

***Hoornsmania* Crous, gen. nov.****Mycobank:** MB501110.**Etymology:** Named after the Hoornsman family, from whose garden this fungus was collected.

**Latin diagnosis:** Genus hyphomycetum. Conidiophora solitaria, brunnea, ex hyphis superficialibus oriunda, septata, Cellulae conidiogenae brunneae, leves vel exigue verruculosae, elongato-ellipsoideae vel fusioideae, 1–2 locis conidiogenis truncatis, modice inspissatis et pigmentatis, neque conspicue refringentibus. Conidia brunnea, levia vel exigue verruculosa, late ellipsoidea vel modice fusioidea, catenas ramosas formantia, cicatricibus paulo fuscioribus, inspissatis, neque refringentibus; hyperparasiticum in *Neonectria*.

**Description:** Hyphomycetes. *Conidiophores* solitary, brown, arising from superficial hyphae, septate. *Conidiogenous cells* brown, smooth to finely verruculose, elongate-ellipsoid to fusoid, with 1–2 truncate loci, somewhat thickened and darkened, but not prominently refractive. *Conidia* brown, smooth to finely verruculose, broadly ellipsoidal to somewhat fusoidal, occurring in branched, acropetal chains; scars somewhat darkened, thickened, but not refractive; hyperparasitic on *Neonectria ditissima*.

***Hoornsmania pyrina* Crous, sp. nov.****Mycobank:** MB501111.**Etymology:** Named after its host plant, *Pyrus malus*.

**Latin diagnosis:** Conidiophora solitaria, erecta, brunnea, ex hyphis superficialibus oriunda, 1–6-septata, 40–120 × 4–6 µm. Cellulae conidiogenae 20–30 × 5–7 µm, brunneae, leves vel exigue verruculosae, elongato-ellipsoideae vel fusioideae, 1–2 cicatricibus truncatis, modice inspissatis et pigmentatis neque refringentibus praeditae. Conidia brunnea, levia vel exigue verruculosa, late ellipsoidea vel modice fusioidea, catenas ramosas formantia, (18–)20–22 (–25) × (9–)10–11(–15) µm; hila 2–4 µm diam, modice fuscata, inspissata neque refringentia.

**Description:** Hyphomycetes. *Mycelium* superficial, consisting of branched, brown, septate hyphae, 3–8 µm wide, colonising perithecia of *Neonectria ditissima*, visible as a grey-brown mass on perithecia. *Conidiophores* solitary, erect, brown, smooth to finely verruculose, arising from superficial hyphae, 1–6-septate, 40–120 × 4–6 µm, giving rise to 1–2 secondary branches; secondary branches aseptate, 15–30 × 4–6 µm, giving rise to conidiogenous cells. *Conidiogenous cells* 20–30 × 5–7 µm, brown, smooth to finely verruculose, elongate-ellipsoid to fusoid, widest in the upper third, tapering gradually to the base, but abruptly to the apex, which is clavate with 1–2 truncate loci, somewhat thickened and darkened, but not prominently refractive, 2–4 µm wide. *Conidia* brown, smooth to finely verruculose, broadly ellipsoidal to somewhat fusoidal, occurring in branched, acropetal chains; ramoconidia 15–30 × 9–15 µm, with 1–3 apical loci; conidia (18–)20–22(–25) × (9–)10–11(–15) µm; hila 2–4 µm diam, somewhat darkened, thickened, but not refractive; conidia aseptate, but developing up to 2 septa with age, conidium body collapsing when once mounted in water or lactic acid.

**Typus:** Netherlands, Utrecht Province, Bilthoven, Evert Cornelislaan 11, on perithecia of *Neonectria ditissima* on twigs of *Pyrus Malus*, January 2005, collected by P.W. Crous, CBS H-19769, **holotypus**.

**Notes:** Sporulation of *H. pyrina* was only observed on perithecia of *Neonectria ditissima* (Tul. & C. Tul.) Samuels & Rossman that developed in moist chambers after 1–2 weeks of incubation at room temperature. Conidia from fresh material failed to germinate, and although successive collections were obtained, the fungus could never be cultivated under different incubation regimes and temperatures. Morphologically *Hoornsmania* is similar to *Hormoconis* Arx & G.A. de Vries, which is based on *H. resinae* (Lindau) Arx & G.A. de Vries, the “creosote fungus”, which has pale olivaceous, somewhat warty, branched conidiophores, with acropetal conidial chains, and inconspicuous scars and conidial hila. The latter fungus, however, can readily be cultivated, and grows on extreme substrates like jet fuel or kerosene. In contrast, *Hoornsmania pyrina* has a unique ecological habitat, being a hyperparasite of *N. ditissima*, and being unable to grow on various nutrient media in culture. Attempts to amplify DNA direct from spore masses were also unsuccessful.

**Colour illustrations:** Apple tree in the backyard of Lex Hoornsman in Bilthoven, which was severely effected by cankers of *Neonectria ditissima* (P.W. Crous); perithecia covered by *H. pyrina*; conidiophores; developing conidial chains (P.W. Crous). Scale bar = 10 µm.

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*Hoornsmania pyrina*

