

supported the position of attachment of glucose to the aromatic hydroxy group.¹ The above results suggested glucosyringic acid (4- β -D-glucopyranosyloxy-3,5-dimethoxybenzoic acid) for (I). Glucosyringic acid was synthesized from syringic acid and α -acetobrom-D-glucose for identification. The resulting acetylglucoside proved to be identical to acetate of (I) with respect to m.p., R_f value on TLC and i.r. spectrum. The m.p., u.v. and i.r. spectrum of its deacetylated product were also identified to those of (I). After methylation of synthetic acetylglucosyringic acid with diazomethane acid hydrolysis gave methyl syringate, which was identified with authentic sample.

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α -YOHIMBINE FROM *ASPIDOSPERMA EXCELSUM*

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Plant. *Aspidosperma excelsum* Benth¹ from Venezuela.

Previous extraction. Yohimbine, *O*-acetyl-yohimbine and excelsinine (10-methoxycorynanthine) were isolated previously.²

Isolation. The mother liquors from the previous extraction showed by TLC (silica gel G: CHCl₃ 10-MeOH 1) small quantities of a fourth alkaloid. The crude base (4 gm) was chromatographed slowly over a column of TLC silica gel G yielding (after certain highly coloured impurities): *O*-acetyl-yohimbine (200 mg), α -yohimbine (10 mg), yohimbine (1.53 gm) and excelsinine (29 mg).

Identification. m.p. 233–235° (decomp.); $[\alpha]_D^{20}$ -18° (pyridine). $\lambda_{\max}^{\text{EtOH}}$ 227.5 (40,800), 284 (8310) and 292 (6920) nm; i.r. peaks at 3550 (OH), 3400 (NH) and 1740 (ester) cm⁻¹; NMR peaks at 7.98 (1H: indolic NH), 7.22 (4H: mult. aromatic) and 3.83 (COOCH₃) δ . Mass spectrum: 354 (M⁺), 336 (M—H₂O), 295 (M—COOCH₃) and typical tetrahydrocarboline peaks at 184, 170, 169 and 156 *m/e*.

Comparison of these properties with those published for α -yohimbine³ suggested identity which was confirmed by comparison with an authentic sample† (TLC, i.r. and mixed m.p.).

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³ M. HESSE. *Indolalkaloide in Tabellen* (and references cited), Springer-Verlag, Berlin (1964).