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SHORT COMMUNICATION

ISOLATION OF 3,3',4',5,5',7,8-HEPTAMETHOXYFLAVONE FROM *MURRAYA EXOTICA**

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Abstract—3,3',4',5,5',7,8-Heptamethoxyflavone (hibiscetin heptamethyl ether) has been isolated from the leaves of *Murraya exotica* L.

Plant material. *Murraya exotica* L. (Rutaceae) collected at Thenmala Forest, Kerala, in October 1965.

Previous work. Chemical.[1-4]

Leaves. Extracted with MeOH and the crude extract (12 g) chromatographed on (120 g) silica gel (0·05–0·2 mm).

Compound isolated. Elution with $CHCl_3$—2% MeOH gave pale yellow needles recrystallized from CH_2Cl_2–EtOH (130 mg), m.p. 190°, R_f 0·7 (TLC on Si gel; $CHCl_3$:3% MeOH). Analyses for $C_{22}H_{24}O_9$ (M^+ at *m/e* 432). A red colour in Shinoda test and the u.v. spectrum λ_{max} EtOH 209, 252, 266 (infl.), 274, 310 (infl.) and 348 nm; log ϵ, 4·73, 4·19, 4·25, 4·27, 4·16 and 4·22 are characteristic of a flavonoid compound. In the NMR spectrum (solvent, $CDCl_3$), signals at 7·57δ (2H, singlet), 6·45δ (1H, singlet) and 4·0δ (21H, multiplet) indicated it to be a heptamethoxyflavone. The singlets at 7·75δ and 6·45δ should be attributed to the 2',6'-protons of ring B[1] and the 6-proton of ring A.[5] This data suggested 3,3',4',5,5',7,8-heptamethoxyflavone as the probable structure. Methylation of 5,7,-8-trihydroxy-3,3',4',5'-tetramethoxyflavone (m.p. 255°) with dimethyl sulphate gave the completely methylated flavone (heptamethyl ether of hibiscetin), m.p. 190°, identical with natural compound (mxd. m.p., i.r., TLC).

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