AEB 1239 (= PDD 110481)

Rosellinia nothofagi L.E.Petrini – see p. 112 of 'Petrini, Liliane E. 2003. Rosellinia and related genera in New Zealand. New Zealand Journal of Botany 41: 71–138.' A good match but with slightly larger apical rings and ascospores.

Substrate: dead unidentified bark and wood beneath a large Kahikatea tree

Collection site: Rangiwahia Township Reserve

Collection date: 21 May 2015, while attending the 29th annual NZ Fungus Foray centered at Sixtus Lodge

Collector: Ann Bell

Identifier: Dan Mahoney

<u>Voucher material:</u> Dried herbarium material [AEB 1239 (= PDD 110481)] and 2 Shear's mounting fluid (SMF) semi-permanent slide mounts; colored 35 mm digitized photo of in-situ stromata and digital photos from slide-mounted centrum contents; Dan's brief comments

Brief comments: Stromata large, black, globular, crowded, 1–2 mm in diameter with a papillate ostiole. Asci 8-spored with moderately long stipe and a large prominent apical ring staining dark blue in Melzer's reagent. Ring 13–15 × 6–7 μm (width at its upper widest portion). Ascospores biseriately arranged, dark brown, inequilaterally ellipsoidal with a straight (or nearly so) germ slit extending almost over the whole spore length, ending shortly before the extremities, ascospores 36–41 X 9–12 μm. A number of less pigmented ascospores were shorter and broader (33–36 X 12–14 μm) - these not seeming to become the typical dark brown. Ascospores characterized by a small, hyaline, conical, cellular appendage at each end and the whole spore completely surrounded by a thin slimy sheath.

No anamorph was seen.

Petrini, Liliane E. 2003. Rosellinia and related genera in New Zealand. New Zealand Journal of Botany 41: 71–138.

The following from p. 112

Rosellinia nothofagi L.E.Petrini, sp. nov.

Subiculum persistent, reduced in mature material, dark reddish brown, felty to wiry, bearing conidiophores in young material. Stromata (1050)1330 \pm 200(1750) μ m high, (1175)1440 \pm 194(1775) μ m wide (n = 15), cupulate to globose, dark brown, black around the ostioles, solitary to crowded. Ostioles coarsely papillate. Ectostroma to 125 μ m thick, black, hard. Entostroma light brown, confined to the base. Perithecia detached and collapsed in mature material. Ascus apical rings (7.6)8.2 \pm 0.5(9) μ m high, upper width 5–6 μ m, lower width 4–6 μ m (n = 15), J+, dark blue. Ascospores (25)29 \pm 2.4(37.5) μ m long, (6)8.3 \pm 0.7(9.6) μ m wide (n = 90), inequilaterally ellipsoidal, dark brown, with straight germ slit, extending almost over the whole spore length, ending shortly before the extremities, each extremity with one 3–4 μ m long, 3 μ m wide, conical, cellular appendage, one of them being more pointed and the other more rounded and shorter, the whole spore completely surrounded by a thin slimy sheath. Conidiogenous cells 4–5 μ m wide, light brown. Conidia 10–13 X 5–5.5 μ m.

NOTES: Rosellinia nothofagi is easily recognised by its ascospores which bear two cellular, conical appendages surrounded by a slimy sheath, massive stromata, and large conidia.





A,B. Asci with moderately long stipes in SMF mount, X40 objective, phase microscopy. C,D. Same asci and apical rings mounted in Melzer's reagent, X100 objective. C. Brightfield. D. Phase.

