BUTLLETÍ

SOCIETAT MICOLÒGICA VALENCIANA

Nº 6 2001

FUNDACIÓN MUNICIPAL
ESCUELA DE JARDINERIA Y PAISAJE
EXCM. AJUNTAMENT DE VALÉNCIA

ISSN 1135-2833

Dipòsit Legal: V-3252-1995

Impressió: Gráficas BORMAC, S.L.

CORTINARIUS BOMBYCINUS, SP. NOV., A NEW SPECIES OF SUBGENUS *TELAMONIA*, SECTION *SERICEOCYBE*, DEVELOPPED UNDER *CISTUS* SPP. IN *QUERCUS ILEX* FOREST.

RAFAEL MAHIQUES(1) **& ALFREDO BURGUETE**(2)

(1) Dr. Climent, 26. E-46837 Quatretonda (València) (Societat Micològica Valenciana)
E-mail: rmahiques@eresmas.net

(2) Les Parres,12. 12190 Borriol (Castelló) (Societat Micològica Valenciana)

Abstract. MAHIQUES, R. & BURGUETE, A. (2001). *Cortinarius bombycinus*, sp. nov., a new species of subgenus *Telamonia*, section *Sericeocybe*, developped under *Cistus* ssp. in *Quercus ilex* forest. *Butll. Soc. Micol. Valenciana* 6: 245-248.

Cortinarius bombycinus is proposed as a new species belonging to subgenus *Telamonia*, section *Sericeocybe* P.D. Orton & J. Melot. Also with some characteristics of the sections *Semivestiti* M.M. Moser, *Muricini* J. Melot and *Incrustati* J. Melot, have this distinctive feature: veil very abundant, gills with violaceous hue, reddish stipe context, cap cuticle coarsed incrusted and coarsed ornamented elliptic spores.

Key words: Systematics, *Telamonia*, *Sericeocybe*, *Cortinarius bombycinus*, *Cistus* spp. in *Quercus ilex* forest, Iberian Peninsular area.

SYSTEMATIC

Cortinarius bombycinus Mahiques & Burguete, sp. nov., belonging to subgenus *Telamonia* (Fr.: Fr.) J. G. Trog, section *Sericeocybe* P.D. Orton & J. Melot.

MATERIAL AND METHODS

Macro and microscopic morphological characteristics of two collection of *Cortinarius bombycinus* has been studied in an area of 200 m^2 with a total of 36 specimens deposited in MES herbarium (particular herbarium of R. Mahiques, Quatretonda, València, Spain), including holotype and isoparatype.

Statistical measures has been obtained with a personal method including data in an Excel program. For sporal volum has folowed Breitenbach & Kränzlin formula (1991: 15).

LATIN DIAGNOSIS

Pileo 1-2 cm lato, plane convexo, ad peripheriam infracto, obtuse umbonato, explanato vel depresso; parum hygrophano, udo obscure brunneo-castaneo, centro obscuriore et ad marginem brunneo pallido; luteo-brunneo in sicco; haud sulcato; omni dense conspecte albo fibrilloso sericeo-lucido obsito; margine inflexo, cortina abundanti fibrillosa et cottonea ornato. Lamellis emarginatis, subcrassis, parum ventricosis juxta stipitem, distantibus, usque 0,3 cm latis, primum brunneo-griseolis cum tinctu debile violaceo, aetate uniformiter cinnamomeis; acie regulare et concolore; lamellulis abundantibus. Sporis in cumulo cinnamomeis. Stipite cylindraceo, aequali vel basi vix attenuato, 0,3-0,5 cm crasso, 2-3 cm altitudine, albo sericeo-fibrilloso, tinctu debili subrubello-violaceo; fragmenta veli et cortinae persitentia, albidula; cingulo ornato distincto, copiosissimo, subperonato praedito. Carne brunnea pallida, sub cute pilei obscuriore; rubra in stipite, praesertim in superiore parte; miti, inodora. Omne carposoma aetate fere nigrescit.
Pileipelle pigmento incrustante crasso praedita, seccionem Incrustatam J. Melot aemulans. Basidiis tetrasporis. Acie fertili. Sporis ellipsoideis, interdum navicularis, valde crassis verrucosis, subcrustatis et extrema linea dentatis: P10-P90= (8) 9-10,6 (12) x 5-5,5 (6) µm. Md= 9,5 x 5,5 µm. Mo= 9,5 x 5,5 µm. Mn= 8 x 5 µm. Mx= 12 x 6 µm. Mme= 8 x 5 µm. MME= 12 x 5,5 µm. Q= (1,5) 1,6-2 (2,2). Qm= 1,8. V= (104,6) 122-169,9 (189,8) μm^3. Vm= 146,6 μm^3. N=20.

HISPANIA, Teruela, S. Agustín, Mas de Andrés, 900 m., UTM 30 T XK 988369, in quercetis, Quercubus illicibus subsp. rotundifoliis et Q. fagineis composito, sub Cistus laurifolius et C. salviifolius, in solo arenoso; aliquii caespitosis, 26-X-2001, leg. *A. Burguete*, Holotypus nº 3779 in auctoris herbario MES (R. Mahiques). Ibidem, Isoparatypus MES-3780.

Etimology:

Bombycinus: Due to over developped silky veil.

Macroscopic description:

Pileus 1-2 cm, plano-convex, periphericaly infracted, hardly umbonated, even central depressed; faintly hygrophanous, at first uniformeous dark chestnut-brown, later, because of dehydration, become pale brown with yellow hue, always with darker center; without peripheral striations; cap surface when joung conspicuous withish silky-fibrillose from veil remnans; margin inflexed, matted and appendiculated. Gills emarginate, thick, distant, about 30 altogether, till 0,3 cm broad; in the beginning something ventricose; edge regular and homomorphic; plenty intermediate gills; brown-greyish with lilac hue when joung; cinnamon with age. Spore print cinnamon. Stipe 2-3 x 0,3-0,5 cm, cilyndric, equal or slightly attenuate at extreme base; silky-whitish with moderate reddish-lilac hue; veil and cortina whitish and copious, persistents, sheathing his

lower part that become peronate in early stage. Context pale brown, darker in subcuticular area of pileus; reddish in the stipe, mostly in the upper portion. Odor and flavourless. All the fruit body finaly tend to blaken.
Icon.: P.134.

Chemical reactions:

KOH 20% dark greyish brown in the context; PhA positive.

Microscopic description:

Pileipellis like *Incrustati* J. Melot. Gill edge homomorphic with some clavate sterile cells. Basidia tetrasporic. Spores elliptics, some naviculate, distinctly and coarse verrucose, crust-like, with toothed profile. P10-P90= (8) 9-10,6 (12) x 5-5,5 (6) µm. Md= 9,5 x 5,5 µm. Mo= 9,5 x 5,5 µm. Mn= 8 x 5 µm. Mx= 12 x 6 µm. Mme= 8 x 5 µm. MME= 12 x 5,5 µm. Q= (1,5) 1,6-2 (2,2). Qm= 1,8. V= (104,6) 122-169,9 (189,8) μm^3. Vm= 146,6 μm^3. N=20. Spores from spore print are smaller than those taked directly from the gills, belonging the greater spore, 12 x 5,5 µm, to the last source, being finded still bigger, 12 x 6,5 µm, but has been excluded from the study for her uncommon singularity.

Habitat and ecology:

SPAIN. Teruel, S. Agustín, Mas de Andrés, 900 m., UTM 30 T XK 988369, *Quercus ilex* subsp. *rotundifolia* and *Q. faginea* forest, under *Cistus laurifolius* and *C. salviifolius*, on soil with sandy component; some specimens caespitose; 26-X-2001, leg. *A. Burguete*, MES-3779 (Holotype). Ibidem, MES-3780 (Isoparatype)

Systematic discussion:

The closely related species *C. impolitus* Kauffman has not ephemeral lilac hue in the gills, stipe more slender, not reddish shades in the stipe context, carpophore not blaken with increasing age and spore form different, narrower and warts not so coarse (M. CONTU & S. LA ROCCA, 1999). *C. impolitus* has also a brownish stipe and spores more slender, with a Q mean value that can vary from 2 to 2,35 (M. MOSER, pers. comm.).
C. hebelomoides J. Favre live under *Alnus*, has earthy smell, spore-form, size and decoration different as well as pileipellis with warts not so coarse (J. FAVRE, 1960).
C. cistophilus Rob. Henry & Contu has acute and blackish umbo, gills without lilac shades, sparse veil, rafanic smell context, bitterish and sharp taste as well as spores with warts not so coarse (ROB. HENRY & M. CONTU, 1989: 51)
C. subcaninus R. Maire (=*C. xerophilus* Rob. Henry & Contu) has pileus not so dark, more sparse veil, gills brighter lilac at early stage and spores for the Section *Anomali* Konrad & Maublanc, broader and not so coarse ornamented (ROB. HENRY & M. CONTU, 1986: 63)

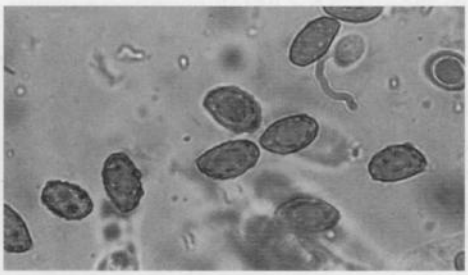
C. cucumisporus M.M. Moser has more sparse veil, lack of lilac shades in the gills, lack of redish context in the stipe, spores softer ornamented and different habitat, in the Alpine area. (M.M. MOSER, 1983: 12)

Acknowledgments:

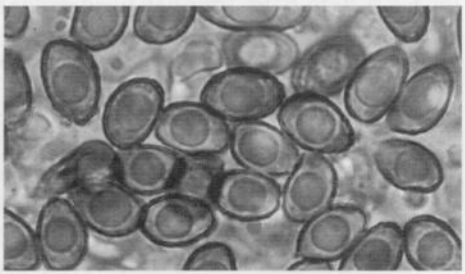
To M. Moser, M. Contu and A. Bidaud for revision of holotype, as well as advice and support for isolate and relate this new species that we propose.

Abbreviations of statistical measures:

M= Arithmetical mean value of sporal lengh (L) or sporal wide (l). Md= Arithmetical median. MME= Value of the greatest spore. Mme= Value of the smaller spore. Mn= Smallest sporal value (L or l) of the conjunct. Mo= Mode or more repeated value. Mx= The greatest sporal value (L or l) of the conjunct. N= Samples number. P10-P90a= Accumulate interval within percentils 10 and 90 of the sporal measures. Q= Sporal lengh / sporal wide. Qa= Accumulate interval within percentils 10 and 90 of Q. Qm= Q arithmetical mean value. Qma= Q accumulate arithmetical mean value. Va= Accumulate interval within percentils 10 and 90 of the sporal volume. Vm= Mean sporal volum. Vma= Accumulate mean sporal volum.



Spores of *C. bombycinus*



Spores of *C. subcaninus*

REFERENCES

BREITENBACH, J. & KRÄNZLIN, F. (1991). *Champignons de Suisse. Bolets et champignons à lames.* 1ère. partie. Vol. 3. Edition Mykologia. Luzern.

CONTU, M. & LA ROCCA, S. (1999). *Fungi non delineati*, Pars IX. *Entità micologiche rare o interesanti dalla zona mediterranea insulare italiana.* 48 pp. Mykoflora. I-Alassio- (SV).

FAVRE, J. (1960). *Catalogue descriptif des champignons supérieurs de la zone subalpine du Parc National Suisse.* F. Flück-Wirth, Reprint. Teufen, Switzerland.

HENRY, ROB. & CONTU, M. (1986). Description d'une nouvelle spèce xero-termophile: *Cortinarius xerophilus*, sp. nov. *Doc. Mycol.* XVI(63-64): 63-5 (1986)

HENRY, ROB. & CONTU, M. (1989). Cortinaires rares ou nouveaux. *Doc. Mycol.* XX (77): 53-67.

MOSER, M. (1983). Notizen zu einigen Cortinarien aus der Untergattung *Telamonia. Mycologia Helvetica* I (1): 1-16.