Identification of a New Triterpene, 3-Epimoretenol, from the Bark of *Sapium sebiferum* Roxb.

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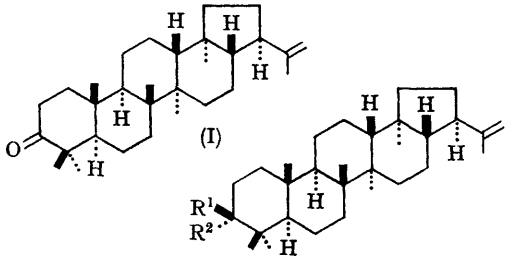
THE isolation of moretenone (I), moretenol (II), and 3-epimoretenol (III) from the neutral ether-soluble portion of the benzene extract of the bark of *Sapium sebiferum* Roxb.[1] (Euphorbiaceae) is believed to constitute the first report of the occurrence of triterpenes of the hopane series in the Euphorbiaceae species. Moretenone (I), the product of oxidation of moretenol (II),[2] was the triterpene present in greatest quantity. This is the first isolation of moretenone from natural sources.

The third triterpene, $C_{30}H_{50}O$, m.p. 223—224°, $[\alpha]_D$ — 2·5, {acetate $C_{32}H_{52}O_2$, m.p. 233—234° $[\alpha]_D$ — 19·4} was obviously related to (I) and (II) from comparison of their respective mass (*m/e* 189, 207, 426) and n.m.r. spectra. Signals in the n.m.r. spectrum of this triterpene appeared at 0·68

(3H), 0·83 (6H), 0·95—0·98 (9H), and 1·68 p.p.m. (3H) corresponding to six methyl groups on



(I)

(II) R^1=OH, R^2=H

(III) R^1=H, R^2=OH

saturated carbon and one on a doubly bonded carbon atom, respectively. A signal at 3·40 p.p.m. (width at half height of 7 Hz.) indicated that the proton attached to the carbon bearing the hydroxy-group was equatorial. The signal of the terminal methylene appeared at 4·68 p.p.m. Chromium trioxide–pyridine oxidation yielded moretenone (I) and established the unknown to be 3-epimoretenol (III).

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[1] R. N. Chopra, S. L. Nayar, and I. C. Chopra, "Glossary of Indian Medicinal Plants", C.S.R.I., India, 1956, p. 221.
[2] M. N. Galbraith, (the late) C. J. Miller, J. W. L. Rowson, E. Ritchie, J. S. Shannon, and W. C. Taylor, *Austral. J. Chem.*, 1965, **18**, 226.