Xenosonderhenia coussapoae
**Xenosonderhenia coussapoae** J.L. Alves & R.W. Barreto, *sp. nov.*

*Etymology.* Name reflects the host genus from which it was isolated, *Coussapoa.*

*Classification.* — Mycosphaerellaceae, Capnodiales, Dothideomycetes.

*Leaf spots.* Amphigenous, irregular, 1–7 mm diam, medium brown with irregular edges, white patches due to raised epidermis, surrounded by a wide, red-purple border and with abundant fungal structures abaxially. Internal mycelium indistinct. External mycelium superficial, up to 2–3 µm diam, branched, septate, pale brown, smooth. Stromata absent. Conidiophores arising from external mycelium, either isolated or clustering on trichomes, cylindrical, 17.5–40 x 5–7.5 µm, 1–3-septate, not branched, hyaline to subhyaline, smooth. Conidiogenous cells terminal or intercalary, subcylindrical, 18–39.5 x 5–7 µm, smooth. Conidiogenous loci protuberant, 3–7 per cell up to 1 µm diam, not thickened nor darkened. Conidia cylindrical, straight, 10–29 x 1–4 µm, 1–3-septate, base truncate, 1–2 µm diam, apex rounded, hyaline to subhyaline, smooth.

Culture characteristics (under 12 h light regime, at 25 °C) — Slow growing (12–15 mm diam after 12 d), aerial mycelium sparse, lobate margins, white to buff with some overlapping areas smoke grey, reverse pale luteus to honey. Cultures sterile.

*Typus.* Brasil., Viçosa, campus of Universidade Federal de Viçosa, on *Coussapoa floccosa* (Cecropiaceae), 18 July 2014, R.W. Barreto (holotype VIC44404, culture ex-type COAD1824; ITS and LSU sequences GenBank MG780415 and MH718814, MycoBank MB827438).

Notes — *Xenosonderhenia* was recently established to accommodate two leaf spot fungal pathogens belonging to the Mycosphaerellaceae. *Xenosonderhenia* is a pleomorphic genus including the type species *X. syzygii* — with no known sexual morph but described as having two asexual morphs: a pycnidal morph and a hyphomycete synasexual morph seen only in culture (Crous et al. 2012b) and *X. eucalypti* — known only from its ascomatal morph (Crous et al. 2014b). Phylogenetically, COAD1824 clusters with *Mycosphaerella elaecarpi* — a fungus lacking an asexual morph — and with *Xenosonderhenia*. Morphological features such as size and surface of conidia (finely verrucose in *X. syzygii* but smooth in the newly proposed species) and phylogenetic data indicated that the fungus on *C. floccosa* represents a new species of *Xenosonderhenia*.

Based on a megablast search of NCBIs GenBank nucleotide database, the closest hits using the ITS sequence were *X. syzygii* (GenBank NR_111763; Identities = 461/492 (94 %), 7 gaps (1 %)), *X. eucalypti* (GenBank NR_137937; Identities = 457/492 (93 %), 6 gaps (1 %)) and *Mycosphaerella elongata* (GenBank EF394833; Identities = 456/492 (93 %), 8 gaps (1 %)). Closest hits for LSU were *M. elaecarpi* (GenBank EU040212; Identities = 858/868 (99 %), 4 gaps (0 %)), *X. syzygii* (GenBank NG_042685; Identities = 852/864 (99 %), 2 gaps (0 %)) and *X. eucalypti* (GenBank NG_058120; Identities = 812/823 (99 %), no gaps).

*Xenosonderhenia coussapoae* represents an addition to the known mycobiota of *C. floccosa* and, if proven specific to this host, may represent an endangered species of microfungi, as are other fungal species described from this highly endangered Brazilian tree species (Rocha et al. 2010). **Colour illustrations.** Leaf spots on *Coussapoa floccosa*; leaf spot, conidiophores and conidia on trichomes (SEM). Scale bars = 20, 20, 5, 40 and 20 µm, respectively.

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