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Two New Antineoplastic Diterpenes from *Taxus mairei*.

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Taxus mairei S. Y. HU (Taxaceae) grows in Fujiang province, China. From the ethanolic extract of the bark, two new diterpenes, named taxamairins A and B, possessing a tropone skeleton were isolated together with some taxane-type diterpenes. These new compounds displayed inhibitory activity (IC_{50} 30.21 μ g/ml (taxamairin A) and 26.78 μ g/ml (taxamairin B)) against hepatoma cell *in vitro*. The structure of these compounds was determined by spectroscopy, and finally confirmed by X-ray analysis. To the best of our knowledge, this paper is the first report of diterpenes having a novel skeleton as natural products.

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Phenolic Constituents from Seeds of *Coptis japonica* var. *dissecta*.

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The rhizomes of *Coptis* species are used as a Chinese crude drug for digestive problems. Previous phytochemical studies showed the occurrence of alkaloids (berberine type and benzophenanthridine type) and flavonoids (coptisides I and II). In addition to coumarinolignans (cleomiscosin A and aquillochin) and 7, 4'-dihydroxy-5-methoxyflavanone, a new dihydrochalcone, 2', 4, 4'-trihydroxy-6'-methoxydihydrochalcone was isolated from the seeds of *Coptis japonica* var. *dissecta*. The structure of the dihydrochalcone was confirmed by comparison with relevant synthetic sample.

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Chemotaxonomic Studies on the Genus *Citrus*. I. Distribution of Flavones in the Subgroup *Microcarpa*.

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Systematic classification of the genus *Citrus* based on morphological characters has been used for delimitation of *Citrus* species. With progressive hybridization and apomictic reproduction, however, it has become difficult to assess the relationship between different taxa only on the basis of morphology. In the present study, the distribution of polyoxygenated flavones in the subgroup *microcarpa* of the genus *Citrus* was examined by use of high-performance liquid chromatography. 5, 6, 7, 8, 3', 4'-Hexamethoxy-, 5, 6, 7, 8, 4'-pentamethoxy- and 5, 6, 7, 3', 4'-pentamethoxyflavone were detected in all species of the subgroup and their contents in the fruit peels were quantitated.