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***Radulodon acaciae* sp. nov. from India**

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ABSTRACT — A new corticioid species, *Radulodon acaciae* is described, associated with trees of *Acacia nilotica* from Chandigarh (India).

KEY WORDS — *Agaricomycetes*, *Basidiomycota*, bark, odontoid

While conducting fungal forays in Chandigarh (India), Gurpreet and G.S. Dhingra made a few collections of resupinate, odontoid fungi associated with trees of *Acacia nilotica*. After comparison of macroscopic and microscopic features (Rattan 1977, Eriksson et al. 1981, Stalpers 1998, Nakasone 2001, Bernicchia & Gorjón 2010), the collections have been identified as a species of *Radulodon* based on their hydroid monomitic basidiocarps, slightly thick-walled, clamped hyphae, and broadly ellipsoid basidiospores. The new fungus is described here as *R. acaciae*, a species close to *R. erikssonii*. A portion of the basidiocarp was sent to Prof. Nils Hallenberg (Denmark), who confirmed the findings.

***Radulodon acaciae* G. Kaur, Avneet P. Singh & Dhingra sp. nov.**

FIGS 1–6

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Differs from *Radulodon erikssonii* by its brownish orange to brownish grey hymenial surface, its brownish tramal hyphae, its smaller, broadly ellipsoid to subglobose basidiospores, and its tropical South Asian distribution on *Acacia* (*Leguminosae*).

TYPE: India, Union Territory, Chandigarh, Sector-18-D park, on bark of tree of *Acacia nilotica* (L.) Delile, 1 September 2012, G.S. Dhingra 5982 (PUN, holotype).

ETYMOLOGY: The epithet refers to the substrate genus.

Basidiocarps resupinate, adnate, effused, ≤ 996 μm thick in section, hymenial surface hydroid with dense spines $\leq 3\text{mm}$ long, cylindrical and tapering to aggregated and flattened; brownish orange to brownish red to violet brown when fresh, becoming dark grayish on drying; margins wavy, very thin and

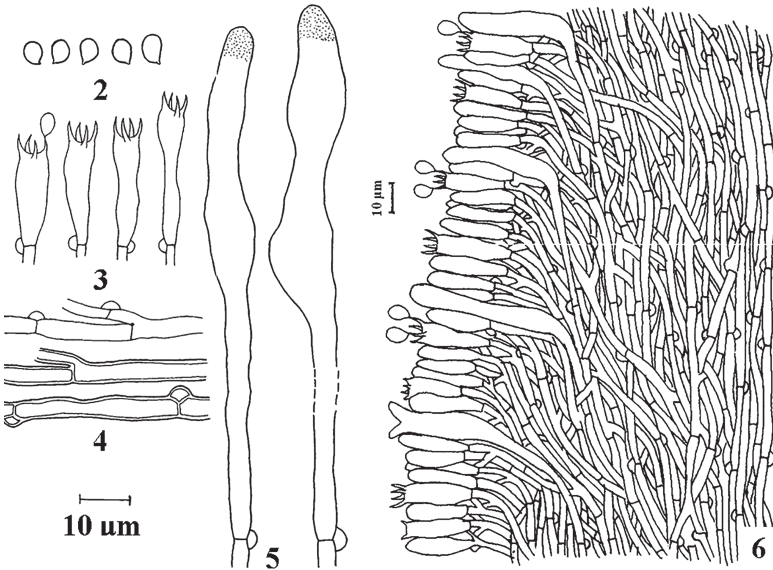
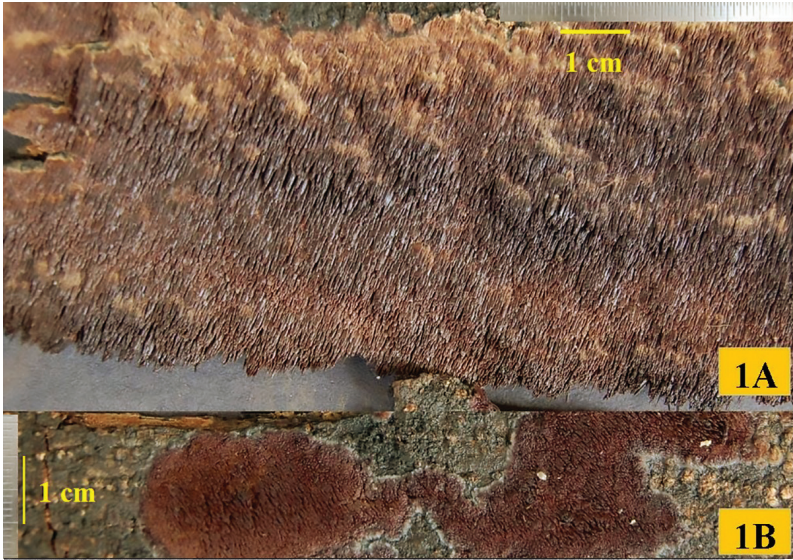


PLATE 1. *Radulodon acaciae* (holotype). 1A. Mature basidiocarp showing hydroid hymenial surface; 1B. Younger basidiocarp showing margins; 2. Basidiospores; 3. Basidia; 4. Hyphae; 5. Cystidia; 6 Vertical section through a portion of spine showing tramal hyphae, basidia, cystidia, and basidiospores.

greyish in young basidiocarps; thinning, paler concolorous, to indeterminate in mature basidiocarps. Hyphal system monomitic; generative hyphae $\leq 3.2 \mu\text{m}$ wide, branched, septate, clamped; basal hyphae intertwined and parallel to the substrate, tramal hyphae running more or less parallel, with thickened, light brownish walls; subhymenial hyphae compactly arranged, thin-walled. Cystidia $39\text{--}121 \times 8.2\text{--}13.5 \mu\text{m}$, clavate, thin- to slightly thick-walled, with resinous encrustation at the tip, originating in the trama and subhymenium but hardly projecting. Basidia $19.0\text{--}30.0 \times 5.2\text{--}6.5 \mu\text{m}$, clavate, 4-sterigmate, with basal clamp; sterigmata $\leq 3.0 \mu\text{m}$ long. Basidiospores $4.5\text{--}5.8 \times 3.5\text{--}4.2 \mu\text{m}$, broadly ellipsoid to subglobose, with thickened walls, inamyloid, acyanophilous.

ADDITIONAL SPECIMENS EXAMINED: INDIA, UNION TERRITORY, Chandigarh, back side of Sukhna Lake, on bark of *Acacia nilotica*, 17 August 2013, Gurpreet 5983 (PUN); forest at the back side of Rock Garden, on bark of *A. nilotica*, 16 August 2013, Gurpreet 5984 (PUN).

REMARKS — *Radulodon acaciae* is similar to *R. erikssonii* Ryvarden, which differs in its yellowish to pale buff hymenial surface, its hyaline tramal hyphae, its larger ($6\text{--}8 \times 5\text{--}6 \mu\text{m}$) globose to subglobose basidiospores, and its temperate to subarctic Scandinavian distribution on *Populus* (*Salicaceae*) (Eriksson et al. 1981).

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Literature cited

- Bernicchia A, Gorjón SP. 2010. *Corticaceae* s.l. Fungi Europaei 12. Edizioni Candusso. Alassio, Italia. 1008 p.
- Eriksson J, Hjortstam K, Ryvarden L. 1981. The *Corticaceae* of North Europe. 6. *Phlebia* – *Sarcodontia*. Oslo. pp. 1051–1276.
- Nakasone KK. 2001. Taxonomy of the genus *Radulodon*. Harvard Pap. Bot. 6(1): 163–177.
- Rattan SS. 1977. The resupinate *Aphyllophorales* of the North Western Himalayas. Bibliotheca Mycologica 60. 427 p.
- Stalpers JA. 1998. On the genera *Sarcodontia*, *Radulodon* and *Pseudolagarobasidium*. Folia Cryptog. Estonia 33: 133–138.