

*Basidiomata* : 6–16 × 10–16 cm, at first compact then undergoing subapical branch elongation and becoming more open coralloid; *apices* vinaceous to pinkish vinaceous or sometimes dark reddish vinaceous finally becoming more or less brownish at late maturity, at first bluntly cuspidate with dichotomous or double dichotomous rounded endings, but then undergoing subapical elongation and producing dichotomous or double dichotomous bluntly rounded apices which may be somewhat flattened; *branches* vinaceous (sometimes darkly tinted) in the upper branches but with more paler tints in the lower branches, slowly altering with maturity to brownish, cylindrical, usually rough but may be more or less smooth; *axils* round, varying from U-shaped to deeply V-shaped with a rounded base to the V; *stipe* 4–5 × 1–2.5 cm, white becoming pallid vinaceous in the upper part, smooth, cylindrical and deeply rooting; *aborted branches* present. *Flesh* white, colour changes mostly unknown however one variety produces picric-yellow stains at the stipe base. *Odour* unknown; *taste* not recorded.

*Macrochemical reactions*: not known.

*Basidiospores* 10.5–14.5(–15.5) × 3.5–5.5(–6.0) μm, mean 12.3 × 4.7 μm, Q: (2.1–)2.3–3.2 (–3.4), mean Q: 2.61, fusiform, elongate ellipsoid to “mummy-shaped”, deeply striate with the striae continuous or disjoint and displayed either longitudinally or helically, apiculus usually very prominent, sometimes with a single large inclusion or two or three smaller ones, profile smooth to a little undulate, ornamentation and spore walls strongly cyanophilic in cotton blue; *basidia* (45–)60–80(–100) × 8–12 μm, mean 72.5 × 9.9 μm, 4-spored, clamps absent in var. *australiana* but present in the other two varieties; *sterigmata* –8 μm, conical, straight or a little curved; *branch trama* without gloeoplerous, skeletal or skeletalised hyphae, composed of thin-walled, septate hyphae 3–12 μm, clamps absent in var. *australiana* but present in the other two varieties; ampulliform septa occasional, 5–12(–14) μm, infrequently with slight amounts of stalactitic ornamentation; *stipe trama* similar to branch trama but hyphae usually a little narrower (up to 11 μm diam.) and ampulliform septa almost always with abundant stalactitic decoration; *rhizomorphs* absent.

*Habit*: solitary or in 2's, emerging from soil and amongst litter. *Habitat*: in wet eucalypt forests.

Before the *Ramaria* study commenced, it was believed that there was a single species, *Ramaria australiana*, in Australia. Extensive study of numbers of collections (all of which produced striated spores with the striations embedded in the spore wall) has shown that there appear to be three varieties of this species, two of which remain undescribed at this stage. They can only be satisfactorily split apart using microcharacters, however these characters are extremely distinctive. For those interested, a key to all three varieties is given below:

**Key to varieties:**

- 1 Clamps absent..... var. **australiana**
- 1\* Clamps present..... 2
- 2 Spores shortly ellipsoid; mean length < 11 μm..... var. nov. taxon **A**.
- 2\* Spores long ellipsoid to fusiform, mean length > 11 μm..... var. nov. taxon **B**

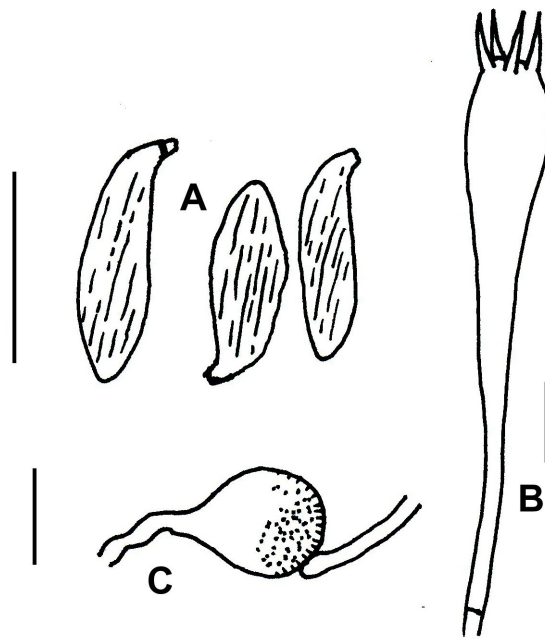
**Notes:** *Ramaria australiana* as described by Cleland (and after examination of the holotype specimen at Herb AD) has no clamp connections and that single microcharacter easily separates it from the other two varieties. All three varieties seem to have widespread occurrences in Eastern Australia and var. *australiana* is also found in Western Australia. Currently, there is sufficient material known on which to base formal descriptions of the two new varieties, but before such a step is taken, it is hoped that more collections of both taxa can be obtained and that those collections are associated with good colour images.



*Ramaria australiana*. This image shows an immature specimen before the branchlets just under the apices begin to elongate. The vinaceous-pink tints are extremely evident and the image also displays the strongly rooting base and the aborted branches near the top of the stipe. This image is of a collection made in Western Australia. © R. Robinson.

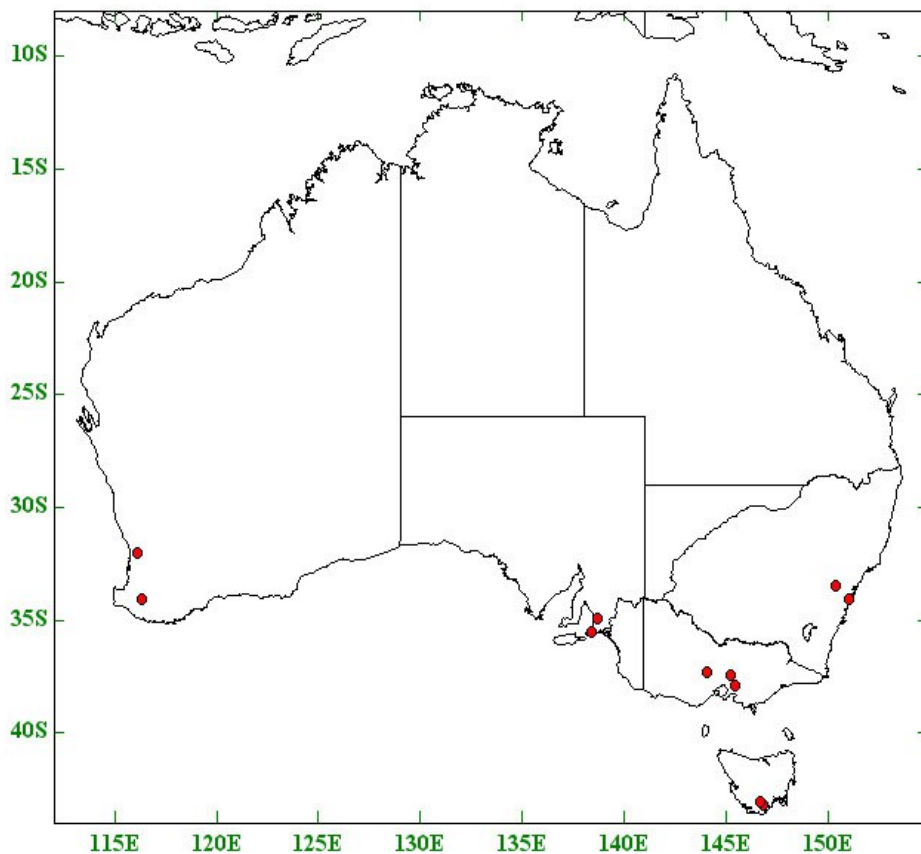


*Ramaria australiana*. A mature specimen collected from Tasmania. The elongation of the branchlets has now taken place but the wine-pink colouration still remains. The stout rooting base is still evident, and aborted branchlets are still present. © G. Gates.



*Ramaria australiana* microdata. A. basidiospores; B. basidium; C. ampulliform septa. Each scale bar = 10µm. © A.M.Young.

***Ramaria australiana* var. *australiana***



*Ramaria australiana*. Known Australian distribution.

**Acknowledgements**

This document was produced from material contained in the 2007 Interim Submission (The Taxonomy of genus *Ramaria* in Australia: coralloid macrofungi) forwarded to ABRS at the cessation of the *Ramaria* project. ABRS is both acknowledged and thanked for their kindness in permitting me to make this information available to the Australian mycological community.