Ramaria fennica (P.Karst.) Ricken, *Vadem. Pilzfr.*, 2nd edn., 264 (1920)
var. **fumigata** (Peck) Schild, (Peck) Schild, *Z. Mycol.* 61: 149 (1995) A.M.Young, Apr. 2014

Fruiting bodies 5–12 (–14) × 4–6(–8) cm.; *apices* at first bright lavender to violet-purple but soon becoming darker with brownish to sepia hues, dichotomous, trichotomous or double dichotomous, tapered but bluntly rounded at the very ends, dry; *branches* bright lavender to violet-purple, with spreading brownish patches as the basidiospores mature, cylindrical, smooth occasionally rugose, obliquely and vertically oriented, undergoing considerable subapical branch elongation during maturity; *axils* rounded but there may be occasional acute axils present especially near the junctions of the main branches; *stipe* 2–4 × 1–2.5 cm., single and robust but not usually massive however bulbous stipes may occur, white at the base, then with steadily increasing lavender-purple tints, smooth, aborted branches usually present. *Flesh* white. *Odour* none; *taste* mild. All parts of the basidioma slowly bruise brownish. *Rhizomorphs* often present as a few white strands.

Macrochemical reactions: 10% potassium hydroxide solution on flesh produces "Etruscan red" colour.

Basidiospores 8.0–12.0 (–13.5) × (4.3–) 4.7–6.0 (–7.0) µm, mean 10.2 × 5.3 µm, Q: 1.6–2.3 (–2.6), mean Q: 1.96, ellipsoid, contents occasionally uniguttulate but mostly granular, hilar appendage prominent and curved, ornamentation of large warts and ridges, spore profile markedly rough, spore wall and warts strongly cyanophilic in cotton blue; *basidia* (50–)70–90 (102) × 8–13 µm, mean 76.0 × 10.9 µm, Q: (4.7–) 6.0–9.8, mean Q: 7.00, 4-spored, clamps present; *sterigmata* up to 10 µm long, distinctly long-conical, straight or curved; *branch trama* monomitic, composed of thin-walled, clamped, hyphae 3–8 (–11) µm diam. and with abundant crystalline deposits; *ampuliform septa* present and exhibiting stalactitic ornamentation; *gloeoplerous hyphae* absent; *stipe trama* similar to branch trama.

Habit: gregarious or solitary on soil amongst leaf litter. ***Habitat***: in open eucalypt forest, woodland, or wet cool temperate eucalypt forest.

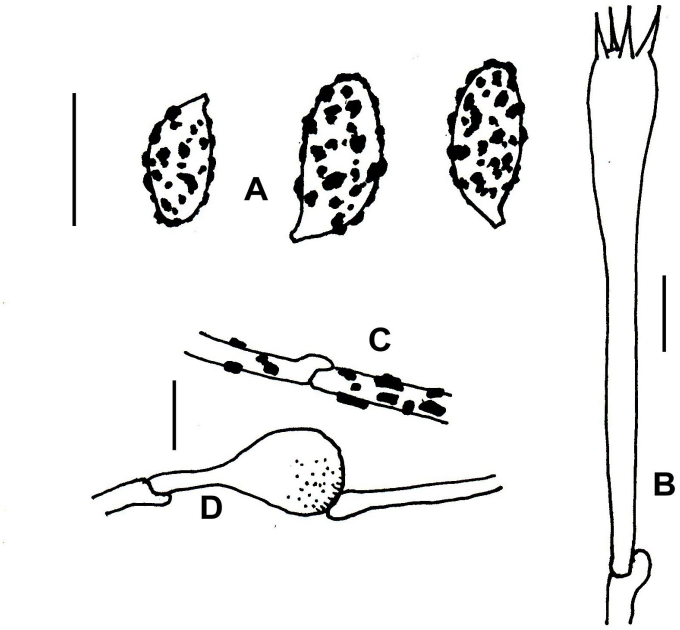
Ramaria fennica var. *fumigata*. An immature fruiting body from Tasmania showing the overall purplish violet colours when young. © G. Gates.

Ramaria fennica var. *fumigata* found in eucalypt woodland in Western Australia. © R. Robinson.

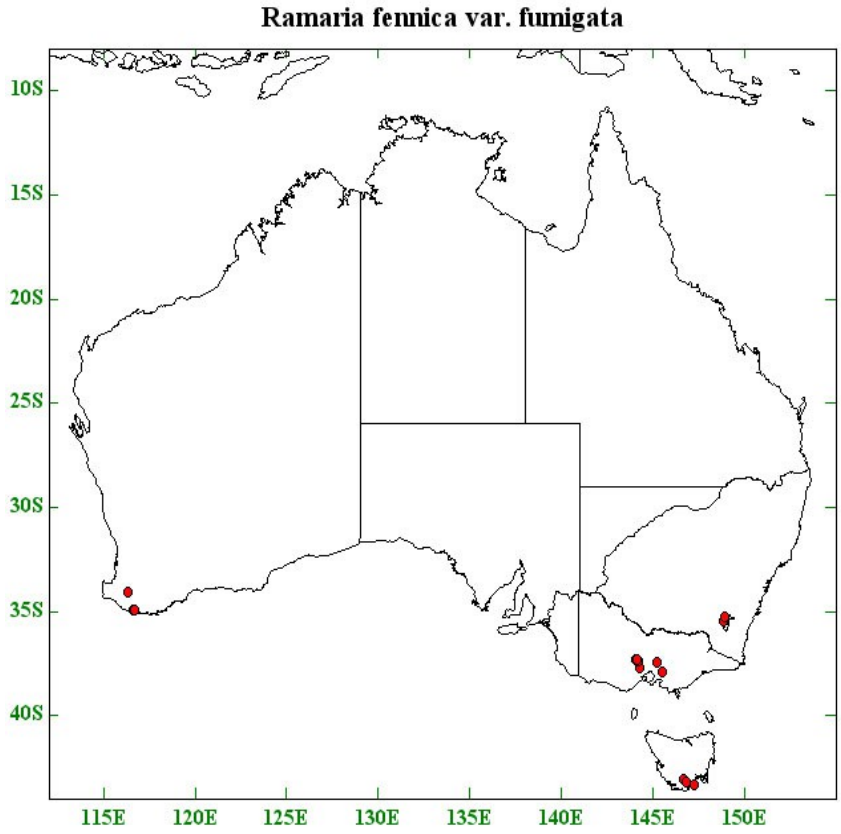
Petersen in his paper on Australian species of *Ramaria* in 1988, erected a new variety which he called "*latispora*" and based his work on this taxon, however further investigation has shown that Australian material is better placed within the taxonomic framework presented by Schild during his enormous investigations into the species of *Ramaria* in Europe and elsewhere.

Notes: the author believes that as a child, he saw a large clump of this species in the eucalypt woodland south of Brisbane in the Kingston area. At that time (circa 1950) the area was mostly a eucalypt/casuarina/acacia woodland with occasional forest form trees and largely undeveloped. The bright purple was distinctive and the size of the massed clump was so high and broad as to exclude the possibility of *Clavaria zollingeri*. That recollection remains the only possible sighting of this species for Queensland. If *Ramaria fennica* var. *fumigata* has a "preference" for cooler climates, the most logical areas to search would be in the MacPherson Ranges on the NSW and Queensland border - Lamington and Springbrook National Parks. It is possible the species might also form an association with *Nothofagus.*

The pure white flesh of this species provides an enormous contrast between the purple outside layer producing the spores and the internal tissues.



Ramaria fennica var. *fumigata* microdata. A. basidiospores; B. basidium; C. rhizomorph hypha with crystalline deposits; D. ampulliform septum. Each scale bar = 10µm. © A.M.Young.



Ramaria fennica var. *fumigata*. Known Australian distribution.

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