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ALKALOIDS OF THE SEEDS OF *PAGIANTHA MACROCARPA*

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Key Word Index—*Pagiantha macrocarpa;* Apocynaceae; indole alkaloids.

The powdered seeds (1150 g) were exhausted in a Soxhlet by petrol and the alkaloids recovered from extract by HCl 0,2 N (1.8 l). Acid solution was extracted at pH 9 (NH_4OH) by Et_2O (1.8 l) giving weak bases (8·67 g). By dissolution of the latter in a small amount of MeOH, crystals (3.47 g) of voacangine [1] are formed. The product was identified by comparison with authentic sample, after recrystallization in the same solvent (PF, $[\alpha]_D$, UV, IR and MS). The mother liquors were chromatographed over a column of Sigel (Merck) (C_6H_{10}–Me_2CO) giving several alkaloids. Further separation on TLC plates (C_6H_{10}–Me_2CO 9:1) yielded voaphylline [2], coronaridine [3] and voacangine, identified by direct comparison with authentic samples (UV, IR and MS). A fourth product, [mp 131–33° (Kofler); UV λ_{max}, nm (log ε) 227 (3.94), 272 (3.57), 286 (3.59); IR (CCl_4) ν cm^{-1} 3470, 1750, 1695, 1600; MS *m/e* (ab. %) 384 (100) (M^+), 367 (60) $(M–OH)^+$, 325 (9) $(M–COOCH_3)^+$] showed the physical constants of voacangine-hydroxy indolenine [4] (7-hydroxy-1-dehydrovoacangine).

This identification was confirmed by comparison (mp, TLC, IR, MS) with a product obtained by oxidation of voacangine with H_2O_2 [4].

Plant material. Pagiantha macrocarpa (Jack) Markgr. (*Ervatamia macrocarpa* Merrill; *Tabernaemontana macrocarpa* Jack). Apocynaceae from North Borneo. Sample collected by N. G. Bisset (C.N.R.S. Expedition, 1963–64) on 12.7.1964 in Pulan Selalo, Sibu, Sarawak, Eastern Malaysia. Herbarium material deposited in the Herbarium of the Forestry Department in Kuching, Sarawak. No previous chemical work.

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ALCALOIDES DES FEUILLES DE *RAUWOLFIA VOMITORIA*: IDENTITE DE LA VOMIFOLINE AVEC LA PERAKSINE

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Key Word Index—*Rauwolfia vomitoria;* Apocynaceae; vomifoline; peraksine.

La composition des feuilles de *R. vomitoria* varie suivant l'origine [1]: hétéroyohimbines et oxindoles [2, 3], α-yohimbine et geissoschizol (*vide infra*) dans des échantillons du Nigéria et de Guinée; vomifoline, rauvoxinine, des acétyldesformopicraline et desacétyldesformoakuammiline [4, 5] dans les échantillons de Côte d'Ivoire; vomilénine dans des feuilles de même provenance [6]. La nature chimique de la vomifoline [4] n'a pas été encore précisée.

L'extraction de la vomifoline a été déjà décrite [4]. En même temps, on a isolé, des fractions moyennement polaires de la chromatographie sur Al_2O_3 des alcaloïdes, deux bases non signalées dans les feuilles de *R. vomitoria* [7]: l'α-yohimbine et le geissoschizol [8]. Constantes de la vomifoline **1**: $C_{22}H_{22}O_2N_2$ 0,5 H_2O; F. 184° (Kofler); $[\alpha]_D^{20}$ + 44° (EtOH, c = 0.86); pK 7,65 (MCS); UV λ_{max} nm (log ε) 227 (4,42). 280 (3,75). 290 (3,68) (épaulement); IR ν_{KB} cm^{-1} 3400, 1630; RMN ^1H (60 MHz, $(CD_3)_2CO$, TMS) δ ppm 1,34 (*d* 3 H, CH_3—$\underset{|}{CH}$—O—);