

THREE INDOLES FROM MURRAYA GLENIEI ROOT TIMBER

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The root timber of Murraya gleniei (Family Rutaceae), which is endemic to Sri Lanka contained three new indoles. We have previously reported the presence of several coumarins in its leaves¹ (Wickramaratne et al., 1984) and root bark² (Kumar et al., 1987).

The dichloromethane extract of the root timber contained three major alkaloids, which were separated using medium pressure chromatography. On the basis of spectral data, their structures were postulated to be those of 3-substitued indoles. A 2-methyl 4-(indol-3'-yl)-butanoic acid structure was proposed for the most polar compound while the least polar one was chemically shown to be its methyl ester. A 2-methyl 4-(5'-methoxyindol-3'-yl)-butanol structure was proposed for the third alkaloid. The similarity of its 1-H NMR spectra to that of the reduction of the methyl ester gave additional evidence for this structure.

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References:

Wickramaratne, D.B.M., Kumar, V. and Balasubramaniam, S. (1984) Phytochemistry, 23:2964.

Kumar, V., Reisch, J., Wickramaratne, D.B.M., Hussain, R.A., Adesina, K.S. and Balasubramaniam S., (1987) Phytochemistry, 26:511.