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Hyphodontia dhingrae sp. nov. from India

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Abstract — A new corticioid species with a hydnoid hymenophore, *Hyphodontia dhingrae,* is described in association with an angiospermous host from Uttarakhand state in India.

Key words — *Agaricomycetes,* Bageshwar, Kausani, *Hymenochaetales*, *Schizoporaceae*

While conducting fungal forays in Kausani area of district Bageshwar, Uttarakhand, India, Samita & Sanyal collected an unknown corticioid fungus on angiospermous wood. The study revealed distinct macroscopic and microscopic features such as hydnoid basidiocarps with very long spines (up to 6 mm), two types of cystidial elements, and ellipsoid thin-walled inamyloid basidiospores. Comparison with available literature (Eriksson & Ryvarden 1976, Rattan 1977, Langer 1994, Dhingra 2005, Xiong et al. 2009, 2010, Bernicchia & Gorjón 2010, Gorjón 2012) showed it to be an undescribed species in the genus *Hyphodontia.* The material was also analyzed by Prof. Nils Hallenberg, who supported the description of a new species within *Hyphodontia.*

Hyphodontia dhingrae Samita & Sanyal, **sp. nov.** Figs 1–12

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Differs from *Hyphodontia arguta* by its strongly hydnoid hymenophore and narrower basidiospores.

Type: India, Uttarakhand: Bageshwar, Kausani, on angiospermous wood, 03 September 2011, Samita 5199 (PUN, **holotype**).

Etymology: In honor of Gurpaul Singh Dhingra, Professor, Department of Botany, Punjabi University, Patiala, India.

Basidiocarp resupinate, adnate, effused, ≤300 μm thick in section excluding aculei; hymenial surface cream colored with an orange tint to pale orange when fresh, light orange white to light brownish orange on drying, hydnoid; aculei densely aggregated, cylindrical to conical or slightly flattened, up to 6

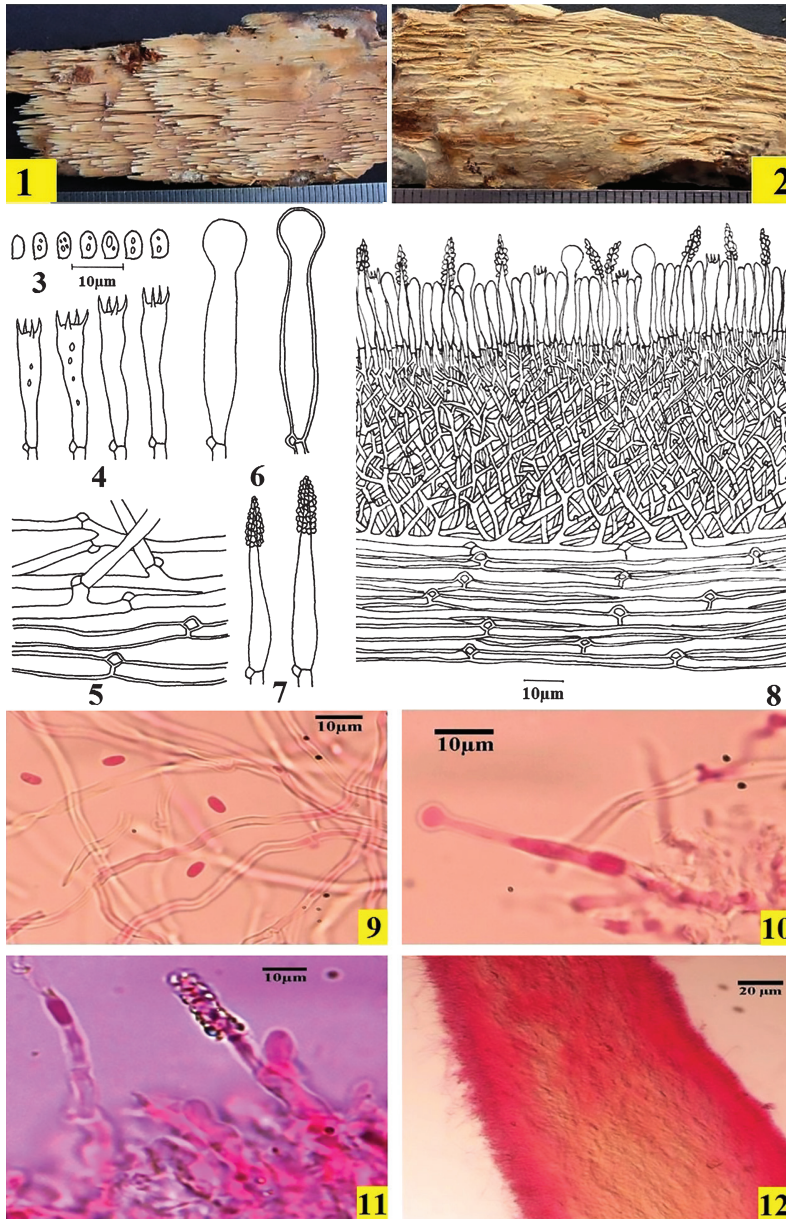

Plate 1. *Hyphodontia dhingrae* (holotype). 1. Fresh basidiocarp. 2. Dried basidiocarp. 3. Basidiospores. 4. Basidia. 5. Generative hyphae. 6. Capitate cystidia. 7. Lagenocystidia. 8. Vertical section through basidiocarp. 9. Generative hyphae and Basidiospores. 10. Capitate cystidium. 11. Lagenocystidia. 12. Section through spine.

mm long and 1 mm wide at the base; margins thinning, paler concolorous to indeterminate. Hyphal system monomitic; generative hyphae, septate, clamped; basal hyphae ≤5 µm wide, parallel to the substrate, sparsely branched, thin- to somewhat thick-walled; subhymenial hyphae ≤2.5 µm wide, frequently branched and interwoven, thin-walled; tramal hyphae in the centre of the aculei up to 4.5 µm wide, running parallel, densely united, with thickened walls and sparsely septated, without crystalline aggregations. Capitate cystidia 21–47 × 4.5–8 µm scattered in the hymenium, thin- to somewhat thick-walled, with basal clamp. Lagenocystidia 35–40 × 4–6 µm, very frequent in the hymenial region, consisting of hyphal ends abruptly ending into a needle like portion, apically encrusted, thin-walled. Basidia 22–28 × 3.5–4.5 µm, clavate, 4-sterigmate, with basal clamp; sterigmata ≤4 µm long. Basidiospores 4.3–5.3 × 2.5–3 µm, ellipsoid, smooth, thin-walled, with oily contents, acyanophilous, inamyloid.

Remarks— *Hyphodontia dhingrae* is closely related to *H. arguta* in having a similar type of lagenocystidia, but *H. arguta* differs in having an odontioid hymenophore with 0.5–2 mm long spines and wider basidiospores (3.5–5 µm; Eriksson & Ryvarden 1976: 609).

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Literature cited

Bernicchia A, Gorjón SP. 2010. *Corticiaceae* s.l. Fungi Europaei 12. Edizioni Candusso. Alassio. Italia. 1008 p.

Dhingra GS. 2005. Genus *Hyphodontia* John Eriksson in the Eastern Himalaya. J. Ind. Bot. Soc. 84: 118–122.

Eriksson J, Ryvarden L. 1976. The *Corticiaceae* of North Europe. Vol. 4. *Hyphodermella – Mycoacia.* Oslo. pp. 549–886.

Gorjón SP. 2012. Some species of *Hyphodontia* s.1. with encrusted cystidial elements. Mycosphere 3(4): 464–474. http://dx.doi.org/10.5943/mycosphere/3/4/10

Langer E. 1994. Die Gattung *Hyphodontia* John Eriksson. Bibliotheca Mycologica 154. 298 p.

Rattan SS. 1977. The resupinate *Aphyllophorales* of the North Western Himalayas. Bibliotheca Mycologica 60. 427 p.

Xiong HX, Dai YC, Wu SH. 2009. Three new species of *Hyphodontia* from Taiwan. Mycol. Progress 8: 165–169. http://dx.doi.org/10.1007/s11557-009-0587-3

Xiong HX, Dai YC, Wu SH. 2010. Two new species of *Hyphodontia* from China. Mycologia 102(4): 918–922. http://dx.doi.org/10.3852/09-139