THE ISOLATION OF THE ALKALOID JASMININE FROM $OLEA\ PANICULATA$ (OLEACEAE)

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The terpenoid alkaloid jasminine (1) was previously isolated from a number of Jasminum species and from Ligustrum novoguineense.^{1,2} Its range of occurrence has now been extended to a third genus of the family Oleaceae by the isolation of jasminine from the leaf alkaloids of Olea paniculata R. Br., a slender tree occurring in New Guinea.

$$H_2C$$
 NH
 MeO_2C
 Me
 MeO_2C
 Me
 MeO_2C
 Me
 Me
 Me
 MeO_2C
 Me
 Me

In the earlier study of Jasminum alkaloids another terpenoid alkaloid (2) was isolated from an incompletely identified Jasminum species from New Guinea.² Since the publication of this work,² the same alkaloid has been isolated from Cantleya corniculata (family Icacinaceae) and given the trivial name cantleyine.³ Cantleyine was also reported to have been obtained from the pericarp of Strychnos nux-vomica (family Loganiaceae).³ It has been shown convincingly that cantleyine is an artefact generated by the action of ammonia on loganin, and it is therefore to be expected that the Jasminum alkaloid (2) is also an artefact. This possibility was considered when the occurrence of alkaloid (2) (cantleyine) was first reported.² The situation with jasminine is less clear. It could be an artefact generated from ammonia and a bakankosin-type precursor, but in the only instance where a Jasminum species was extracted without the use of ammonia the yield of jasminine was not significantly altered.¹

Experimental

Leaves of *O. paniculata* (Herbarium voucher number TGH 11948) were collected from a tree (12 m high, 20 cm in diameter) near Omaura in the Eastern Highlands District, Territory of New Guinea.

Extraction of the milled dried leaves (8 kg) by the method described afforded 2.6 g crude alkaloids. As with previously examined species, about 50% of the crude alkaloids dissolved in hot

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- ¹ Hart, N. K., Johns, S. R., and Lamberton, J. A., Aust. J. Chem., 1968, 21, 1321.
- ² Hart, N. K., Johns, S. R., and Lamberton, J. A., Aust. J. Chem., 1969, 22, 1283.
- ³ Sévenet, T., Das, B. C., Parello, J. B., and Potier, P., Bull. Soc. chim. Fr., 1970, 3120.

benzene, leaving an insoluble, intractable gum. Chromatography of the benzene-soluble portion from $1.8\,\mathrm{g}$ crude alkaloids on neutral alumina afforded a series of crystalline fractions (100 mg) which were eluted by benzene. Crystallization from benzene gave jasminine, m.p. $175-176^\circ$, $[\alpha]_D - 33^\circ$ (c, 0.9 in CHCl₃), which was identical (mixed m.p., i.r., and n.m.r. spectra) with that previously identified. 1,2

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