

THE FAMILIES OF CYCADS AND THE ZAMIACEAE OF AUSTRALIA.

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(Four Text-figures.)

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8. *M. LUCIDA* L. Johnson, sp. nov.

Typification: Southern side of Ngungun, abt. 400 ft. alt., Glass House Mountains, Queensland, L. A. S. Johnson, 13.vi.1951 (NSW.40668), vegetative. HOLOTYPE. (Since no good material with cones was available, I have nominated as the type this specimen which I have seen living in the field.)

Caudex plerumque subterraneus, 10-20 (-30?) cm. diametro. Frondes in corona plerumque 2-15 (nonnunquam usque ad 40?), 80-110 cm. longae, petiolo (basi lanata expansa exclusa) 25-50 cm. longo; rhachis non torta, teretiuscula, ad pinnas infimas 3-7 mm. lata, supra saepissime rotundato-convexa (sed nonnunquam applanata vel proxime plus minusve medio subsulcata), sulcis duobus lateralibus angustis e basibus pinnarum decurrentibus instructa (in sicco), infra semper rotundato-convexa (haud angulata). Pinnae 50-100, patentes (seriebus duabus tamen non in eodem plano) et praesertim versus apices suos decurvatae, plurimae angulo acuto prorsum directae sed infimae cum rhachi angulum rectum saepe formantes, basi tortae, plurimae arctae sed infimae saepe 1.5-3 cm. distantes, integrae, pleraeque plus minusve recurvato-falcatae (sed versus apices suos aliquando prorsum curvatae), lineares, eae longissimae 15-35 cm. longae, infimae haud vel vix abbreviatae, 7-11 mm. latae, infra nervis prominentibus 5-11 striatae, apicem pungentem versus sensim angustatae, basi conspicue pallida callosiuscula sed non rugosa constrictae, supra nitentes virides, pagina inferiore sola stomatibus instructa. Coni maturi non visi, probabiliter illis *M. spiralis* similes; sporophyllis masculis usque ad 4 cm. longis, spinis brevibus. Conos ad *M. lucidam* probabiliter pertinentes, F. M. Bailey (1902) sequens nunc describo: Axis coniger usque ad 30 cm. longus. Coni masculi cylindracei, 15 cm. longi (vel longiores), ca. 4 cm. diametro, [immaturi? L.J.] spinis sporophyllorum infimorum obsolescentibus eis sporophyllorum apicalium usque ad 1.2 cm. longis. Coni feminei 15-20 cm. longi, 7.5-9 cm. diametro, sporophyllorum parte terminali ad 4 cm. lata et 2 cm. alta, spinis 0.6-5 cm. longis longissimis versus apicem coni dispositis. Semina ca. 2.5 cm. longa, ca. 2 cm. crassa, integumentum parte exteriori rubella.

Description (English) and *discussion* of misapplied names: See Johnson in Anderson, *Flora of N.S.W.*, part 1 (in press).

Distribution: Queensland and New South Wales: Southern Coast region of Queensland from Wide Bay to Moreton District, and Clarence River (N. Coast of N.S.W.).

Specimens examined: QUEENSLAND: Southern side of Ngungun, abt. 400 ft. alt., Glass House Mountains, L. A. S. Johnson, 13.vi.1951 (NSW.40668); Mt. Coonowrin, Glass House Mountains, ca. 300 ft., C. E. Hubbard 4112, 21.ix.1930 (BRI); Taylor's Range, near Brisbane, C. T. White, i.1912 (BRI); Palmwoods, C. T. White, 6.v.1907 (BRI); Enoggera Creek, F. M. Bailey, 7.i.1875 (BRI); Enoggera, C. T. White, vi.1919 (NSW.40699); Cedar Creek, near Brisbane, C. T. White 1961, 6.v.1923 (NSW.40671); Brisbane, J. L. Boorman, iv.1899 (NSW.40670). NEW SOUTH WALES: Three miles E. of Dalmorton, L. A. S. Johnson and E. F. Constable, vi.1957 (NSW.43069). Living and preserved cultivated material also examined.

This is the species which has been wrongly known in Queensland, but not in New South Wales, as *M. spiralis* (see below, under *M. spiralis*). Though related to the true *M. spiralis*, it clearly constitutes a quite distinct series of populations, and is readily distinguished in cultivation as well as in the wild. *M. lucida* is characterized by its long slender petioles, not or scarcely twisted rhachis, and the curved, very glossy (whence the specific epithet) pinnae with sharply demarcated whitish but not very callous bases. Though it does not form dense stands it is widely spread in hilly country of the coast districts of southern Queensland, but in New South Wales only a single small stand is known as yet. It has been cultivated in the Sydney Botanic Gardens for many years and there maintains its distinctive appearance. For further treatment see the forthcoming *Flora of New South Wales*, part 1, where a probable hybrid population derived from *M. lucida* and the very different *M. moorei* is also discussed.