

MS/SC/11/1609

SHORT COMMUNICATION

CONSTITUENTS OF THE BARK OF *MARSDENIA VOLUBILIS*

MS
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Plant. *Marsdenia volubilis* T. Cook (Syn. *Dregea volubilis* Benth. ex. Hook.) (Family)—Asclepiadaceae.

Uses. Medicinal.¹

Previous Work. Seeds,² twigs and leaves,³ follicles.⁴

Bark. Extracted with petroleum ether, chloroform and alcohol.

Pet. ether ext. (Chromatographed, alumina); β -sitosterol $C_{29}H_{50}O$ (m.p., mxd. m.p. and $[\alpha]_D$; m.p., mxd. m.p. and $[\alpha]_D$ of acetate).

Chf. ext. 2-Deoxy sugars, after mild acid hydrolysis, forming part of pregnane glycosides.²

Alcoholic ext. *Kaempferol* (extracted by ether from the alcoholic ext.) $C_{15}H_{10}O_6$ (m.p., mxd. m.p. and paper chromatography; m.p. and mxd. m.p. of acetate and methyl ether).

Kaempferol 3-galactoside (trifolin)⁵ (extracted by ethyl acetate from the alcoholic ext.) $C_{21}H_{20}O_{11}$ (m.p., mxd. m.p. and paper chromatography); hydrolysis with acid to kaempferol (m.p., mxd. m.p. and paper chromatography; m.p. and mxd. m.p. of acetate) and galactose (paper chromatography and m.p. and mxd. m.p. of *p*-nitrophenylhydrazone); methylation with diazomethane and acid hydrolysis to 3-hydroxy-5,7,4'-trimethoxyflavone (m.p.) and galactose.

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¹ R. N. CHOPRA, I. C. CHOPRA, K. L. HANDA and L. D. KAPUR, *Indigenous Drugs of India*, p. 133, U. N. Dhur, Calcutta (1958).

² T. REICHSTEIN *et al.*, *Helv. Chim. Acta*, **37**, 721 (1954); **48**, 857 (1965); **49**, 1625, 1632, 1655 (1966); **51**, 148 (1968).

³ D. VENKATA RAO, E. VENKATA RAO and N. VISWANADHAM, *Current Sci. (India)* **36**, 421 (1967).

⁴ S. SANKARA SUBRAMANIAN and A. G. R. NAIR, *Phytochem.* **7**, 1703 (1968).

⁵ S. HATTORI, M. HASEGAWA and M. SHIMOKORIYAMA, *Acta Phytochim. (Japan)* **13**, 99 (1943); *Chem. Abstr.* **45**, 5156 (1951).