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# THE CHEMICAL CONSTITUENTS OF MUSANGA CECROPIOIDES

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We wish to report the isolation, for the first time, of tormentic acid, 2-acetyl tormentic acid, 3-acetyl tormentic acid, and euscaphic acid, as their methyl esters, from the rootwood of Musanga cecropioides R. Br. (Urticaceae). These triterpene acids were previously isolated from Myrianthus arboreus P. Beauv (1,2). The two genera, Musanga and Myrianthus, which were formerly classified as members of the Moraceae (3,4), are now placed in the family Urticaceae because both genera lack latex (5). The presence of the same triterpene acids in both genera may be taxonomically significant.

#### **EXPERIMENTAL**

PLANT MATERIAL.—M. cecropioides was collected from the bank of the New Calabar River near the University of Port Harcourt, Choba, Nigeria. Voucher specimens are deposited at the Herbarium of the Faculty of Science, University of Port Harcourt, Nigeria.

EXTRACTION AND ISOLATION.—The rootwood (15 kg) of M. cecropioides was crushed and successively extracted with hexane, CHCl<sub>3</sub>, and EtOH. The EtOH extract (58 g) was redissolved in 10% aqueous MeOH and precipitated with dilute HCl. The precipitate (42 g) was methylated (CH<sub>2</sub>N<sub>2</sub>), and the crude methyl ester (43 g) was chromatographed on a silica gel (1.2 kg) column eluted with Et<sub>2</sub>O in petroleum ether. Mixtures of 40%, 50%, 60%, and 70% Et<sub>2</sub>O in petroleum ether eluted 2-acetyl methyl tormentate, 3-acetyl methyl tormentate, methyl euscaphate, and methyl tormentate, respectively. These compounds were identified from their mp, ir, ms, and nmr and by direct chromatographic comparison with authentic samples isolated from Myrianthus arboreus (1,2).

Full details of the isolation, mps, spectral data, and identification of the compounds are available on request to the authors.

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