**Ophiostoma eucalyptigena** Barber & Crous, sp. nov.

_Etymology._ Name reflects the host genus _Eucalyptus_, from which the species was isolated.

_Classification._ _Ophiostomataceae_, _Ophiostomatales_, Sordariomycetes.

_Ascomata_ with globose bases, dark brown, 60–130 µm diam, surface of _textura epidermoidea_, with medium brown 2 µm diam hyphae. _Perithecial necks_ brown to black, smooth, 100–500 µm long, 25–40 µm wide at base, 10–13 µm wide at apex. _Ostioral hyphae_ not common, subhyaline, tapering to acutely rounded apices, 20–35 × 2 µm. _Ascospores_ hyaline, aseptate, allantoid, round in side view, 3(–3.5) × 2 µm. _Asexual morph_ _Sporothrix-like_.

_Conidiogenous cells_ form directly on superficial hyphae, micronematous, hyaline, 15–30 × 1.5–2 µm, with several flattipped denticles, 0.5–2 × 0.5 µm. _Conidia_ hyaline, aseptate, guttulate, smooth, ellipsoid to clavate, apex obtuse, tapering to truncate base, 0.5 µm diam, (4–)5–6(–7) × (2–)2.5(–3) µm.

_Culture characteristics._ — Colonies reaching 50 mm diam after 1 mo at 25 °C, spreading with sparse aerial mycelium, and smooth, lobed margins. On PDA surface hazel, reverse vinaceous buff. On MEA surface umber with patches of dirty white, reverse isabelline with patches of dirty white. On OA surface umber, reverse mouse grey.

_Typus._ **Australis**, Western Australia, on _Eucalyptus marginata_ (Myrtaceae), 22 June 2013, P.A. Barber (holotype CBS H-22228, culture ex-type CPC 24638 = CBS 139899; ITS sequence GenBank KR476721, LSU sequence GenBank KR476756, MycoBank MB812435).

Notes — Species of _Ophiostoma_ are well-known associates of bark beetles and some cause tree diseases (De Beer et al. 2014). Some species known by their _Sporothrix_ s.str. morphs contain important human pathogens, and species are commonly associated with plant debris or soil (Zhang et al. 2015). _Ophiostoma eucalyptigena_ is phylogenetically closely related to _Ophiostoma bragantinum_, which has larger ascomata (bases 130–220 µm diam, necks 700–1200 µm long, ostioral necks up to 45 µm long), and smaller conidia, 4–6 × 2–2.5 µm (Pfenning & Oberwinkler 1993).