[PD2-40] [2003-10-11 09:00 - 12:30 / Grand Ballroom Pre-function]

Three New Flavonoids Of Spatholobus suberectus

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Six compounds were isolated from the 90% MeOH fraction of the vine stem of Spatholobus suberectus Dunn (Leguminosae) using silica gel, reverse phase column chromatography and RP-HPLC. Structures of compounds 1-6 were elucidated by spectroscopic parameters of IR, EI MS, FAB MS, 1D-NMR and 2D-NMR spectrum and identified as pseudobaptigenin (1), genistein (2), (2R)-7-hydroxy-6-methoxyflavanone (3), (3R,4R)-2",4"-dihydroxy-6,7-methylenedioxy-isoflavan-4-ol (4), (3R,4R)-7,2"-dihydroxy-4"-methoxyisoflavan-4-ol (5), sativan (6), respectively. Compounds 3, 4 and 5 have been newly reported in nature.

[PD2-41] [2003-10-11 09:00 - 12:30 / Grand Ballroom Pre-function]

Inhibitory effects of the extract of Viscum album on the proliferation of human tumor cell lines

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A bioassay-guided fractionation of the whole extract of Viscum album (a parasitic plant : Loranthaceae) led to the isolation of two triterpenoidal components, oleanolic acid (1), β-amyrin acetate (2), homoflavoyadorinin B (3) as well as large quantity of free fatty acid mixtures as active ingredients of the extract responsible for the antitumoral property. The EtOAc soluble part and BuOH soluble part of the extract demonstrated a significant inhibition on the proliferation of cultured human tumor cells such as A549 (non small cell lung), SK-OV-3 (ovary), SK-MEL-2 (melanoma), XF498 (central nerve system) and HCT-15 (colon) in vitro, whereas the remaining water soluble part exhibited a poor inhibition. The intensive phytochemical investigation of the EtOAc soluble part and BuOH soluble part of the extract has resulted in the conclusion that the oleanolic acid (1) and large amounts of free fatty acid mixtures were attributed to the in vitro antitumoral property of the whole extract of Viscum album

[PD2-42] [2003-10-11 09:00 - 12:30 / Grand Ballroom Pre-function]

Phenolic glycosides from Pyrola japonica-(Ⅱ)

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Two known compounds, syringaresinol monoglucoside(8), chimaphilin(14), together with three new compounds, (9)[mp. 106~111℃, $C_{29}H_{44}O_{13}$], (10)[mp. 180~182℃, $C_{15}H_{20}O_9$] and (11)[mp. 100~105℃, $C_{18}H_{28}O_8$] were isolated from the BuOH fraction of Pyrola japonica(Pyrolaceae). The structures of the known compounds were determined by chemical and spectroscopic methods. The assignments of the ^{1}H- and ^{13}C-NMR spectra of these compounds were carried out by two-dimensional ^{1}H-^{1}H-COSY, NOESY and ^{1}H-^{13}C multiple-bond, multiple-quantum spectroscopic correlation techniques. The characterization of the three new compounds is now in progress.

[PD2-43] [2003-10-11 09:00 - 12:30 / Grand Ballroom Pre-function]

Antiinflammatory and Antiangiogenic Activities of Flavonoids Isolated from