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## A new polypore from Cuba: *Junghuhnia kotlabae*

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*Junghuhnia kotlabae* Pouzar, a new species of the genus *Junghuhnia* Corda em. Ryvarden (Aphylophorales) is described from two specimens collected on a fallen stem of the palm *Roystonea regia* on Cuba. It is characteristic by the effuso-reflexed carpophores with regular to somewhat prolonged pores and short, relatively broad spores as well as by the presence of two types of cystidia.

**Key words:** Basidiomycetes, Aphylophorales, *Junghuhnia kotlabae* Pouzar spec. nov., taxonomy.

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Je popsán nový druh rodu *Junghuhnia* Corda em. Ryvarden (Aphylophorales), *Junghuhnia kotlabae* Pouzar, na základě dvou položek sebraných na padlém kmenu palmy *Roystonea regia* (palma královská) na Kubě. Vyznačuje se polorozlitými plodnicemi s pravidelně okrouhlými až poněkud protáhlými póry a krátkými, dosti širokými výtrusy a hlavně přítomností dvou typů cystid.

### INTRODUCTION

During his investigation of larger fungi of Cuba (19. 11. 1966 – 19. 4. 1967), Dr. František Kotlaba collected there a rather representative collection of polypores of various groups (see Kotlaba 1988; Kotlaba and Pouzar 2003; Kotlaba, Pouzar and Ryvarden 1984; Vampola, Kotlaba and Pouzar 1994). Two characteristic and well-developed specimens have been the object of several attempts to identify them by both of us as well as by foreign specialists, but none of them was successful. Most probably the best solution of the problem is to describe it as a new species, named here *Junghuhnia kotlabae*.

## RESULTS

***Junghuhnia kotlabae* Pouzar spec. nov.**

Carposomata annua, effusoreflexa, cum pilcis, facile separabilia, molliter suberosa, pileis tenuibus, semicircularibus seu flabelliformibus, 3–13 mm latis, 0.8–1.1 mm crassis, superficie crasse molliter tomentosa, pallide cremea, leviter late zonata, contextu albido; tubulis 0.3–0.5  $\mu\text{m}$  longis, concoloribus, poris albido-cremeis seu pallide stramineis, 5–6 per mm, regulariter angulatis (iuventute rotundatis), in partibus carposomatum pileatis, saepe radialiter dispositis alicubi in partibus obliquis usque lamellas simulantibus. Systema hypharum dimiticum, hyphae generativae 2.5–4.5  $\mu\text{m}$  latae, tenuitunicatae, hyalinae, nodoso septatae; hyphae skeletales (tramae tubularum) ca 2.5–4  $\mu\text{m}$  latae. Basidia 11–20 (–26)  $\times$  5.5–7  $\mu\text{m}$ , late cylindrica, tetrasterigmatica. Cystidia bina: (1) crasse tunicata, cylindrica usque scepstriformia, haud septata, 40–50  $\times$  6–11  $\mu\text{m}$  cum incrustatione, 4–6.5  $\mu\text{m}$  lata absque incrustatione, pariete hyalina; (2) tenuiter tunicata, plerumque in dissepimentis tubulorum disposita, (25–) 37–47  $\times$  (6.5–) 7.5–8  $\mu\text{m}$ , vesiculiformia seu subcylindrica, absque incrustatione vel raro cum solo apice incrustato, basidiis similia sed longiora. Sporae 3.7–5.5  $\times$  3–4.2  $\mu\text{m}$ , breviter ovoideo-ellipsoideae, tenuiter tunicatae. Omnes tunicae hypharum, basidiorum sporarumque haud dextrinoideae, haud amyloideae acyanophilaeque.

Holotypus: Cuba, prov. Pinar del Rio, Soroa ap. San Cristóbal, ad truncum emortuum deiectum palmae *Roystonea regia*, 13. I. 1967 leg. F. Kotlaba (PRM 878650), in herbario Musei Nationalis Pragae asservatur.

Paratypus: ibidem, 3. II. 1967 leg. F. Kotlaba (PRM 870890).

## Description

Carpophores annual, easily separable from the substrate, usually effuso-reflexed or sessile, pileate to completely resupinate. Pilei thin, mostly fan-shaped or semicircular, 6–70 mm long, 3–13 mm wide and 0.8–1.1 mm thick; pileus surface broadly zonate, thickly soft tomentose, pale cream whitish. Pores 5–6 per mm, regularly angular, when young circular, in some pileate carpophores arranged radially and in some oblique places simulating short, anastomosed lamellae, pale cream to straw coloured, dissepiments thin, mostly faintly lacerate; tubes 0.3–0.5 mm long, concolorous with the context; broad margin of resupinate carpophores sterile, white.

Hyphal system dimitic throughout, generative hyphae 2.5–4.5  $\mu\text{m}$  wide, with clamp-connections, thin-walled or on some places slightly thick-walled; skeletal hyphae of (a) the trama of tubes 2.5–4  $\mu\text{m}$  wide, straight, unbranched, with thickened walls and narrow lumen, of (b) the context similar but slightly broader,

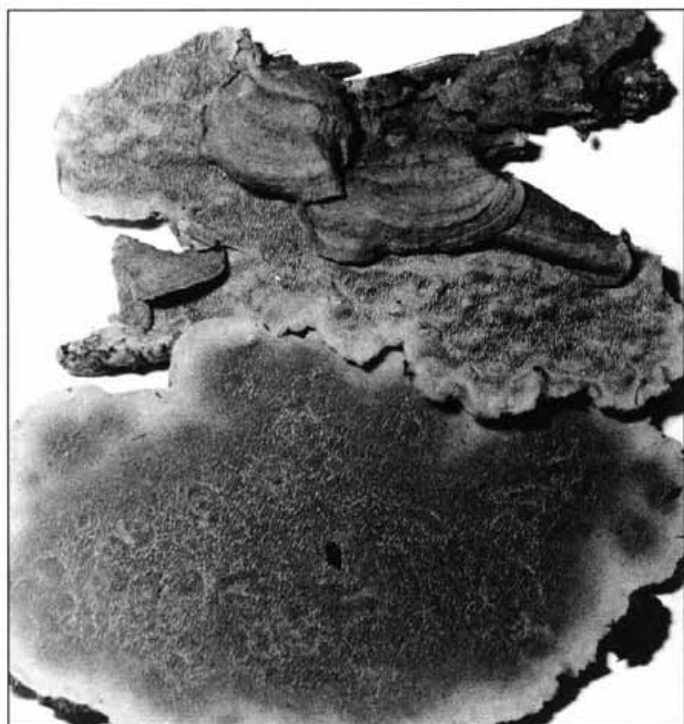
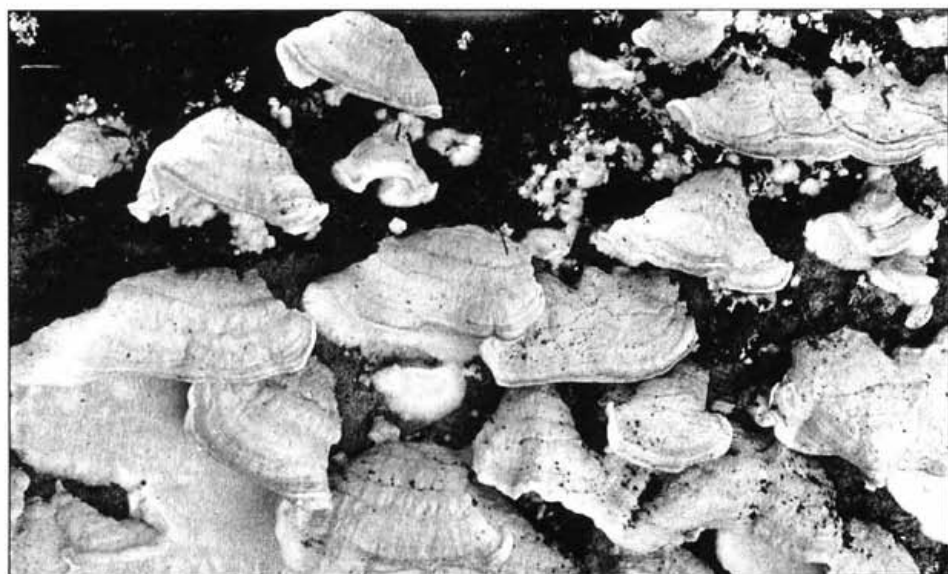


Fig. 1.-2. *Junghuhnia kotlabae*. Cuba, Soroa, on *Roystonea regia* (above fresh, below herbarium specimens), 3. 2. 1967 photographed by F. Kotlaba.



Fig. 3. *Junghuhntia kotlabae*. Spores. Scale bar = 5  $\mu\text{m}$ .

up to 5.5  $\mu\text{m}$ . Cystidia of two types: (a) thick-walled, 40–50  $\mu\text{m}$  long and 8–11  $\mu\text{m}$  wide with incrustations, or 4–6.5  $\mu\text{m}$  without incrustations, narrowly cylindrical-clavate to clavate with fusiform apex or sometimes scepstriform in the upper distal 1/3, with 1.5–2.3  $\mu\text{m}$  thick wall; the incrustations present in longer cystidia only in their apical part, in shorter cystidia in their 1/3–1/2 upper part (only exceptional incrustations on the entire length of the cystidium); basal part of cystidia mostly 5  $\mu\text{m}$  wide, (b) thin-walled cystidia (25–) 37–47  $\mu\text{m}$  long and (6.5–) 7.5–8  $\mu\text{m}$  wide (similar to sterile basidia, but larger), mostly present close to dissepiments, prolonged vesicular-ovoid to cylindrical, sometimes at the top slightly narrowed and rounded here, not incrustated or only rarely with rough incrustations, forming a little cap on the top, non-septate or sometimes with a central septum with a clamp-connection. Basidia 12–18  $\mu\text{m}$  long and 5.5–7  $\mu\text{m}$  broad, some longer basidia close to tube dissepiments 21–26  $\times$  5.5–6  $\mu\text{m}$ , shortly ventricose-clavate, at base abruptly narrowed, tetrasterigmatic, thin-walled; sterigmata almost straight, 3–4.5  $\mu\text{m}$  long and ca. 1  $\mu\text{m}$  wide at base. Spores 3.7–5.5  $\times$  3–4.2  $\mu\text{m}$ , shortly ovoid-ellipsoidal, with hyaline, glabrous and thin wall. Walls of all cells not swelling nor dissolving in a KOH solution, indextrinoid, inamyloid and acyanophilous.

The fungus is named after the collector, at the occasion of his 75<sup>th</sup> birthday (2002).

#### DISCUSSION

*Junghuhntia kotlabae* is characterised by the following features.

1) There are two types of cystidia present: a) thick-walled, for most part (especially in the top 1/3) roughly incrustated, b) thin-walled, mostly non-incrustated or sometimes roughly incrustated only at their tops (these cystidia were observed mostly in dissepimental parts of the tubes).

2) The spores are shortly ovoid and relatively broad, especially if compared with European species of the genus *Junghuhntia*.

3) The soft pubescence of the pileus surface and the absence of a hairy covering is also a characteristic feature.

The genus *Junghuhntia* Corda is now rather rich, but there are only two species which are similar and possibly related to *J. kotlabae*. The first one is the pileate

species *Junghuhnia complicata* S. Blumenfeld et J. Wright (1984), which has some generative hyphae with remarkably thickened walls, but has only one type of cystidia (thick-walled) and slightly narrower spores. Another similar species is *Junghuhnia undigera* (Berk.) Ryvarden (see Ryvarden 1984), in which also thin-walled cystidia are absent and the pilei tend to be even laterally stipitate.

Other species of *Junghuhnia* do not seem to be distinctly similar.

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