Ten wood-inhabiting agarics from Cuba

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After studying specimens of macro fungi collected in Cuba, ten species of wood-inhabiting agarics were identified belonging to genera Chaetocalathus, Gymnopilus, Hohenbuehelia, Lentinus, Marasmius, Oudemansiella, Pleurotus, and Xeromphalina. Uncommon or rare species include Gymnopilus palmicola, Hohenbuehelia nigra, Marasmius haematocephalus, Pleurotus pulmonarius, and Xeromphalina tenuipes. Other species mentioned in the article are rather abundant or common in Cuba.

Key words: Cuba, Agaricales, hosts, distribution, subtropics.


Z početných sběrů makromycetů na Kubě bylo určeno 10 druhů dřevních lupenatých hub náležejících do rodů Chaetocalathus, Gymnopilus, Hohenbuehelia, Lentinus, Marasmius, Oudemansiella, Pleurotus a Xeromphalina. Z nich k nehojným nebo vzácným druhům patří Gymnopilus palmicola, Hohenbuehelia nigra, Marasmius haematocephalus, Pleurotus pulmonarius a Xeromphalina tenuipes. Ostatní v článku uváděné druhy jsou na Kubě dosti hojné nebo obecně rozšířené.

INTRODUCTION

During field work in Cuba (19 November 1966–9 April 1967), the first author collected a large number of various fungi, which are currently kept in the herbarium of the Mycological Department of the National Museum in Prague (PRM). A considerable part of these collections were representatives of polypores and steroeid taxa, several of which have already been published (Kotlaba 1983, Kotlaba & Pouzar 2003, 2008, Kotlaba et al. 1984, Pouzar 2003, Vampola et al. 1994).

The present paper includes information on ten species of wood-inhabiting agarics based mostly on several of the aforementioned collections.

Thanks to collaboration with the late Cuban botanist J. Acuña and also the late Czech geobotanist J. Samek, most substrates of host trees or shrubs could be identified to the species level. We would like to note that many specimens of these ten agarics species were identified by the late Rolf Singer, world-famous agaric specialist, during his visits to PRM, on request of the first author.
Material and Methods

Wood-inhabiting agarics were collected only occasionally at many localities in the Cuban archipelago, mostly on dead trunks and branches of various trees and shrubs.

The collected agarics were photographed and tentatively identified in the field, later microscopically in Prague using a Zeiss Amplival microscope with oil immersion, magnification 1000×, in Melzer’s reagent and in Cotton blue lectophenol.

The localities of the collected species are arranged from west to east. The names of Cuban districts (provinces) are given in the current sense; if different at the time the fungi were collected, the former names are given in parentheses. Dates of collection are written in the form “3. II. 1967” (months in Roman numerals), whereas other dates (later identification, revision of specimens) are written in the form “23. 9. 1970” (months in Arabic numerals).

The names of the authors of this paper are abbreviated to F.K. and Z.P.

Results and Discussion

Chaetocalathus liliputianus (Mont.) Singer 1942
≡ Agaricus liliputianus Mont. 1854
≡ Pleurotus liliputianus (Mont.) Sacc. 1887
≡ Marasmius nidulus Berk. et M.A. Curt. 1868
≡ Crinipellis calosporus Pat. in Duss 1904

Brief description. A tiny white pleurotoid agaric without stipe, dorsally attached, pileus clothed with long, thick-walled, strongly pseudoamyloid hairs. Cystidia fusoid, thick-walled, strongly dextrinoid, in the upper half crystalline encrusted.

Material studied

Notes. According to Pegler (1983), it is a common Central American agaric species growing on fallen branches and twigs in large numbers; Dennis (1970) recorded it also in Venezuela and adjacent countries.

It was described from Cuba in 1868 under the synonymous name Marasmius nidulus (holotype in K – see Pegler 1983); however, it does not seem to be abundant in this country.
**Gymnopilus palmicola** Murrill 1913

≡ *Flammula palmicola* (Murrill) Murrill 1913
≡ *Gymnopilus aculeatus* (Bres. et Roum.) Singer s. Singer

**Brief description.** The habit of this species is mostly caespitose; it is also distinctive by aculeate scales on the pale ferrugineous to ochraceous pileus surface, stipe bearing a strongly developed veil which is fine squamulose on its margin.

**Material studied.**
Cuba. Prov. La Habana (W Cuba), City of Habana-Marianao, site called “Laguito”, in garden of the Biological Institute of the Cuban Academy of Sciences, on stump of the native palm *Roystonea regia*, 27. I. 1967, leg. F.K., det. D.N. Pegler 11. 3. 1988 (PRM 871141; Kotlaba 1983, as *Gymnopilus praefloccosus*).

**Notes.** This nice agaric species was described from Cuba and is also known from Florida (Murrill 1913) and Mexico (Hesler 1969). In Cuba it is apparently rather rare: it was firstly collected in the eastern part of this country [near Baracoa, Prov. Guantánamo (formerly Oriente), March 1903; herb. Underwood & Earle no. 1134], whereas our collection comes from the western part of Cuba (city of Habana, January 1967). The first mentioned find was made in spring, whereas our collection in winter.

**Hohenbuehelia nigra** (Schwein.) Singer 1951

≡ *Agaricus niger* Schwein. 1822
≡ *Pleurotus niger* (Schwein.) Sacc. 1887
≡ *Agaricus subbarbatus* Berk. et M.A. Curt. 1869
≡ *Hohenbuehelia subbarbata* (Berk. et M.A. Curt.) Singer 1951

**Brief description.** Very small stipeless agaric with broad attachment to the substrate; the pileus surface is dark fuscous to black, without hairs, but with globose “cells” having a short hyphal basis. Cystidia thick-walled, fusoid, reddish brown below, attenuate towards apex. Spores hyaline, smooth, thin-walled, amyloid and indextrinoid.

**Material studied.**

**Notes.** According to Pegler (1983), *Hohenbuehelia nigra* is found throughout the Caribbean area and in the southern region of North America. In Cuba, however, it seems to be rare or at least not abundant. Minter et al. (2001) report one collection as *H. subbarbata* from Cienfuegos (1968), and 12 records as *H. nigra* from the Caribbean. The taxon was described by Berkeley and Curtis in 1869 under the name *Agaricus subbarbatus* and already collected by Wright (holotype in K – see Pegler 1983).
Lentinus crinitus (L.: Fr.) Fr. 1825
≡ Agaricus crinitus L.: Fr. 1821
≡ Panus crinitus (L.: Fr.) Singer 1951
≡ Lentinus villosus Klotzsch 1833
≡ Lentinus wrightii Berk. et M.A. Curt. 1868
≡ Lentinus rigidulus Berk. et M.A. Curt. 1868
≡ Lentinus subcervinus Berk. et M.A. Curt. 1868

**Brief description.** An agaric very variable in carpophore size (which is probably the reason why it has been described under many different names – we have chosen only four of them for this paper), characterised by a coriaceous consistence, central stipe without veil, and deep infundibuliform pileus which is densely covered with long ferruginous, brown or black hairs.

**Material studied.**


**Notes.** Lentinus crinitus is mainly distributed in tropical and subtropical areas of the world, predominantly in Central America (Dennis 1970, Pegler 1983); Corner (1981), however, claims that he did not find it in SE Asia.

From Cuba, where it is a rather common species, it has been described three times: as Lentinus wrightii, L. subcervinus, and L. rigidulus – all by Berkeley and Curtis in 1868.
**Fig. 1.** *Gymnopilus palmicola*. W Cuba, Prov. La Habana, city of Habana-Marianao, site called "Laguito", in a garden, on stump of the palm *Roystonea regia*, 27 January 1967 (PRM 871141). Photo F. Kotlaba.

**Fig. 2.** *Hohenbuehelia nigra*. W Cuba, Prov. Pinar del Río, "mogotes" near Viñales, on dead lying branch of a frondose tree, 3 April 1967 (PRM 871130). Photo F. Kotlaba.
Fig. 3. *Lentinus crinitus*. W Cuba, Prov. La Habana, near El Salado close to Habana on fallen branch of *Eugenia buxifolia*, 22 January 1977 (PRM 871929). Photo F. Kotlaba.

Fig. 4. *Lentinus crinitus*. W Cuba, Prov. Mayabeque, near Güines, on fallen branch of a frondose tree, 8 March 1967 (PRM 871132). Photo F. Kotlaba.

Lentinus hirtus (Fr.) Murrill 1911

≡ Agaricus hirtus Fr. 1830
≡ Pleurotus hirtus (Fr.) Singer 1951
≡ Lentinus vellereus Berk. et M.A. Curt. 1868

Brief description. This agaric species produces rather large carpophores with finely tomentose pileus and stipe, and strongly decurrent lamellae; the gill edge is not denticulate.

Material studied

Notes. Lentinus hirtus is distributed in Central and South America as well as in Africa. From Cuba, where it is not abundant, it was already described as L. vellereus by Berkeley and Curtis in 1868 (holotype in K – see Pegler 1983). Newly it was reported from the provinces La Habana, Pinar del Río (according to the status in 2001), Santiago de Cuba, and Villa Clara documented by at least 9 herbarium specimens (apart from those mentioned in this article) by Minter et al. (2001).

Lentinus strigosus (Schwein.) Fr. 1825

≡ Agaricus strigosus Schwein. 1822
≡ Lentinus lecomtei Fr. 1825
≡ Panus rudis Fr. 1839
≡ Lentinus sparsibarbis Berk. et M.A. Curt. 1868
≡ Lentinus strigellus Berk. et M.A. Curt. 1868

Brief description. Lentinus strigosus is characterised by a tomentose covering of tufted hairs on the pileus, and microscopically by thick-walled large metuloids.

Material studied
Notes. The distribution of this species reaches from the temperate zone to the tropics; European mycologists treat it mostly as *L. lecomtei* or *L. rudis*. In Cuba it is not rare and was already described from this country by Berkeley and Curtis in 1868 under the name *L. sparsibarbis* as well as *L. strigellus* (both holotypes in K – see Pegler 1983). Minter et al. (2001) mentioned it from the provinces La Habana and Holguín as well as from Isla de la Juventud.

Marasmius haematocephalus (Mont.) Fr. 1838

≡ *Agaricus haematocephalus* Mont. 1837
≡ *Marasmius rhodocephalus* Fr. 1851
≡ *Marasmius sanguineus* Cooke et Massee 1889
≡ *Marasmius atropurpureus* Murrill 1915

Brief description. Very small *Marasmius* (pileus at most up to 0.5 cm wide) with purpur-reddish pileus surface, low number of distant gills, rather long (up to 20 μm) fusoid spores and distinct pleurocystidia.

Material studied

Notes. According to Mossebo & Antonín (2004) and Pegler (1983) it is a pantropical and subtropical species known from the southernmost USA through the Antilles to South America, Africa, Asia, New Zealand, and Papua-New Guinea.

In Cuba it is, however, rather rare. According to Minter et al. (2001) five collections in three provinces (Pinar del Río, La Habana, Ciudad de la Habana – according to the status in 2001) are known from this country.

Oudemansiella canarii (Jungh.) Höhn. 1909

≡ *Agaricus canarii* Jungh. 1838
≡ *Agaricus alphitophyllus* Berk. et M.A. Curt. 1860
≡ *Agaricus cubensis* Berk. et M.A. Curt. 1869
≡ *Agaricus cheimonophyllus* Berk. et M.A. Curt. 1869
≡ *Agaricus radiculosus* Cooke 1880

Brief description. Very variable agaric in size of carpophores as well as colour and presence or absence of remnants of squamules on pileus surface (for this reason this species possesses a rather rich synonymy – for this paper we have chosen only four of them). It has caps of very variable size (1–10 cm or more) covered with small brown scales (blackish on dried specimens); globose spores have a rather thick, smooth, hyaline wall.

Material studied

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Notes. *Oudemansiella canarii* has a pantropical and subtropical distribution: it has been recorded from the southernmost part of the USA up to N Argentina in the Americas, further in some countries of Africa as well as Asia (Pegler 1983).

From Cuba it was described twice by Berkeley and Curtis, as *Agaricus alphitophyllus* in 1860 and as *A. cheimonophylus* in 1860 (see Pegler 1983); Minter et al. (2001) mentioned 31 herbarium records from this country. It seems to be common in the Cuban archipelago.

**Pleurotus pulmonarius** (Fr.: Fr.) Quél.

≡ *Agaricus pulmonarius* Fr. 1821
≡ *Pleurotus ostreatus* f. *pulmonarius* (Fr.: Fr.) Pilát 1933

Brief description. This species has for a long time been considered only a form of the common *P. ostreatus* (Jacq.: Fr.) P. Kumm. It differs, however, by a whitish, pale yellowish to very light greyish cap, and by gills which turn yellow on its margin when drying in the open air. The sometimes mentioned smaller spores of *P. pulmonarius* are according to our experiences not a sufficiently reliable feature.

Material studied


Notes. *P. pulmonarius* had not yet been mentioned from Cuba and does not seem to be abundant there. In our opinion this species is not identical with the somewhat similar *P. djamor* (Rumph. ex Fr.) Boedijn.

**Xeromphalina tenuipes** (Schwein.) A.H. Sm. 1952

≡ *Agaricus tenuipes* Schwein. 1822
≡ *Agaricus hilarianus* Mont. 1837
≡ *Agaricus rheicolor* Berk. 1859
≡ *Marasmius anabilipes* Peck 1870
≡ *Marasmius pilopus* Kalchbr. 1880

Brief description. *Xeromphalina tenuipes* is characterised by a light-coloured cap with reddish brown centre (in dried specimens the whole cap is reddish
brown), a thin stipe covered by ferruginous hairs (forming a continual layer), and thin-walled amyloid spores.

**Material studied**


**Notes.** According to Dennis (1970), *Xeromphalina tenuipes* is the only South American species of its genus; he mentioned it from Trinidad and Venezuela, Pegler (1983) from the Lesser Antilles and Murrill (1913) from the SE part of the USA.

In Cuba, where it might be rather rare, it was already collected by Wright (see Pegler 1983), and according to Minter et al. (2001) it has been collected in the provinces Granma, Guantánamo and Santiago de Cuba (5 herbarium specimens).

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**References**


