A prenylated Flavanone from Roots of *Maackia amurensis* subsp. *buergeri*.

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*Maackia amurensis* subsp. *buergeri* (Leguminosae) is a deciduous tree widely distributed in Eastern Asia. A prenylated flavanone was isolated from the roots of the plant in addition to seven known compounds, daidzein, formononetin, ononin, maackiaiain, trifolirhizin, isomedicarpin 9-O-glucoside and 5-hydroxysoforanone. The structure of the new flavanone was characterized as 8,5′-diisoprenyl-5,2′,4′-tri hydroxy-7-methoxyflavanone (maackiaflavanone).

2,3-Secogermacranolides and Germacranolides from *Pyrethrum santolionoides*.


Previous study on the chemical constituents of *Pyrethrum santolionoides* (Compositae) led to the isolation of hydrotridentin, erivanin, heliangolides and some germacranolides from the aerial parts and various compounds including malabaricane-triterpene derivative from the root. Re-investigation of the chemical constituents of the aerial parts of *P. santolionoides* gave six new sesquiterpene lactones (two 2,3-secogermacranolides and four germacranolides) in addition to eight known compounds. These structure were determined by spectroscopic analysis.

Flavonoids in Frond Exudated of *Pityrogramma tartarea*.

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From the frond exudated of *Pityrogramma tartarea*, a new dihydrochalcone, 2,6′-dihydroxy-3,4,4′-trimethoxydihydrochalcone, and five complex flavonoids (D-2, D-2/a, calomelanols, D, F and H) were isolated in addition to three known chalcones, three dihydrochalcone and three flavanones. Naturally occurring compounds which are assumed to be transformed from secondary metabolites in vitro by physical factors as found in exudated of species, such *Pityrogramma*, *Pentagramma*, *Primula* etc., are defined as tertiaiy metabolites.