Marasmius vagus (F.E. Guard, M.D. Barrett & Farid) sp. nov. 2020

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Cap: 12–20 mm diameter, apricot (47) to sienna (11), with paler margin, not sulcate, bluntly conic to broadly convex, dry velvety. Cap darker in dry conditions, fades to off-white in wet weather.

Stipe: fleshy, (20)–40–50 × 1.5–2 mm, hollow, smooth, cylindric, all white, prominent basal mat of mycelial hairs.

Lamellae: moderately close, ~30, with 2–3 tiers lamellulae, and occasional to frequent shallow cross venations, free, whitish cream with margin +/- concolourous with cap.

Flesh: thin, white, ~1 mm thick.

Spores: inamyloid, ellipsoid to teardrop shape, average 9.5 × 5.5 µm, Qav=1.73, range 8.5–10 × 5–6.5 µm, Qmin=1.58, Qmax=1.87.

Basidia: majority 2-spored, small number 3-spored, 26.5 × 8.5 µm.

Pleurocystidia: absent.

Cheilocystidia: Siccus-type broom cells, with short to very long divergent projections, mostly thin-walled, with body also thin-walled except for outer ¼ at base of projections; shape narrowly to broadly and irregularly cylindric, clavate; body 9–16 × 4–8 µm, digits 4–12 × 1–2 µm, with 2–4 (–8) digits. Also, occasional (2 seen) mucronate, smooth cheilocystidia 24 × 8 µm.

Pileipellis: large divergent and sometimes bifurcating Siccus-type broom cells, with thick refractive walls on projections and upper body wall, clavate, irregularly cylindric, body 13–24 × 4–9 µm, digits 3.5–11.5 × 1–2 µm, 5–9 digits, some branching.

Caulocystidia: absent.

Substrate: leaf litter.   **Habit:** gregarious +/- caespitose.

Habitat: tropical dry vine thickets across northern Australia with populations in gardens and lawns in Florida. Now found in road verges and lawns in FNQ & SEQ.

Collections examined: SMF 3041, FE Guard, Brooklyn Sanctuary, March 2018; AQ553628, PIF28282, Paul Forster, Mungana, Chillagoe 22/2/2002.

Notes: This species looks very similar to *Marasmius elegans,* but always has a totally white stem and cross venations between gills, and is genetically distant. '*vagus*' means wandering, for its widespread distribution.