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HIRSUTEINE AND MITRAJAVINE FROM *MITRAGYNA HIRSUTA*

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Key Word Index—*Mitragyna hirsuta*; Rubiaceae; hirsuteine; mitajavine.

Plant. Mitragyna hirsuta Havil, leaves. *Source.* Collected in Thailand by Mr. Bamrung Tantisewie. A voucher specimen is deposited in the Museum of the Pharmacognosy Department, Department of Pharmacy, Chelsea College, University of London. *Previous work.* Hirsutine, rhynchophylline, isorhynchophylline, mitraphylline and isomitraphylline have been isolated from the leaves.[1] Hirsuteine has previously been isolated from *M. parvifolia* Korth,[2] and mitrajavine from *M. javanica* var. *microphylla* Koord et Valeton.[3]

Present work. The heteroyohimbine alkaloids, hirsuteine (6 mg) and mitrajavine (5 mg) have been isolated from the dried mother liquors of hirsutine[1] (154 mg) by means of preparative TLC using silica gel G–silica gel GF (2:1) and $CHCl_3$–EtOH (95:5). The alkaloids were identified by comparing their R_fs on TLC systems silica gel G; $CHCl_3$–EtOH (3:1) (hirsuteine 0·18, mitrajavine 0·31) and alumina G; $CHCl_3$ (hirsuteine, 0·49, mitrajavine 0·75), using 0·2 M $FeCl_3$–35% $HClO_4$ as spray reagent and by means of their UV and MS. The MS were determined on a high resolution AEI 902 mass spectrometer having a direct inlet system and operating at a temperature of 220° and at 70 eV. MS data, mitrajavine *m/e* 382 (M^+, 42%), 381 (25%), 255 (17%), 239 (25%), 214 (58%), 199 (37%), 186 (100%);[4] hirsuteine, 366 (M^+, 84%), 365 (60%), 351 (70%), 237 (20%), 223 (22%), 197 (8%), 184 (100%), 170 (65%), 169 (42%), 156 (73%).[2]

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