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[Lab. of Pharmacognosy]

A Xanthone from Pericarps of *Garcinia mangostana*.

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The chemical constituents of *Garcinia subelliptica* and *Calophyllum inophyllum* were dealt with in our previous papers. In continuation of our study oriented to search for xanthone derivatives with bioactive potency in guttiferous plants, we examined the chemical constituents in pericarps of *G. mangostana*. A new geranylated xanthone, mangostinone was isolated from benzene extract of *G. mangostana*. The structure was confirmed to 2-geranyl-1,3,5-trihydroxyxanthone by means of spectroscopic analysis.

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[Lab. of Pharmacognosy]

Two Xanthenes with a 1,1-Dimethylallyl Group in Root Bark of *Garcinia subelliptica*.

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Guttiferous plants are known to be an abundant source of xanthenes. In previous papers, we elucidated the structures of some new xanthone derivatives from *Garcinia subelliptica* and *Calophyllum inophyllum*. In a further search for biologically active compounds in guttiferous plants, two new preylated xanthenes, subelliptenones H and I, were isolated from the root bark of *G. subelliptica*. The structures were determined by NMR spectroscopy and chemical transformation. The both had a 1,1-dimethylallyl group and a isoprenyl group cyclize with the O-function.

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Two Prenylated Anthrones in *Harungana madagascariensis*.

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Two new anthrones were isolated from *Harungana madagascariensis* in addition to a known anthrone, two xanthenes, four anthraquinones and two flavonoids. The structures of the two anthrones were determined to be 1,3,8-trihydroxy-4,5-diisoprenyl-7-methylanthrone (harunganol A) and 1,3,8-trihydroxy-4,5,7-triisoprenyl-7-methylanthrone (harunganol B) by spectroscopic analysis. The other anthrone, 1,8-dihydroxy-2-isoprenyl-3-methoxy-6-methylanthrone which has been once derived from natural product, and one xanthone, 1,5,6-trihydroxy-7-methoxyxanthone which has been synthesized earlier were isolated for the first time as genuine natural product.