

var. angustata

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Fraxinus sieboldiana var. *angustata* Nakai (Oleaceae) is one of the native plants of *Fraxinus* sp. in Korea. The bark of this plant called as "Gin Pi" has diverse pharmacological activities such as soothing, expectorant and anti-inflammatory activity. The isolations of hydroxycoumarins (e.g. esculin, fraxin, fraxetin, fraxinol, isofraxetin and esculetin) have been reported from several research groups over the past two decades.

By means of HIV gp-41 binding affinity directed chromatographic fractionation, three phenylpropanoid glycosides, calceolarinoside A (1), calceolarinoside B (2) and acteoside (3), along with four hydroxycoumarins (esculin, fraxin, fraxetin and esculetin) were isolated from *Fraxinus sieboldiana* var. *angustata*. The structures of these compounds were elucidated on the basis of spectroscopic methods. Three phenylpropanoid glycosides were isolated for the first time from this plant.

[OD-7] [04/20/2001 (Fri) 15:00 – 15:15 / Room 3]

Cytotoxic Acetylenes and a Pyridinium Alkaloid from the Stony Coral *Montipora* sp.

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Stony corals have been found to contain interesting secondary metabolites, and the genus *Montipora* is especially rich in acetylenic compounds. Our continuing search for the cytotoxic constituents of the marine organisms has resulted in the isolation of a series of diacetylene derivatives from *Montipora* sp. All these acetylenes are either 2,4- or 5,7-diacetylenes and most of them have shown a significant cytotoxicity against a small panel of human solid tumor cell lines (A549, SK-OV-3, SK-MEL-2, XF-498, and HCT15). Montiporyne A has been found to induce apoptosis in human colon cells (HCT116). A new pyridinium alkaloid has also been isolated. The structures were elucidated based on combined spectroscopic data.

Reference:

1. Bae, B. H.; Im, K. S.; Choi, W. C.; Hong, J.-K.; Lee, C.-O.; Choi, J. S.; Son, B. W.; Song, J.-I.; Jung, J. H., *J. Nat. Prod.* 2000, 63, 1511-1514.

[OD-8] [04/20/2001 (Fri) 15:15 – 15:30 / Room 3]

A RAPID, ACCURATE, AND NONDESTRUCTIVE METHOD FOR THE DETERMINATION OF FAT, LACTOSE, PROTEIN, AND TOTAL SOLIDS IN RAW MILK USING NEAR-INFRARED TRANSMITTANCE SPECTROSCOPY

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Near-infrared (NIR) transmittance spectroscopy has been applied to determine rapidly and nondestructively the content of fat, lactose, protein and total solids in raw milk. The spectral range