

acid moiety was defined by NMR and CD spectroscopy. The compounds were evaluated for cytotoxicity against five human tumor cell lines to display significant potency.

[PD2-14] [10/19/2001 (Fri) 14:00 – 17:00 / Hall D]

Phytochemical Constituents of Chrysanthemi Flos

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The flowers of *Chrysanthemum boreale* and *C. indicum* (Compositae) have been used in the name of "Yagukhwa" for the treatment of headache and eye disease in the Korean traditional medicine. The extracts of Chrysanthemi Flos have been reported to exhibit antispasmodic, anti-inflammatory and antiviral activity. The genus *Chrysanthemum* is known to contain numerous flavonoids as well as sesquiterpene lactones. During our search for antiviral compounds from natural products, an ethyl acetate fraction of Chrysanthemi Flos was found to potently inhibit HIV-1 integrase. By means of bioassay-directed chromatographic fractionation, six flavonoids and three quinic acid derivatives were isolated. The structural determination of these compounds by the aid of spectroscopic analyses (1H-1H COSY, DEPT, HMQC and HMBC) will be discussed. Among isolated compounds, apigenin-7-glucuronide and three quinic acid derivatives were isolated from this plant for the first time.

[PD2-15] [10/19/2001 (Fri) 14:00 – 17:00 / Hall D]

Diarylheptanoids from Barks of *Alnus japonica*

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Barks of *Alnus japonica* have been used as a traditional medicine for the remedies of inflammation, hemorrhage, fever, diarrhea and alcoholism. We tried to investigate the barks of *Alnus japonica* chemically and isolated 10 diarylheptanoids. Structures of these compounds were identified as hirsutanonol, hirsutenone, platyphylloside, oregonin, 1,7-bis-(3,4-dihydroxyphenyl)-heptane-3-O-β-D-glucopyranosyl(1→3)-β-D-xylopyranoside, 1,7-bis-(3,4-dihydroxyphenyl)-heptane-3-O-β-D-apiofuranosyl(1→6)-β-D-glucopyranoside, 1,7-bis-(3,4-dihydroxyphenyl)-heptane-3-one-5-O-β-D-glucopyranoside, 1,7-bis-(3,4-dihydroxyphenyl)-heptane-5-O-β-D-glucopyranoside, 1,7-bis-(3,4-dihydroxyphenyl)-5-hydroxyheptane and 1,7-bis-(3,4-dihydroxyphenyl)-5-hydroxyheptane-3-O-β-D-glucopyranoside by comparison with previously reported spectral data.

[PD2-16] [10/19/2001 (Fri) 14:00 – 17:00 / Hall D]

Panaxynone A, a New Inhibitor of Acyl-CoA: Cholesterol Acyltransferase from the roots of *Panax ginseng*

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Acyl-CoA: cholesterol acyltransferase (ACAT, EC 2.3.1.26) is responsible for intracellular esterification