

Stephanospora occidentiaustralis T. Lebel & Castellano, sp.nov.

IF555308

Basidiomata subglobose to elongate, often irregularly lobed and pitted, 4–18 × 4–12 mm, peridium thin, inconspicuous, pale yellow to deep yellow or bright yellowish-green. Gleba dull to bright yellow with slight green tint when fresh, trama darker, locules polygonal to irregular, 1–3 mm in section, empty but lined with spores at maturity. Taste not distinct to slightly chemical, not pleasant. Odour strong, of mandarin oranges to sweet acetylene. Peridium 80–160 mm wide, a thin cutis (10–25 mm thick) of thin-walled, sparingly septate, loosely interwoven to periclinal hyphae, 2.5–5.0 mm broad, merging into oblong to isodiametric, thin-walled, hyaline, inflated cells, 7–20 (–28) mm broad. Glebal trama 40–140 mm wide, of hyaline, thin-walled, isodiametric cells, (8–) 12–20 (–35) mm broad. Subhymenium of irregularly branched cells, inflated up to 9 mm broad. Basidia cylindrical to clavate, 20–28 (–35) mm tall × 8–14 mm broad, thin-walled, hyaline, cyanophilic, 4-spored; sterigmata 3–5 mm long. Spores globose to subglobose, 9–12 (–13) × 8–11 (–12) mm [mean 11.02 ± 1.1 × 10.22 ± 0.95], Q = 1.0–1.17 (mean Q = 1.08); hilar appendix 1.5–3 mm long; walls 0.5–1.5 mm thick; ornamentation of acute wedged shaped spines or warts, 0.5–1.5 (–2) mm tall × 0.5–1.0 mm broad at base, occasionally forming short ridges, coalescing around the sterigmal attachment to form an inconspicuous corona, 3–5 (–6.5) mm broad × 1–2 mm tall.

Holotype MEL 2341674.

Differs from other *Stephanospora* species in the strong odour of mandarin or sweet acetylene of fresh sporocarps, and globose to subglobose spores.

Etymology: From Latin, occidental meaning 'western' and australis for 'southern', in reference to the distribution of the species, occurring in Western Australia and South Australia.

Stephanospora papua T. Lebel & Castellano, sp.nov.

IF555309

Basidiomata irregular, 5–22 mm × 4–28 mm, pale orange-yellow. Gleba pale yellow, locules mostly <2 mm, irregularly shaped. Taste not recorded. Odour not recorded. Peridium 30–140 mm wide, a thin cutis (5–14 mm thick) of pale yellow, thin-walled, septate, branched, interwoven to periclinal hyphae 2.0–5.0 mm broad merging into thin-walled, hyaline, irregular to isodiametric, inflated cells, 11e35 mm broad. Glebal trama 20–55 mm wide, of hyaline, thin-walled, isodiametric cells, 10–30 mm broad. Subhymenium of irregularly branched cells, inflated up to 11 mm broad. Basidia cylindrical to clavate, 20–30 (–33) mm tall × 7–10 mm broad, thin-walled, hyaline, 4-spored; sterigmata 3–5 mm long. Spores subglobose to ellipsoid, 9–11 × 7–8.5 mm [mean = 9.93 ± 0.76 × 7.91 ± 0.44], Q: 1.18–1.38; [mean = 1.26], hilar appendix 1–2 mm long; walls 0.8–1.0 mm thick; ornamentation of cylindrical or flattened, blunt spines 1–2 mm tall × 0.8–2.0 mm broad at base, forming short ridges, coalescing around the sterigmal attachment to form a corona 4–5 mm broad × 1–2 mm tall.

Holotype PERTH, Young, H5575.

Differs from other *Stephanospora* species in the ellipsoid spores and distribution in Papua New Guinea.

Etymology: In reference to the geographic location of the species, Papua New Guinea.