

## ***Coltricia grandispora* and *Tyromyces vitellinus*, two new polypores**

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**Key words:** Basidiomycetes, Aphylophorales, *Coltricia*, *Tyromyces*. – New species. – Mycota of Africa, Australia.

**Abstract:** *Coltricia grandispora* from the Seychelles and *Tyromyces vitellinus* from Australia are described as new. Besides detailed descriptions they are illustrated with colour photographs.

**Zusammenfassung:** Zwei Porlinge, *Coltricia grandispora* und *Tyromyces vitellinus*, werden als neue Arten beschrieben. Detaillierte Beschreibungen, farbige Abbildungen und Mikrozeichnungen werden gegeben.

During several visits to different areas in the southern hemisphere, one of us (A. HAUSKNECHT) has collected numerous polypores out of which two did not match any known description when pertinent literature was consulted (CUNNINGHAM 1965, QUANTEN 1997, RYVARDEN & JOHANSEN 1980), and thus assumed to be undescribed species. The colour designations are according to KORNERUP & WANSCHER (1975).

### ***Coltricia grandispora* RYVARDEN & HAUSKN., spec. nova (Figs. 1 a-d, 3 a)**

#### **Latin diagnosis:**

Ad *Coltriciam montagnei* (FR.) MURRILL, sed spora 11,5-14 × 7-9 µm (9-12 × 5-6 µm in *C. montagnei*).

**Typus:** Seychelles, Mahé island, Morne Seychellois National Park, Le Niol, 15. 3. 2006, A. HAUSKNECHT SE 14/06 (WU 26565, holotype; O, isotype).

#### **Characters:**

**Basidiocarps:** annual, centrally or slightly eccentrically stipitate, single, rarely 2-3 fused to more compound basidiocarps.

**Pileus:** 8-45(-60) mm in diam., up to 20 mm thick, mostly regularly circular, infundibuliform, even young with slightly depressed centre, later distinctly depressed, margin obtuse, involute, sometimes slightly incised; very young specimens camel, brown (6DE4), soon becoming darker, greyish brown, dark brown (7-8E4, 8F3-4),

finally nearly black with brownish hue, mostly distinctly sulcate to zonate, in centre nearly smooth, shining, velvety to tomentose near the margin.

**Pores:** slightly decurrent, irregular, up to 2 mm wide, slightly angular, radially elongated near the stipe, furcate in old specimens, rust brown.

**Tubes:** up to 5 mm long, concolorous with pores.

**Context:** hard, brittle, brown, without distinct smell, up to 2 mm thick.

**Stipe:** 13-40 mm long, 1-3.5 mm in diam., cylindrical to slightly enlarged towards the base, longitudinally fibrillose to tomentose, later nearly smooth, greyish brown to dark brown.

**Hyphal system:** monomitic; tramal hyphae thick-walled, brown, up to 5  $\mu\text{m}$  wide, hyphae of context more thin-walled, up to 10  $\mu\text{m}$  wide, all hyphae with simple septa.

**Basidiospores:** 11.5-14  $\times$  7-9  $\mu\text{m}$ ,  $Q = 1.3-1.7$ , ellipsoid, smooth, thick-walled, ochre yellow, without reaction in Melzer's reagent.

**Basidia:** clavate with 2 sterigmata, no basidia with 4 sterigmata observed even after prolonged search, 17-20  $\times$  8-10  $\mu\text{m}$ .

**Setal elements:** absent.

**Substrate and distribution:** Terrestrial, evidently not a wood-rotting fungus and probably ectomycorrhizal. The specimens were found on an exposed, steep slope of naked loamy soil, in open places and under low bushes. Known only from two islands of the Seychelles.

**Material examined (besides type):** Seychelles: Praslin island, Vallée de Mai National Park, 20. 3. 2006, A. HAUSKNÉCHT SE 25/06 (WU 26566).

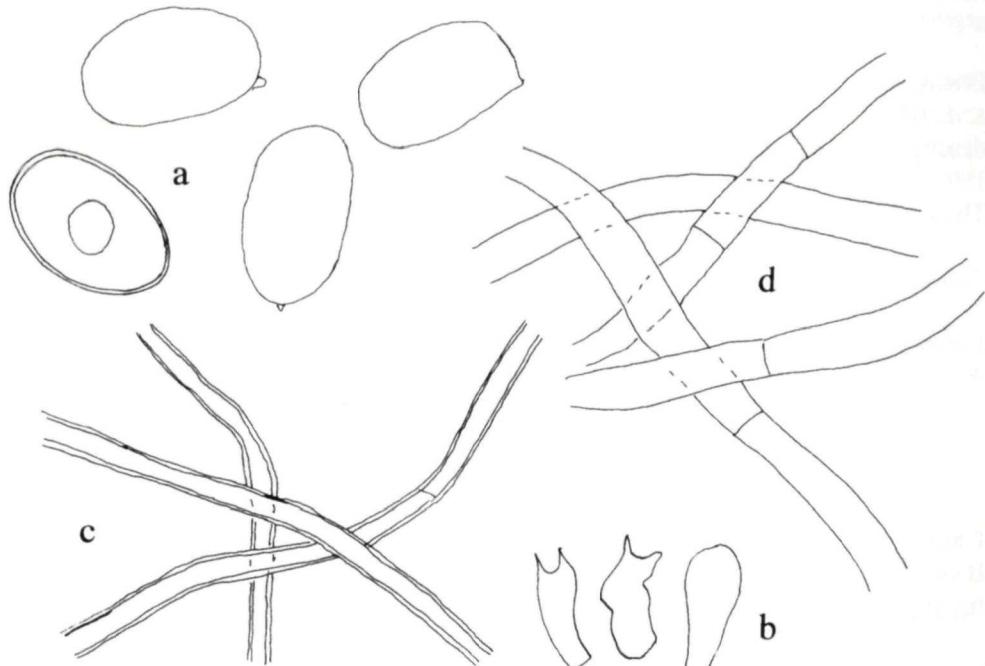


Fig. 1 a-d. *Coltricia grandispora* (holotype). a spores,  $\times 2000$ , b basidia,  $\times 800$ , c tramal hyphae,  $\times 800$ , d hyphae of context,  $\times 800$ .

**Comments:**

This is an extraordinary species by its huge spores, the largest hitherto known from the genus. *Coltricia montagnei* is undoubtedly related by also having large wide pores (1-3 mm wide and often irregular), but has smaller spores and besides much larger and more robust basidiocarps.

***Tyromyces vitellinus* RYVARDEN & HAUSKN., spec. nova** (Figs. 2 a-d, 3 b)**Latin diagnosis:**

Ad *Tyromycetum stramenticum* G. CUNN., sed pileus glaber (hirsutus ad fibrillosus in *T. stramenticus*).

**Typus:** Australia, Queensland, Daintree, Marrdjana Botanic Walk, 25. 3. 2003, A. HAUSKNECHT AU 78/03 (WU 25567, holotype; O, isotype).

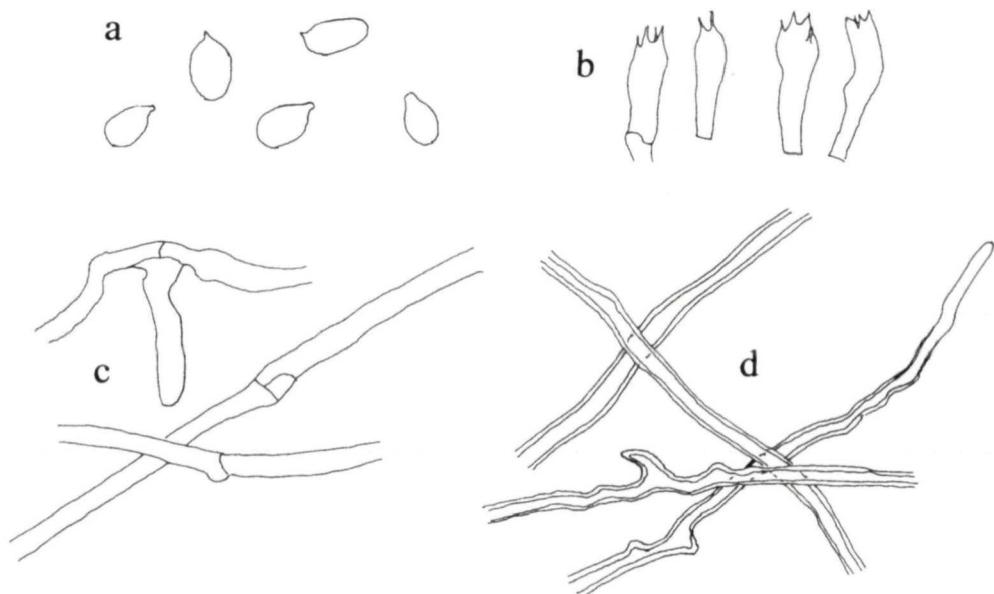


Fig. 2 a-d. *Tyromyces vitellinus* (holotype). a spores,  $\times 2000$ , b basidia,  $\times 800$ , c generative hyphae,  $\times 800$ , d skeletal hyphae,  $\times 800$ .

**Characters:**

**Basidiocarps:** annual, pileate, imbricate, up to four layers of pilei one upon the other, broadly attached to the substrate.

**Pileus:** 15-50 mm wide, 6-15 mm broad, up to 10 mm thick, applanate to slightly convex, semicircular to dimidiate, fresh colour like *Laetiporus sulphureus* (BULL.: FR.) MURRILL, pale yellow, yellow (3A4-6), later yellow, dark yellow, saffron yellow

(3-4A5, 4A5-7), becoming brownish when drying or bruised, almost smooth, only slightly felty at the margin, partly alveolate in older specimens; margin involute.

**Pores:** decurrent, round to slightly irregular, 2-4/mm, pale yellow to yellow.

**Tubes:** 2-2.5 mm long, pale yellow and concolorous with the pore surface.

**Context:** soft, yellow white to pale yellow, with sour taste and smell, not bitter, becoming brownish when bruised, up to 33 mm thick.

**Hyphal system:** dimitic; generative hyphae thin-walled, 3-5 µm broad, with clamp-connections, skeletal hyphae few and thick-walled, up to 5 µm broad, often irregularly flexuous.

**Basidiospores:** ellipsoid, smooth, hyaline, 3-4(-5) × 2-2.5 µm, in average 3.6 × 2.4 µm, Q = 1.3-1.5(-2.2), no reaction in Melzer's reagent.

**Basidia:** with 4, rarely 2 sterigmata, 15-23 × 5-7 µm, with basal clamp-connection.

**Cystidia:** none.

**Type of rot:** white rot.

**Substrate and distribution:** On lying, rotting stem of a deciduous tree (probably *Eucalyptus* spec.), gregarious (up to 50 pilei together), in mixed subtropical broad-leaved forest of mainly *Eucalyptus* trees. It is known only from the type locality.

### Comments:

The species is seemingly related to *T. stramenticus* G. CUNN. originally described from New Zealand by having almost identical basidiospores. However, the latter has a hirsute to fibrillose pileus and dimidiate to almost semistipitate caespitose basidiocarps, thus grossly different from the new species described here.

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Fig. 3 a. *Coltricia grandispora* (holotype). b. *Tyromyces vitellinus* (holotype). – Phot. INGRID HÄUSKNECHT.

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