

***Heteroconium eucalypti* Crous & M.J. Wingf., sp. nov.**

**MycoBank:** MB501000.

**Etymology:** Named after its host, *Eucalyptus*.

**Latin diagnosis:** Conidia subcylindrica vel ellipsoidea, catenata, sicca, verruculosa, sursum obtusa, ad basim truncata, 0–6-septata, 10–35 × 5–7  $\mu\text{m}$ , ad septa constricta.

**Description:** *Leaf spots* predominantly hypophyllous, to some degree visible on the upper leaf surface on older spots, circular, 3–6 mm diam; spots dark brown to black, colour in concentric rings, inner region more grey-brown, becoming dark-brown, with outer region red-brown as it approaches the distinct margin which is not raised, and confluent with the leaf tissue; spots covered with fluffy, brown sporulation. *Mycelium* internal and superficial, consisting of branched, septate, medium brown, smooth to rough hyphae, covering large portions of the leaf spots. *Conidiophores* arising as lateral branches from hyphae, erect, cylindrical to ellipsoidal, brown, 1–2-septate with terminal loci visible, 10–15 × 5–7  $\mu\text{m}$ . *Conidiogenous cells* holoblastic, integrated, terminal, 5–7 × 5–6  $\mu\text{m}$ . Conidia subcylindrical to ellipsoidal, tapering towards both ends, catenate, dry, verruculose, apex obtuse, base truncate, 0–6-septate, 10–35 × 5–7  $\mu\text{m}$ , becoming constricted at the septa.

**Cultural characteristics:** Colonies on 2 % malt extract agar<sup>1</sup> (Oxoid) slow-growing, reaching 15 mm diam after 2 months at 25 °C; erumpent with moderate umber aerial mycelium and chestnut outer border; margins smooth, regular; reverse olivaceous-black; colonies fertile.

**Typus: Uruguay**, La Turruta, on leaves of *Eucalyptus dunnii*, Jan. 2005, collected by M.J. Wingfield, CBS-H 19766, **holotypus**; cultures ex-type CPC 12111 = CBS 120122, CPC 12112–12113.

**Notes:** *Heteroconium eucalypti* can be accommodated in the genus *Heteroconium* Petr. (type: *H. citharexylis* Petr., collected on *Citharexylum* in Ecuador). Few species are presently known from culture, or have been subjected to DNA sequence comparison, and most morphological species will emerge as not being congeneric in future studies. The concept of *Heteroconium* has been wildly overextended in the late 20<sup>th</sup> century, and presently accommodates several unrelated species of dematiaceous hyphomycetes.

BLASTn results of the ITS sequence of *H. eucalypti* did not retrieve any close hits. The partial 28S rRNA gene sequence (GenBank DQ885893) places *H. eucalypti* with members of the *Lecanoromycetes*.

**Colour illustrations:** Logging of *Eucalyptus* trees in Uruguay (M.J. Wingfield); hypophyllous leaf spot; conidia and conidiogenous cells *in vivo* (P.W. Crous). Scale bar = 10  $\mu\text{m}$ .

**References:** <sup>1</sup>Gams W, Hoekstra ES, Aptroot A (eds) (1998). *CBS course of mycology* 4<sup>th</sup> ed. Centraalbureau voor Schimmelcultures, Baarn, Delft, Netherlands.

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*Heteroconium eucalypti*

