CYMATODERMA ELEGANS VAR. *LAMELLATUM*

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Before 1965, fungi described as 'stipitate stereums' had a rather turbulent ride through various taxa of the Aphyllophorales. Reid (1965) imposed a measure of order on the chaos by erecting two new families for the stipitate stereoid fungi. One, the Podoscyphaceae, includes three existing genera: *Cotylidia* P. Karst., *Cymatoderma* Jungh. and *Podoscypha* Pat.

Cymatoderma may be distinguished from all other Podoscyphaceae by (1) the well developed abhymenial tomentum of thick-walled hyphae bearing clamp connections at each septum along their entire length, (2) the presence of knife-edged ridges of the leading margins of the pileal surface, and (3) by a complex system of radiating branched folds on the hymenial side which, in some species, may be covered with densely crowded warts or spines. (Reid, 1965.) The material in hand definitely belongs in *Cymatoderma*.

Reid next considered the species problem and, by one means or another, the list of Australian species was shortened to three: *Cymatoderma elegans* var. *lamellatum* (Berk. & Curt.) D.A. Reid, *C. dendriticum* (Pers.) D.A. Reid, and *C. plicatum* (Lloyd) D.A. Reid. The records of *C. dendriticum* given by Reid contain no authentic Australian sightings after 1892: the hyphal structure is trimitic, there is no cuticle, and the spores are minute. The specimens being considered here are certainly not this species. Reid's remarks on *C. plicatum* include, 'this species is extremely closely related to *Cymatoderma elegans* var. *lamellatum*, differing only in its slightly larger spores'. It is known only from the type collection in 1918.

Without specimens and/or coloured photographs of *C. plicatum* to study, this appears to be the end of the present enquiry. To my knowledge, the Australian *Cymatoderma* species have not been discussed either in the professional or popular literature since 1965, a gap of 33 years. The fruiting bodies are large and colourful. Certainly they have been seen repeatedly during these 'dark ages'.

Lepp (1998) published on the macrofungi of Norfolk Island. *Cymatoderma elegans* var. *lamellatum* was included. Two sources of coloured pictures were mentioned. (1) A Norfolk Island postage stamp was issued in 1983 as one in a block of four featuring native mushrooms. While there was no mycological information included, the specimens of Norfolk Island mushrooms (presumably *Cymatoderma elegans* var. *lamellatum* was among them) were gathered by the islanders and sent to Kew for identification before the stamp issue. (2) A travelogue book by Edgecombe & Bennett (1983) contains a coloured photograph labelled *Cymatoderma elegans* var. *lamellatum*. The collections in hand are similar in appearance with the material from both these sources.

Coloured photographs are presented of two specimens which are referred to as the brown phase (Figures 1A & 1B) and the white phase (Figures 2A & 2B). Figures 1B & 2B are the hymenial views; Figures 1A & 2A are the abhymenial views. Both specimens were found growing on rotting Camphor Laurel (*Cinnamomum camphora*) logs. The brown phase was photographed at Heritage Park, Mullumbimby, N.S.W. It was growing in a sparse clump of small trees and received some direct sunlight. The diameter of its pileus was 100 mm. The white phase was found in a Camphor Laurel regrowth area with a solid canopy at Dorroughby, N.S.W. The diameter of its pileus was 180 mm.

The abhymenial surfaces of the white phase are off-white tinged at the edges with light violet, or sometimes with light brown. The abhymenial surfaces of the brown phase are very light buff tinged with various shades of light brown, or even light violet. The hymenial surfaces are usually a milky white, contrasting with the abhymenial surface. With aging and/or drying the abhymenial surfaces turn to a greyed buff colour. Again the colour patterns reflect a wide variation among individuals. Together, the two specimens shown nearly represent the extremes of colour variation found.

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[1] The author is interested to know if any one has any Australian collections of *Cymatoderma* available for loan. Email: Nightcap@nor.com.au

The stem may subdivide several times thus resulting in a tree-like structure. Other stems may arise separately from the mycelial base and anastomose with adjoining forms. Together, the several forms cooperate to form a pseudopileus which may take the form of a rosette, a dimideate structure, or a closed or semi-closed cone. The length of the stipes ranges from barely discernible to half the total height of the fruiting bodies, and show individual or caespitose structure. Usually the stipes are covered with a brownish membrane; however, this does not seem to form on the white phase. The outermost growth stanza of one brown specimen developed a violet tinge.

Nullius in verba!

The conclusion that these specimens represent one variable species common to Camphor Laurel regrowth areas of the Northern Rivers area of New South Wales is inescapable. It is probable that it is the sole known Australian representative of the genus *Cymatoderma*. Further study of the Podoscyphaceae is long overdue, and would most likely reveal new taxa and ecological relationships.

References

Edgecombe, J. & Bennett, J. (1963). Discovering Norfolk Island. Published by the authors. 155 pp. [Available from Pacific Maps and Guides, 243 Riley St., Surry Hills, N.S.W.]

Lepp, H. (1998). Norfolk Island Macrofungi: history and bibliography. *Australasian Mycological Newsletter* **17 (2),** 42–63.

Reid, D.A. (1965). A monograph of the stipitate stereoid fungi. *Nova Hedwigia* **18,** 1–388.

Further reading

Reid, D.A. (1959). The genus *Cymatoderma* Jungh. *Kew Bulletin* **13 (3),** 518–530.

Figure 1A. Brown phase. (Heritage Park, Mullumbimby, N.S.W.) Abhymenial view.

Figure 2B. Brown phase, hymenial view.

Figure 2A. White phase. (Dorroughby, N.S.W.) Abhymenial view.

Figure 2B. White phase, hymenial view.