

An Indole Alkaloid from *Dracontomelum mangiferum* Bl. (Family Anacardiaceae)

By S. R. JOHNS and J. A. LAMBERTON

(C.S.I.R.O., Division of Organic Chemistry, Chemical Research Laboratories, Melbourne, Victoria, Australia)

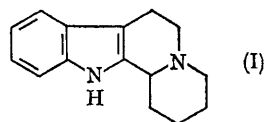
and J. L. OCCOLOWITZ

(Defence Standards Laboratories, Maribyrnong, Victoria, Australia)

No structural information regarding alkaloids of the family Anacardiaceae appears to be available, although there is an early account¹ of the isolation of an amorphous base from *Quebrachia (Loxopterygium) lorentzii* Griseb. We now report that the major alkaloid, C₁₅H₁₈N₂, m.p. 158—159°, [α]_D -12.5° (methanol), from the leaves of a New Guinea tree, *Dracontomelum mangiferum* Bl.,

belonging to the family Anacardiaceae, has been identified as (-)-1,2,3,4,6,7,12,12b-octahydroindolo[2,3-*a*]quinolizine (I). Although not previously isolated from natural sources, the (\pm)-form of (I) has been prepared synthetically.²⁻⁴ The structure of the alkaloid (I) was deduced from spectroscopic data and confirmed by the formation of 1-butyl- β -carboline on dehydrogenation with selenium.

The biosynthesis of (I) is of interest since its structure suggests formation from tryptophan and α -keto-adipate or lysine, in contrast to the mevalonate-derived alkaloids of the yohimbine type⁵ in which the same ring system is incorporated.



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¹ O. Hesse, *Annalen*, 1882, **211**, 274.

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⁴ J. Keufer, *Arch. pharm. franç.*, 1950, **8**, 816.

⁵ A. R. Battersby, R. T. Brown, R. S. Kapil, A. O. Plunkett, and J. B. Taylor, *Chem. Comm.*, 1965, 538.