Fr., (1863); under *Quercus suber* in the forest of Azrou, CNS.

*Russula decipiens* (Singer) Kühner & Romagn., (1985), (singer) Bon, (1985); under the *Quercus* of Azrou, CNS.

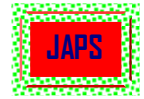
*Russula decolorans* (Fr.) Fr., (1838). LNS, SNS & CNS.

*Russula delicata* Fr., (1838); under *Quercus* in the forest of Azrou & Jaaba, CNS.

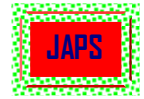
*Russula delicata* var. *glaucophylla* Quél., (1901). C. R. Soc. Sci. Nat. & Phy. Malç., 1959. LNS, SNS & CNS.

*Russula densifolia* Secr. ex Gillet, (1876), sensu NCL (1960), Rayner (1985), (= *Russula acrifolia* Romagn., 1997); under *Quercus suber* & *Q. pyrenaica* in the forest of Jaaba, CNS.

*Russula farinipes* Romell, (1893); under the *Quercus* of Azrou, CNS.



- Russula foetens* (Pers.) Pers., (1796); under *Pinus* & *Quercus* of Azrou, CNS.
- Russula grata* Britzelm, (1898); under *Pinus* & *Quercus suber* of Azrou, CNS.
- Russula grisea* (Batsch) Fr., (1838), sensu auct. p.p., (= *Russula ionochlora* Romagn., 1952). C. R. Soc. Sci. Nat. & Phy. Malç., 1959. LNS, SNS & CNS.
- Russula lepida* Fr., (1836), (= *Russula rosea* Pers., 1796). C. R. Soc. Sci. Nat. & Phy. Malç., 1959. LNS, SNS & CNS.
- Russula lutea* Sacc., (1887), (Huds.) Gray, (1821), sensu auct. mult., (= *Russula risigallina* (Batsch) Sacc., 1915), sensu auct., (= *Russula acetolens* Rauschert, 1989). Bull. Soc. Sci. Nat. Malç, 1937. in Azrou.
- Russula maculata* Quél., (1877), sensu Cooke; under the *Quercus* of Azrou, CNS.
- Russula olivacea* Pers., (1796), (Schaeff.) Fr., (1838). C. R. Soc. Sci. Nat. & Phy. Malç., 1959. LNS, SNS & CNS.
- Russula palumbina* (Paulet) Quél., (1885), Quél., (1883), (= *Russula grisea* (Batsch) Fr., 1838). Wood of *Quercus* pure or mixed of Azrou, CNS.
- Russula parazurea* Jul. Schäff., (1931). C. R. Soc. Sci. Nat. & Phy. Malç., 1959. LNS, SNS & CNS.
- Russula persicina* var. *rubrata* Romagn., (1953), Romagn. ex Romagn., (1967); under *Quercus faginea* in the forest of Jaaba, CNS.
- Russula pectinata* (Bull.) Fr., (1838), sensu NCL (1960), Rayner (1985), (= *Russula pectinatoides* Peck., 1907); in Azrou.
- Russula puellaris* Fr., (1838). C. R. Soc. Sci. Nat. & Phy. Malç., 1959. LNS, SNS & CNS.
- Russula romellii* Maire, (1910); under the *Quercus* of Azrou, CNS.
- Russula rosacea* (Pers.) Gray, (1821), (= *Russula sanguinaria* (Schumach.) Rauschert, 1989); under the *Quercus* of Toumliline, CNS.
- \*\**Russula rubicunda* Quél., (1895), (= *Russula persicina* Krombh., 1845); under *Quercus faginea* Lamk. : forest of Jaaba, 1500 m
- Russula schiffneri* Singer, (1929), (= *Russula vetermosa* Fr., 1838); in Azrou, SNS, CNS.
- Russula seperina* Dupain, (1913); under *Acer monspessulanum* & *Quercus rotundifolia* of Azrou, CNS.
- \**Russula seperina* var. *luteovirens* Bertault & Malençon., (1978); under *Quercus rotundifolia* & *Q. suber* of Azrou, CNS.
- Russula straminea* Malençon., (1942); under *Quercus rotundifolia* & *Q. suber* of Azrou, forest of Jaaba, Kissarite & Moudmam, CNS.
- Russula subfoetens* W. G. Sm., (1873), sensu Rea, (1922), (= *Russula farinipes* Romell, 1893); under *Quercus rotundifolia* & *Q. suber* of Azrou, forest of Jaaba, Kissarite & Moudmam, CNS.
- Russula turci* Bres., (1881); in Cedars & under the *Pinus* at Ràs-es-Seheb & Tamrabt, CNS.
- Russula vesca* Fr., (1836); under *Quercus* & *Pinus* at Ich Ouaharrouq., CNS.
- Family: Stereaceae**
- \**Aleurodiscus atlanticus* Maire., (1917); on bark of *Cedrus* dead, Moudmam, Seheb; on living bark of the Cedar, at Boujirhirh, near Ifrane.
- \**Aleurodiscus atlanticus* var. *alba* Malençon, (1953); on *Cedrus*, Seheb (Azrou).
- \**Aleurodiscus cerussatus* (Bers.) Höhn. & Litsch., (1907); dead twigs of *Grataegus* sp., Ras el Ma near of Ifrane, Malç. 1944.
- \*\**Aleurodiscus disciformis* (DC.) Pat., (1894); on the barks of *Quercus rotundifolia* L. : Azrou, 1600 m.
- \**Aleurodiscus dryinus* (Pers.) Bourdot, (1922), (= *Dendrothele dryina* (Pers.) P. A. Lemke, (1965); on dead bark of *Quercus rotundifolia*, Michlifene & forest of Azrou, 1953, 67 Malç.
- \**Aleurodiscus macrosporus* (Bres.) Bres., (1913), (= *Dendrothele macrospora* (Bres.) P.A. Lemke, 1965); on *Quercus rotundifolia*. C. R. Soc. Sci. Nat. & Phy. Malç. & Bert., 1967.
- \**Aleurodiscus monilifer* Malençon, (1954); on Cedars, Biology station of Ifrane.
- Stereum gausapatum* (Fr.) Fr., (1874); in Azrou. Bull. Soc. Sci. Nat. Malç., 1937.
- Stereum hirsutum* (Willd.) Pers., (1800); in Azrou. Bull. Soc. Sci. Nat. Malç., 1937.
- \**Stereum purpureum* Pers., (1794), (= *Chondrostereum purpureum* (Pers.) Pouzar, 1959); on *Crataegus monogyna*, Ravine of Toumliline, Azrou. Malç., 1961.
- \**Stereum sanguinolentum* (Alb. & Schwein.) Fr., (1938); under *Cedrus atlantica*, Azrou. Malç., 1937.
- \**Stereum spadiceum* (Pers.) Quél., (1888), (= *Porostereum spadiceum* (Pers.) Hjortstam & Ryvarden, 1990), Fr., (1838), sensu auct., (= *Stereum gausapatum* (Fr.) Fr., 1874); under fallen trunk of *Quercus rotundifolia*, forest of jaaba; on *Quercus faginea*, at Tamrabt. Malç., 1944, 46, 58, 61, 65.
- Order: Thelephorales**
- Family: Bankeraceae**
- \*\**Sarcodon imbricatus* (L.) P. Karst., (1881), sensu auct. brit., (= *Sarcodon squamosus* (Schaeff.) Quél., 1886); under *Quercus rotundifolia* I. : Ifrane, 1700 m.



**Family: Thelephoraceae**

\**Caldesiella viridis* (Alb. & Schwein.) Pat., (1900), (= *Amaurodon viridis* (Alb. & Schwein.) J. Schröt., 1888); on decaying wood of *Quercus rotundifolia*, at Toumliline, near Azrou Malç., 1952.

*Lenzitesopsis oxycedri* Malençon & Bertault, (1963). Bull. Soc. Sci. Nat. & Phy. Malç. & Bert., 1967. on *Juniperus oxycedrus*.

\**Tomentellina bombycina* (P. Karst.) Bourdot & Galzin, (1928), (= *Tomentella fibrosa* (Berk. & M. A. Curtis) Køljalg, 1974); on old decayed *Cedrus*, Tamrabt. Malç., 1952.

*Tomentella echinospora* (Ellis) Bourdot & Galzin, (1928), (= *Tomentellopsis echinospora* (Ellis) Hjortstam, 1970); on *Cedrus* Bull. Soc. Sci. Nat. & Phy. Malç. & Bert., 1967.

*Tomentella fuscella* (Sacc.) S. Lundell, (1954); on *Cytisus battandieri* & *Pinus pinaster*. Bull. Soc. Sci. Nat. & Phy. Malç. & Bert., 1967.

\**Tomentella microspora* (P. Karst.) Höhn. & Litsch., (1906); on dead wood of *Pinus pinaster*, Tamrabt. Malç., 1952.

*Tomentella pallidofulva* (Peck) Litsch., (1939), (= *Tomentella bryophila* (Pers.) M. J. Larsen, 1974); on *Quercus faginea*, *Q. rotundifolia* & *Q. suber* Bull. Soc. Sci. Nat. & Phy. Malç. & Bert., 1967.

\**Tomentella phylacteris* (Bull.) Bourdot & Galzin, (1920); on *Quercus rotundifolia*, Michlifene, on death and burned *Cedrus*, mixed forest above Azrou. Malç., 1952, 53.

\**Tomentella tenebrosa* Malençon, (1954); on *Cedrus* very decayed, Tamrabt. Malç., 1952, 54.

**Order: Tremellales**

**Family: Tremellaceae**

\**Tremella foliacea* Pers., (1800); on *Quercus faginea*, forest of jaaba. Malç., 1953.

\**Tremella mesenterica* Retz., (1796), Schaeff., (1774), J. F. Gmel., (1792), Schumach., (1803); up of *Quercus rotundifolia*, Boujirhirh, Ifrane. Malç., 1951, 53, 65.

*Tremella indecorata* Sommerf., (1826); on *Q. faginea*. Bull. Soc. Sci. Nat. & Phy. Malç. & Bert., 1967.

**Order: Tulasnellales**

**Family: Tulasnellaceae**

\**Tulasnella viola* var. *incarnata* (Tul.) Juel.; on dead wood of *Quercus rotundifolia*, Michliffen. Malç., 1953.

**Classe: Urediniomycetes**

**Order: Atractiellales**

**Family: Phleogenaceae**

*Helicogloea lagerheimii* Pat., (1892); Sur branches tombées de *Quercus faginea*. Bull. Soc. Sci. Nat. & Phy. Malç. & Bert., 1967.

**Order: Microbotryales**

**Family: Microbotryaceae**

*Sphacelotheca andropogonis* (Opiz) Bubák, (1912), (= *Sporisorium andropogonis* (Opiz) Vánky, 1985); in the inflorescence of *Hypparrhenia hirta* (= *Andropogon*). Nat. Phy., 1959.

\*\**Sphacelotheca reiliana* (J. G. Kühn) G. P. Clinton, (1902); on *Sorghum halepense* Pers., *S. vulgare* Pers.: Middle Atlas.

**Order: Uredinales**

**Family: Coleosporiaceae**

\**coleosporium senecionis* (Pers.) Fr., (1867), (= *Coleosporium tussilaginis* (Pers.) Lév., 1849); Biological Station of Ifrane. Malç., 1950.

**Family: Melampsoraceae**

\*\* *Melampsora amygdalinae* Kleb., (1900); on *Salix* sp. : 850 m (Middle Atlas).

\**Melampsora helioscopiae* (Pers.) G. Winter, (1881), (= *Melampsora euphorbiae* (Ficinus & C. Schub.) Castagne, 1843); in grasslands at Ifrane. Malç., 1951, 57, 67.

\**Melampsora ribesii-purpureae* Kleb., (1901), (= *Melampsora epitea* var. *epitea* Thüm., 1879); on *Salix purpurea*, Forestry House of Ain Nokra, (MA) Malç., 1962.

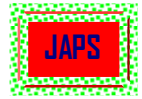
**Family: Phragmidiaceae**

\*\**Phragmidium circumvallatum* Magnus, (1894); on *Geum heterocarpum* Boiss. : Ari Benij.

\**Phragmidium disciflorum* (Tode) J. James, (1895), (= *Phragmidium mucronatum* (Pers.) Schldtl, 1824), sensu Grove [Brit. Rust Fung. p. 293 (1913)], (= *Phragmidium rosae-pimpinellifoliae* Dietel, 1905); on *Rosa* sp., Biological Station of Ifrane; on *Rosa* sp., in the lower cartère of Jebel Hebri. Malç., Bert., Guyot & Malç., 1954, 56, 62, 67.

\*\**Phragmidium fragariastris* (DC.) J. Schröt., (1887), (= *Phragmidium fragariae* G. Winter, 1884); on *Potentilla micrantha* Ramond: Bou-Iblane, vers 2000 m.

\*\**Phragmidium sanguisorbae* (DC.) J. Schröt., (1887); on *Sanguisorba magnolii* Spach., *S. maroccana* Coss., *S. minor* Scop. var. *atlantica* Lit. & Maire, *S. muricata* Spach., *S. mauritanica* Desf. : Azrou, 1300 m.



\*\**Phragmidium tuberculatum* Jull. Müll., (1885); on *Rosa sicula* Trott. : Aguelman Sidi-Ali, 2000 m.

**Family: Pucciniaceae**

\**Aecidium euphorbiae* Link, (1816), Pers., (1792), (= *Uromyces pisi-sativi* (Pers.) Liro, 1908), sensu auct., (= *Uromyces tuberculatus* Fuckel, 1870), sensu Cooke [Handb. Brit. Fungi.: 537 (1871)] *vide* Grove (1913), (= *Endophyllum euphorbiae-silvaticae* (DC.) G. Winter, 1881); on the stems of *Euphorbia nicaeensis* at Ait Oufellah, near Itzer Malç., 1961.

\**Aecidium ranunculacearum* DC., (1815), sensu de Candolle, (= *Puccinia magnusiana* Körn., 1876), (= *Uromyces dactylidis* G. H. Otth., 1861); on *Ranunculus paludosus* & *Ranunculus orientalis*, base of Boujirhirh, near Ifrane Malç., 1950

\**Aecidium* sp., on *Euphorbia nicaeensis* near of Dayet Aaoua, Malç., 1967

\**Gymnosporangium confusum* Plowr., (1889), Dietel., (1889); on *juniperus oxycedrus*, at Tizi-n'Tretten.

\**Gymnosporangium gracile* Pat., (1902), (Peck) F. Kern & Bethel, (1911); on *Juniperus oxycedrus*, at Tizi-n'Tretten, Malç., 1962, 68.

\**Gymnosporangium fusisporum* E. Fisch., (1918); on *Coloneaster nummularia* Fisch. & Meyer : Ari Benij.

\**Gymnosporangium oxycedri* Bres., (1903), (= *Gymnosporangium confusum* Plowr., 1889); on *Crataegus monogyna* Jacq., on *Juniperus oxycedrus* L.: Azrou, 1500 m.

\**Puccinia acarnae* P. Syd. & Syd., (1904); on *Cirsium acarna*, the roadside of Azrou (Mouboulkheir). Malç., 1962.

\**Puccinia acetosae* (Schumach.) Körn., (1876), sensu sensu Barclay, (= *Puccinia nepalensis* Barclay & Dietel, 1890); on *Rumex acetosa* L. cultivated, *R. tuberosus* L. : Mont Bou-Iblane.

\**Puccinia algerica* Pat., (1905); on *Rubia laevis* Poirlet : Azrou & Ifrane, 1300- 1700 m.

\* *Puccinia allii* Castagne, (DC.) F. Rudolphi, (1928), (= *Puccinia porri* (Sowerby) G. Winter 1881); on *Allium paniculatum* L. (var. *pallens* Batt. & var. *lypicum* Regel), *A. album* Santi, *A. ampeloprasum* L., *A. sphaerocephalum* L.: El Hajeb.

\*\**Puccinia alyssi* Syd. & P. Syd., (1903), Lindr., (1902), on *Alyssum spinosum* L.: Ari Benij.

\*\**Puccinia arenariae* (Schumach.) J. Schröt., (1880); on *Loefinbia hispanica* L., *L. micrantha* Boiss. & Reut., *Cerastium gibralticum* Boiss. var. *boissieri* (Gren.) Pau, *Gypsophila paniculata* L., *Dianthus* sp., *Silene* sp., *S. colorata* Poirlet: Anocour, 1450 m.

\*\**Puccinia asphodeli* Moug., (1830), Bagnis, (1877); on *Asphodelus microcarpus* Viv., *A. nervosus* Pomel, *A. cerasiferus* Gay. *A. aestivus* Brot. var. *gracilis* (Br. Bl. & Maire) Maire : Immouzer, 850-1440 m.

\*\**Puccinia beltranii* f. *dipora* Maire, (1937); on *Centaurea triumjelti* All. var. *seuseana* (Chaix) Gugler : Tigelmamin, 2000 m, Ain Kahla, Azrou, Ain Leuh, Ifrane.

\**Puccinia biformis* Lagerh., (1890); on *Rumex tuberosus*, at the base of Jbel Boujirhirh, between Ifrane & Azrou. Malç., 1967, 68.

\*\**Puccinia bunii* G. Winter, (1882); on *Bunium alpinum* Waldst. & Kit., *B. mauritanicum* Batt. var. *Perrotii* Br. Bl. & Maire, *B. incrassatum* (Boiss.) Bat., *B. sp.*: Azrou, vers 1600 m.

\*\**Puccinia bupleuri* (Opiz) F. Rudolphi, (1829), Corda, (1840); on *Bupleurum protractum* Link. & Hoffm., *B. atlanticum* Murb., *B. canescens* Schousb., *B. montanum* Coss.: forest of Kissaria, 1800 m.

\*\**Puccinia cardui-pycnocephali* P. Syd. & Syd., (1902), (= *Puccinia calcitrapae* DC., 1805); on *Carduus pycnocephalus* L., *C. tenuiflorus* Curt. : Immouzer, 1440 m.

\*\**Puccinia carduncelli* P. Syd. & Syd., (1902); on *Carthamus calvus* (Boiss. & Reut.) Batt., *C. caeruleus* L., *C. carlinoides* Pomel, *Carduncellus Pomelianus* Batt. var. *gracilis* Maire : Ito, 1200-1400 m & Dayet Aoua, toward 1700 m.

\*\**Puccinia carduorum* Jacky, (1899), (= *Puccinia calcitrapae* DC., 1805); on *Carduus ballii* Hook. fil., *C. myriacanthus* Salzm., *C. macrocephalus* Desf., *C. chevalleri* Barratte, *C. spachianus* D. R.: Dayet Aoua, toward 1700 m.

\*\**Puccinia calcitrapae* DC., (1805); on *Centaurea calcitrapa* L. : Azrou, vers 1600 m.

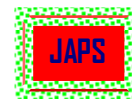
\*\**Puccinia castellana* Gonz. Frag., (1916); on *Pimpinella villosa* Schousb.: Ouria.

\*\**Puccinia centaurea* Mart., (1815), DC., (1915), (= *Puccinia carthami* Corda, 1840); on the *Centaurea Ali-Beyana* F. Q. & Pau, *C. benoistii* Humb., *C. diluta* Ait., *C. eriophora* L., *C. fragilis* D. R., *C. gentili* Br. Bl. & Maire, *C. involucrata* Desf., *C. litardierei* Jah. & Maire, *C. maroccana* Ball., *C. melilensis* L., *C. musimomum* Maire, *C. nana* Desf., *C. sphaerocephala* L., *C. sulphurea* Willd. : Aghbalou-Larbi, Dayet Aaoua, 1700 m.

\*\**Puccinia chamaepences* Maire, (1937); on the living leaves of *Cirsium Casabonae* (L.) DC. (= *Chamaepeuce casabonae* DC) ssp. *dyrriculum* Maire & ssp. *rhizophaeum* (Pau & F. Q.) Maire: Azrou, toward 1600 m.



- \*\**Puccinia cichorii* (DC.) Belyneck, (1867), (= *Puccinia hieracii* var. *hieracii* (Röhl.) H. Mart., 1817); on *Cichorium divaricatum* Schousb.: Moyen Atlas.
- \*\**Puccinia dictyoderma* Lindr., (1901); on *Smyrniium perfoliatum* L.: Azrou, toward 1500 m.
- \*\**Puccinia epilobii-tetragoni* G. Winter, (1881), (= *Puccinia pulverulenta* Grev., 1824); on *Epilobium hirsutum* L.: Kheneg Merzoui; Ifrane, 1600 m.
- \*\**Puccinia graminis* Pers., (1794); I. on *Berberis hispanica* Boiss. & Reut.; II. III. on *Triticum* cultivated, *Elymus capul-Medusae* L. : Bou-Iblane; Dayet Hachlaf, 1700 m.
- \*\**Puccinia hyoseridis-radiatae* Maire, (1905); on *Hyoseris radiata* L. : Moyen Atlas.
- \*\**Puccinia jasmini* DC., (1805); on *Jasminum fruticosum* L. : Immouzer, 850-1440 m.
- \*\**Puccinia johandiezii* Maire, (1921); on *Erysimum bocconeii* (All.) Pers. var. *gramineum* Pomel : Timhadit, 1930 m. Ifrane, 1600 m.
- \*\**Puccinia junci* (F. Strauss) G. Winter, (1880), Schwein., (1834), Desm., (1825), H. Mart., (1817), I. on *Sonchus maritimus* L.; II. III. on *Juncus punctorius* L. fil., J. sp. : Lake of Ouiuane, 1700 m. and Valley of Senoual near Ras el Ma, 1600 m.
- \*\**Puccinia jurineae-humilis* Maire, (1937); on *Jurinea humilis*, Grasslands of Afennourir, (M A). 1968.
- \*\**Puccinia lolii* E. Nielsen, (1875), (= *Puccinia coronata* Corda, 1837); on *Lolium perenne* L. : Lake of Ouiuane, 1700 m.
- \*\**Puccinia madritensis* Maire, (1919); I. on *Clematis cirrhosa* L.; II. III. on *Bromus madritensis* L., *B. macrostachys* Desf., *B. villosus* Forsk., *B. alopecuroides* Poiret, *B. hordeaceus* L. (= *B. mollis* L.), *B. sterilis* L., *B. tectorum* L. : El Hajeb.
- \*\**Puccinia malvacearum* Bertero ex Mont., (1852); on *Malope trifida* Cavan, *Malva hispanica* L., *M. nicaeensis* All., *M. parviflora* L., *M. rotundifolia* L., *M. silvestris* L., *lavatera Cretica* L., *L. olbia* L., *L. trimestris* L., *alcea rosea* Cav., *Althaea hirsuta* L., *A. longiflora* Boiss. & Reut. : Immouzer, 1440 m.
- \*\**Puccinia menthae* Pers., (1801); on *Mentha piperita* (L. p. p.) Huds. Cultivated. *M. longifolia* (L.) Huds., *M. rotundifolia* L., *Satureja baborensis* Batt., *S. calaminta* (L.) Scheele var. *heterotricha* (Boiss. & Reut.) Briq & var. *baetica* Boiss. & Reut., *S. atlantica* (Ball.) Maire, *S. vulgaris* (L.) Fritsch. Ssp. *villosa* (De Noé) Maire, *S. rotundifolia* (Pers.) Briq. : Azrou, toward 1700 m. Ari Hayan; Kheneg Merzoul.
- \*\**Puccinia mesnieriana* Thüm., (1877); on *Rhamnus alaternus* L., *R. oleoides* L. : Mont Taouarit Tamokrant; Ifrane, 1600 m.
- \*\**Puccinia microlonchi* P. Syd. & Syd., (1904) II. III. on *Mantisalca salmantica* (L.) Briq. & Cavill. : Dayet Aaoua, toward 1700 m.
- \*\**Puccinia montana* Fuckel, (1874); on *Leuburea seureana*, Azrou. Malç., 1926.
- \*\**Puccinia odontolepidis* Gonz. Frag., (1918); on *Cirsium odontolepis* Boiss. : Dayet Chiker.
- \*\**Puccinia pimpinellae* (F. Strauss) Link., (1824); on *Pimpinella tragium* Vill. : Timhadit, 1850 m ; Ari Benij.
- \*\**Puccinia podospermi* DC., (1805); on *Podospermum laciniatum*, at Ait Oufellah toward Itzer. Malç., 1967.
- \*\**Puccinia polygami-amphibii* Pers., (1801); on *Polygonum amphibium* L. : Dayet Ifer ; Ras-el-Ma, 1600 m.
- \*\**Puccinia rubigo-vera* (DC.) G. Winter, (1801), (= *Puccinia recondita* Dietel & Holw., 1857), sensu auct., p. p., (= *puccinia striiformis* var. *striiformis* Westend., 1854); on *Aegilops ovata* L. *Festuca* (Vulpia) *dertonensis* (All.) Hasch. & Gr., F. (V.) *geniculata* L. *Gaudinia fragillia* (L.) Beauv. *Brachypodium distachyum* (L.) R. & Sch., *Triticum* sp. & *Hordeum* sp., *Lolium multiflorum* Lamk., *L. rigidum* Gaud., *L. perenne* L., *Koeleria villosa* Pers., *Lagurus ovatus* L., *Cynodon dactylon* (L.) Pers., *Hordeum bulbosum* L., *Trisetum pumilum* (Desf.) Kunth.: Lake of Ouiuane, 1700 m.
- \*\**Puccinia scirpi* (Fr.) Link, (1825), DC., (1805); on *Scirpus lacuster* L.: Lake of Ouiuane, 1700 m.
- \*\**Puccinia scorzonerae* (Schumach.) Jacky, (1899). on *Scorzonera pygmaea* Sibth. & Sm.: Mont Bou-Iblane.
- \*\**Puccinia silvatica* J. Schröt., (1879), (= *Puccinia dioicae* var. *silvatica* (J. Schröt.) D. M. Hend., 1961); on *Helminthia echioides* Gaertn., II. III. on *Carex divisa* Huds., *C. hispida* Schkuhr. : Dayet Hachlaf, around, 1700 m.
- \*\**Puccinia thesii* (Desv.) Chaillet, (1830), P. Syd. & Syd.; on *Thesium divaricatum* Jan.: between Dayet Aaoua & Ifrane, 1600-1700 m.
- \*\**Puccinia violae* (Schumach.) DC., (1815); on *Sedum sedoides*: Ain Leuh.
- \*\**Puccinia* sp., on *Smyrniium perfoliatum*, ravine of Toumliline. Emberger., (1926).
- \*\**Uromyces anthyllidis* (Grev.) J. Schröt., (1875); on *Anthyllis tetraphylla* L., *A. cytisoides* L., *A. vulneraria* L. (s. l.) *Benedictella benoistii* Maire, *Hippocrepis ciliata* Widd., *H. multisiliquosa* L., *Hedysarum membranaceum* Coss., *Lotus arenarius* Brot., L., *assakensis* Coss., L. *edulis* L., L. *commutatus* Guss., L. *maroccanus* Ball., L. *ornithopodioides* L., *Tetragonolobus purpureus* Moench. *Trifolium campestre* Schreb : Azrou.
- \*\**Uromyces armeriae* (Schltdl.) Lév., (1847), Spég.; on *Statice alliacea* Cav., *S. plantaginea* All. Sensu lato : Bekrit



- \*\**Uromyces bupleuri* Magnus, (1899); on *Bupleurum spinosum* L. fil. : Gelb-er-Rahal, Aguelman Sidi-Ali.
- \**Uromyces caryophyllinus* (Schränk) J. Schröt., (1884), (= *Uromyces dianthi* (Pers.) Niessl, 1872); on *Dianthus prolifer*, Plate of Seheb, above Azrou. Malç., 1962.
- \*\* *Uromyces dianthi* (Pers.) Niessl, (1872); on *Dianthus gadilanus* Boiss. ssp. *Jabandiezii* Maire : Bekrit. on *Tunica prolifera* (L.) Scop. ssp. *velutina* (Guss.) Briq. : Ifrane, 1600 m.
- \*\* *Uromyces ervi* (Wallr.) Westend, (1854); on *Lens culinaris* Medik.
- \*\* *Uromyces fabae* (Pers.) de Bary., (1870), (= *Uromyces viciae-fabae* var. *viciae-fabae* (Pers.) J. Schröt., 1875); on *Vicia faba* L., *V. peregrina* L., *V. onobrychioides* L., *V. villosa* Roth. var. *wilezekii* Maire, *Lathyrus cicera* L. : Aguelman Sidi-Ali, 2000 m.
- \*\**Uromyces graminis-ferulae* Maire. I. on *Ferula communis* L. II. III. on *Puccinia ferulae* ; Ito, 1450 m.
- \*\**Uromyces lilii* (Link) Fuckel, (1875), (= *Uromyces aecidiiformis* (Strauss) Rees, 1917), Kunze, (1875), Clinton, (1875), (= *Uromyces holwayi* Lagerh., 1889); on *Friellaria* sp., *macrocarpa* Coss., Moyen Atlas.
- \*\**Uromyces limonii* (DC.) Lév., (1849), sensu Plowright, (= *Uromyces armeriae* (Schldtl.) Lév., 1847); on *Limonium beaumieranum* Maire, *L. Mourelii* (Pit.) Maire, *L. sinuatum* (L.) Mill., *L. Thouini* (Viv.) Kunze : Timhadit, 1930 m.
- \*\**Uromyces poae* Rabenh., (1866), (= *Uromyces dactylidis* Otth, 1861); on *Ranunculus flabellatus* Desf., *R. ficaria* L. I. II. III. on *Poa alpina* L., *P. bulbosa* L. : Azrou.
- \*\**Uromyces proeminens* (DC.) Lév., (1847), Duby; on *Euphorbia chamaesyce* L.: Timhadit, 1930 m.
- \*\**Uromyces punicus* (Juel) Maire. Syn. *Aecidium punicum* Juel. I. on *Thapsia decussata* Lag., *T. pillosa* L. : Middle Atlas.
- Uromyces ramicis* (Schum.) Wint. On *Rumex crispus* L., *R. ginii* Jah. & Maire. *R. pulcher* L., *R. acelosa* L.: Ari Hayan & Ifrane.
- \*\**Uromyces scillarum* (Grev.) G. Winter, (1884), (= *Uromyces muscari* Lév., 1847); on *Dipcadi serotinum* (L.) Medik, *Scilla lingulata* Poiret, *S. obtusifolia* Poiret, *S. peruviana* L., *S. numidica* Poir., *S. autumnalis* L., *S. hispanica* Mill., *Ornithogalum umbellatum* L., *O. unifolium* (L.) Ker-Gawl., *Urginea maritima* (L.) Baker, *U. maura* Maire. : Azrou, Ras-el-Ma, 1600 m.
- \*\**Uromyces scirpi* Burrill, (1844), (= *Uromyces lineolatus* (Desm.) J. Schröt., in Rabenhorst, 1876); on *Scirpus maritimus* L.: Ras-el-Ma, valley of Senoual, around 1600 m.
- \*\**Uromyces sublaevis* Tranzschel, (1910); on *Euphorbia nicaeensis* All. : Immouzer.
- \*\**Uromyces terebinthi* (DC.) G. Winter, (1884), (= *Pileolaria terebinthi* Castagne, 1842); on *Pistacia terebinthus* L.: El Hajeb, Kheneg Merzoul.
- \*\**Uromyces tinctoriicola* Magnus, (1896), on *Euphorbia nicaeensis* All.: Azrou, Ifrane, Immouzer, Timhadit, 1300-1900 m.
- \*\**Uromyces tingitanus* Henn., (1904); on *Rumex bipinnatus* L. fil., *R. tingitanus* L.: Ras-el-Ma, Bekrit, Ifrane, Dayet Aoua.
- Uromyces trifolii* (R. Hedw.) Lév., (1874), sensu auct., (= *Uromyces trifolii-repentis* Liro, 1906); under *Trifolium pratense* var. *spontaneum*, edge of rivulet near Ait Oufellah, at the beginning of the track of Khenifra. Malç., 1962.
- \*\**Zagbonania phillyreae* Pat., (1901); on *Phillyrea media* L., *P. latifolia* L., *P. angustifolia* L. Ksiba (Moyen Atlas).

**Classe: Ustilaginomycetes****Order: Entylomatales****Family: Entylomataceae**

\*\**Entyloma eryngii-tricuspidati* Maire, (1919); on *Eryngium tricuspidatum* L., Azrou.

\*\**Entyloma helosciadii* Magnus, (1882); on *Helosciadium nodiflorum* (L.) Koch : Ras el Ma, toward 1600 m.

*Entyloma ficariae* A. A. Fisch. Waldh., (1877); on leaves of *Ranunculus ficaria* ssp. *ficariiformis*.

Soc Sci. Nat. Phy. Malç., 1959

\*\**Entyloma maroccanum* Maire, (1937). Ras el Ma, toward 1600 m.

**Order: Microstromatales****Family: Microstromataceae**

\*\**Helostroma album* Pat., (1902); on *Quercus faginea* Lamk. : Azrou toward 1700 m.

**Order: Tilletiales****Family: Tilletiaceae**

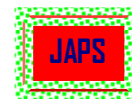
\*\**Tilletia laevis* J. G. Kühn, (1837); on *Trilicium durum* (Desf.) Trab., *Trilicium* various cultivated: Immouzer.

*Tilletia cynosuri* Massenet, (1955); In the ovaries of *Cynosurus effusus* Soc. Sci. Nat. Phy. Malç., 1959.

\*\**Tilletia salzmännii* Maire, (1937); on *Koeleria salzmännii* Boiss. & Reut. : Plate of Ito, 1921. 1450 m

**Order: Urocystales****Family: Melanotaeniaceae**

\*\**Melanotaenium cingens* Bref., (1892), (Beck) Magnus; On the stems of *Linaria tristis* (L.) Mill : Ito, 1450 m.



**Family: Urocystidaceae**

*Tuburcinia asphodeli* Massenot, (1955); on leaves of *Asphodelus* (*Cerasiferus*?) Soc. Sci. Nat. Phy. Malç & Bert., 1959.

*Tuburcinia ficariae* (Unger) Liro, (1922); on leaves and petioles of *Ranunculus ficaria* ssp. *ficariiformis*. Soc. Sci. Nat. Phy. Malç., 1959.

\*\**Tuburcinia ranunculi* (Lib.) Liro, (1922); on *Ranunculus flabellatus* Desf., *R. aleae* Willk. : Azrou.

**Order: Ustilaginales**

**Family: Cintractiaceae**

\*\**Cintractia hypodites* (Schltld.) Maire, (1907), (= *Tranzscheliella hypodytes* (Schltld.) Vánky & McKenzie, 2002); on *Branchyopodium ramosum* (L.) R. & Sch., *Haynaldia bordeacea* (Coss. & DR.) Hack.: Azrou & Ari Hebri, 1800-2000 m.

**Family: Glomosporiaceae**

\*\**Sorosporium saponariae* F. Rudolphi, (1829), (= *Thecaphora saponariae* (F. Rudolphi) Vánky, 1998); on *Arenaria pungens* Clem., *Cerastium gibraltarium* Boiss. var. *Boissieri* (Gren.) Pau. *Dianthus virgineus* L.: Aguelman Sidi-Ali, 2000 m.

**Family: Ustilaginaceae**

*Ustilago avenae* (Pers.) Rostr., (1890); in the spikelets of *Avena sterilis* C. R. Soc. Sci. Nat. & Phy. Malç., 1959.

\*\**Ustilago bromivora* (Tul. & C. Tul.) A. A. Fisch. Waldh., (1867); on *Bromus macrostachys* Desf., *B.*

*madrilensis* L., *B. sterilis* L., *B. tectorum* L., *B. rubens* L., *B. bordeaceus* L : Azrou 1600 m, Ari Hebri, 1900 m & Ifrane, 1700 m.

\**Ustilago cynodontis* (Pass.) Henn., (1893); on *Cynodon dactylon* versant at Ait Oufellah, near Itzer. Malç., 1967.

\*\**Ustilago duriaeana* Tul. & C. Tul., (1847); on *Cerastium glomeratum* Thuill. : El Hajeb

*Ustilago hypodytes* (Schltld.) Fr., (1832). C. R. Soc. Sci. Nat. & Phy. Malç., 1959. On steams of *Haynaldia bordeacea*.

\*\**Ustilago lychnidid-dioicae* (DC.) Liro; on *Melandrium album* (L.) Garck, *M. latifolium* (Poiret.) Maire: Ifrane, 1700 m.

*Ustilago nuda* (C. N. Jensen) Rostr., (1889), (= *Ustilago nuda* f.sp. *bordei* Schaffnit, 1928); on *Hordeum hexastichum* C. R. Soc. Sci. Nat. & Phy. Malç., 1959.

*Ustilago ornithogali* (J. C. Schmidt & Kunze) J. G. Kühn, (1875), (= *Vankya ornithogali* (Schmidt & Kunze) Ershad, 2000); on leaves of *Gagea (foliosa?)*. C. R. Soc. Sci. Nat. & Phy. Malç., 1959.

*Ustilago otophora* (Lavrov) Gutner, (1941), (= *Tranzscheliella otophora* Lavrov, 1936); on *Stipa lagascae* C. R. Soc. Sci. Nat. & Phy. Malç., 1959

*Ustilago violacea* (Pers.) Roussel, (1806), (= *Microbotryum violaceum* (Pers.) Deml & Oberw., 1982), sensu auct., (= *Microbotryum dianthorum* (Liro) H. Scholz & I. Scholz, (1988); in the anthers of *Melandrium divaricatum*. C. R. Soc. Sci. Nat. & Phy. Malç., 1959.

**4 CONCLUSION**

The catalog obtained after assembling a solid bibliographic data, updating, systematic and nomenclatural gave a global and clear view of the wealth and variety of both quantitative and qualitative fungal of Morocco and especially that of the Middle Atlas. This wealth of previously expressed fungal reign (1937-1975) focuses on a history of a continuous struggle to defend and promote mycology within the life sciences. This bibliographic catalog lists 1486 taxa in four divisions. 1032 species only Division Basidiomycota divided into 24 orders, 68 families and

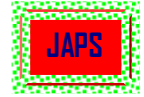
184 kinds is a division that most surveyed by the ancient mycologists in the area of the Middle Atlas. The inventory project of the higher fungi of Morocco is in itself a very important event for the advancement of mycological work. The bibliographic inventory currently allows opening the way for other projects mycological projects of the Moroccan territory. In this domain, much remains to be done, especially in a little explored area as the Middle Atlas that can accommodate new species not yet encountered in Morocco.

**5 BIBLIOGRAPHICAL REFERENCES:**

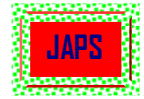
Abourouh M., 2000. Mycorrhizes et Mycorrhization des principales essences forestières du Maroc. Thèse de Doctorat d'Etat, université, Md V- Agdal, Faculté des sciences de Rabat, Maroc, 100-108.

Abourouh M. et Najim L., 1995. Les différents types d'ectomycorhizes naturelles de *Cedrus atlantica* Manetti au Maroc, 337-339.

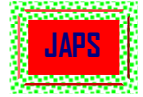
Abourouh M., Lamhamdi M. et Fortin J., 1995. Technique de mycorrhization en pépinière des plants forestiers, 14-15.



- Ait Aguil F., El Houssni A., Ouazzani Touhami A., et Douira A., 2002. Contribution à la connaissance des gastéromycètes (Basidiomycètes) de la forêt de la Mamora. *Ann. Rech. For. Maroc*, T (35), p : 77-87
- Ait Aguil F., 2005. Contribution à l'étude de la biodiversité de la flore fongique des forêts du Rif oriental et occidental et des Gastéromycètes de la Mamora. Thèse de Doctorat, Université Ibn Tofaïl, Faculté des Sciences, Kénitra, Maroc, 146p.
- Anonyme, 1995. La nature : Les champignons. Le livre de Paris, Hachette, 174-295.
- Baier J., Vancura B., Dubourg M., Hériveau P., 1992. Les champignons toxiques : les connaître pour les éviter. Ed. Gründ, 183p.
- Becker G., 1980. Champignons. Edi. Gründ, 223 p.
- Becker G., 1996. Champignons. Edi. Gründ, 32-288.
- Bertault R., 1964a. Amanites du Maroc, *Bull. Soc. Myco. Fr.*, 80(3): 364-384
- Bertault R., 1965a. Amanites du Maroc (Deuxième contribution). *Bull. Soc. Myco. Fr.*, 81(3): 345-371
- Bertault R., 1978a. Russules du Maroc, *Bull. Soc. Myco. Fr.*, 94(1): 5-31.
- Bertault R., 1978b. Lactaire du Maroc. *Bull. Soc. Myco. Fr.*, 94(3): 273-288.
- Bertault R., 1979. Bolets du Maroc. *Bull. Soc. Myco. Fr.*, t. 95(3):297-318
- Bertault R., 1980. Amanites de Maroc (Troisième contribution). *Bull. Soc. Myco. Fr.*, 96(3):271-287.
- Bouchet P., 1979. Abrégé de cryptogamie. Préface du Pr. J. L. Guignard, 110-139.
- Chaumeton H., 1981. Les champignons des bois de conifères, comment les reconnaître, 63 p.
- Chaumeton H., 1981. Les champignons des bois feuillus, comment les reconnaître, 63 p.
- Chaumeton H., 1982. Les champignons des bois (feuillages caducs), comment les reconnaître, 63 p.
- Chillasse L., 2001. Valeurs et fonctions écologiques des Zones humides du Moyen Atlas (Maroc). *Humedales Mediterráneos*, 1 (2001) 139 – 146 SEHUMED, Valencia (España)
- Chu-Chou M., 1979. Mycorrhizal fungi of *Pinus radiata* in New Zealand. *Soil Biol. Bioch.*, 11 : 557-562.
- Courtecuisse R. et Duhem B., 2000. Guide des champignons de France et d'Europe. Delachaux et Niestlé S. A. Lausanne (Switzerland), Paris, 409 p.
- Danielson R. M. , 1984. Ectomycorrhizal associations in jack pine stands in northeastern Alberta. *Can. J. Bot.*, 62: 932-939.
- Derak M., 2003. Contribution à l'estimation de l'espace vital de croissance et des conditions de mortalité du cèdre de l'Atlas. Cas de la cédraie de Sidi M'Guild (Moyen Atlas). Mémoire pour l'obtention du diplôme d'ingénieur des eaux et forêts. 30-31.
- El Assfour A., Ouazzani Touhami A., Zidane L., M. Fennane & A. Douira, 2003. « Inventaire des spécimens fongiques de l'Herbier national de l'Institut Scientifique de Rabat ». *Bulletin Scientifique, Rabat, section Science de la vie*, n°25, 1-23.
- El Assfour A., Ouazzani Touhami A., Douira A., 2004. « Etude de quelques espèces d'Agaricus de la forêt de la Mamora » *Bulletin de l'institut Scientifique, Rabat, section Sciences de la vie*, n° 26-27, 1-5.
- El Assfour A., Ouazzani Touhami A., Douira A., 2005. « Etude de quelques lactaires de la forêt de la Mamora ». *Bulletin de la Société Mycologique des Hautes-Voges*, 10 : 14-19.
- El Assfour A., Ouazzani Touhami A., Douira A., 2006 a. «Inventaire des champignons comestibles de la forêt de la Mamora (Maroc) ». *Bulletin de l'Association Entrevalaise de Mycologie et de Botanique Appliquée (Entrevaux), France*, n° 46 : 5-9
- El Assfour A., Ouazzani Touhami A., Douira A., 2006 b. «Etude de quelques Russules de la forêt de la Mamora (Maroc) ». *Bulletin de la Société Mycologique de Strasbourg, France*, n°25, 1-7.
- El Assfour A., 2006. Biodiversité fongique du Maroc : Inventaires et étude des Basidiomycètes de la forêt de la Mamora. Thèse de Doctorat, Université Ibn Tofaïl, Faculté des Sciences, Kénitra, Maroc, 294p.
- Fennane M. & Ibn Attou M., 1998. Catalogue des plantes endémiques, rares ou menacées du Maroc. A paraître dans *Boccone*, n° spécial.
- Grogan, H. M; O'Neil, J. J. M and Mitchel, D. T. 1994. Mycorrhizal association of Stika- spruce seedlings propagated in Irish tree nurseries. *Eur. J. For. Path.*, 24: 335-344.



- Guinier P., 1935. Rôle des végétaux hétérotrophes dans les premiers stades de l'évolution des forêts d'origine récente. C. R. Soc. Bio.118
- Haimed M., Ouazzani Touhami A., Douira A., 2004. « Etude de quelques espèces de lépiotes collectées dans la Mamora, Benslimane et le Rif (Maroc) ». Bulletin de l'Institut Scientifique, section Sciences de la Vie, 2004-2005, n°26-27, 13-18.
- Haimed M., Benkirane R., Ouazzani Touhami A., Douira A., 2005. « Les champignons alimentaires sauvages du Maroc : situation et perspectives » Bulletin des Mycologues du Luxembourg Belge, 3 : 21-26.
- Haimed M., Ouazzani Touhami A., Laurent P., & Douira A., 2006. « Etude de l'évolution des caractères macroscopiques d'un *Gymnopilus* méditerranéen : *Gymnopilus suberis* (Maire) Singer. » Bulletin de la Société Mycologique des Hautes-Vosges, N° 11, 14-20
- Haimed M., 2007. Biodiversité fongique du Maroc : Etude des champignons Basidiomycètes du Plateau Central et des Jardins Exotiques. Thèse de Doctorat, Université Ibn Tofaïl, Faculté des Sciences, Kénitra, Maroc, 278p.
- Hocine H., Perrin, R. L. and Belarbi, R. 1990. Variation of mycorrhizal association of *Cedrus atlantica Manetti*, the example of Tala Guilef Forest . 8 th congress of the Mediterranean Phythopathological Union, Agadir, Morocco.
- Khabar L., 1992. Etudes pluridisciplinaires des truffes du Maroc et perspectives pour l'amélioration de production des « Terfess » de la forêt de la Mamora. Thèse de Doctorat d'Etat es-Sciences. Université Mohammed V-Agdal, Faculté des Sciences, Rabat, Maroc, 167p.
- Larouz B., 2002. Contribution à l'étude des Hyménomycètes de la forêt de la Mamora et du Moyen Atlas. Mémoire de DESS, Faculté des Sciences Kénitra, Université Ibn Tofaïl, Kénitra, 105p.
- Larouz B., Ouazzani Touhami A., & Douira A., 2005. Etude des Pezizales (Ascomycètes à ascocarpes) du Moyen Atlas. Bulletin de la Société Mycologique des Hautes-Vosges, N°10, La France, 26-38.
- Larouz B., Ouazzani Touhami A., & Douira A., 2006. Inventaire mycologique du genre *Coprinus* au Moyen Atlas (Maroc). Bulletin des Mycologues du Luxembourg Belge, n°3 /2006, 16-28.
- Laurent P., 2003. Regard sur les champignons: connaissance, identification, cueillette. Saed, UE, 117 p.
- Leson A., 1977. Je reconnais les champignons à lamelles, Paris, 208 p.
- Loiseau J., 1975. Les champignons supérieurs volume 2 Ed. Vigot. F Belgique : 154-164.
- Maire R., et Werner G., 1937. Catalogue raisonné des champignons connus jusqu'ici au Maroc. Mém. Soc. Sc. Nat. Maroc. 45: 1-148.
- Malençon G., 1937. Observations mycologiques. C.R. Soc. Sci. Nat. Phy. Maroc 4 : 26-27.
- Malençon G., 1938. L'horizon mycologique automnal des forêts du Moyen Atlas dans la région d'Azrou. Bull. Soc. Sci. Nat. Phy. Maroc 18: 62-72.
- Malençon G., 1940. La flore mycologique des cédraies. C. R. Soc. Sci. Nat. Pht. Maroc. 5: 12-15.
- Malençon G., 1973. Champignons hypogés du Nord de l'Afrique, Ascomycètes. *Persoonia* 7: 261-288.
- Malençon G., 1958b. Champignons du Moyen Atlas. 1<sup>re</sup> liste. C. R. Soc. Nat. et Phy. Maroc, 8: 188-191.
- Malençon G., 1959. Champignons du Moyen Atlas. 2<sup>ème</sup> liste. C. R. Soc. Nat. et Phy. Maroc, 25: 21-23.
- Malençon G., 1959. Champignons du Moyen Atlas. 3<sup>ème</sup> liste. C. R. Soc. Nat. et Phy. Maroc, 8: 44 - 46.
- Malençon G., 1960. Champignons du Moyen Atlas. 4<sup>ème</sup> liste. C. R. Soc. Nat. et Phy. Maroc, 8: 140-142.
- Malençon G. et Bertault R., 1967. Champignons du Moyen Atlas. 5<sup>ème</sup> liste. C. R. Soc. Nat. et Phy. Maroc, 47: 259-270.
- Malençon G. et Bertault R., 1969. Champignons du Moyen Atlas. 6<sup>ème</sup> liste. C. R. Soc. Nat. et Phy. Maroc, 49: 76-78.
- Malençon G. et Bertault R., 1970. Flore des champignons supérieurs du Maroc, Tome I. Faculté des sciences de Rabat, Maroc, 601 p.
- Malençon G. et Bertault R., 1975. Flore des champignons supérieurs du Maroc, Tome II. Faculté des sciences de Rabat, Maroc, 539 p.
- Maublanc A., 1946. Les champignons comestibles et vénéneux. Le chevalier Ed., Paris, Encycl. Prat. Nat., 22 : 144.



- Moreau C., 1978. Larousse des champignons, Ed. France, 316 p.
- Outcoumit A., Yamni K., Ouazzani Touhami A., & Douira A., 2004. Suivi au laboratoire du développement des carpophores de *Gymnopilus suberis* (Maire) Singer sur des fragments de bois de *Quercus suber*. Bulletin de l'Institut Scientifique, section de Sciences de la Vie, 2004, n°26.
- Poumarat S. 2001. Clé des Gastéromycètes épigés d'Europe (Lycoperdales, Nidulariales, Phallales, Sclérodermatales, Tulostomatales). Monographie Mycologique de la FAMM. Edition FAMM n°2, Nice, 96 pp.
- Pujos A., 1966. Annales de la recherche forestière au Maroc, Tome 8. Ed. Technique Nord-Africaines : 61-72.
- Romagnési H., 1995. Atlas des champignons d'Europe, 240 p.
- Saafadi M., 2003. Contribution à l'évaluation des reboisements du cèdre de L'Atlas (*Cedrus atlantica* Manetti dans le Moyen Atlas central.) Mémoire du diplôme d'ingénieur des eaux et forêts, p. 15-20.
- Slézec A. M., 1995. Les champignons. Ed., liber SA., Genève (Suisse), 268 p
- Thibault M., 1989. 250 champignons du Québec et de l'Est du Canada. Ed. du Trécaré, Saint-Laurent (Québec) Canada, 267 p.
- Yamni K., Outcoumit A., Douhou N., Ouazzani Touhami A., & Douira A., 2005. Etude de quelques Basidiomycètes comestibles du platane de la ville de Kénitra (Maroc). Bulletin de l'Institut Scientifique, section Sciences de la Vie, 2004-2005, n°26-27, 19-23.