enteritis, diarrhea, alcoholism and cut wounds. In the current work, activity guided isolation of the butanol fraction of the Alnus japonica bark led to the isolation of catechin-7-O-β-D-apiofuranoside. Anti-inflammatory activity was determined with carrageenan-induced paw edema in mice as an acute inflammation, complete Freund's adjuvant-induced arthritis as a chronic inflammation. Carrageenan-induced paw edema in mice was significantly inhibited at 0.5, 1, 2, and 3 hr after carrageenan injection by administration of the flavonoid glycoside at the dose of 150mg/kg. The structure of the catechin-7-O-β-D-apiofuranoside that has anti-inflammatory activity was established by spectroscopic methods, including 2D-NMR.

[PD2-9] [2003-10-11 09:00 - 12:30 / Grand Ballroom Pre-function]

Discrimination between Acanthopanax Cortex and Periplocae Cortex

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Acanthopanax cortex (Acanthopanax sessiliflorum, Araliaceae, KP VIII), an important herbal drug, has been used as tonic, antistress and immuno-enhancing drugs in Korea. And Peiplocae cortex(Periploca sepium, Asclepiadaceae, CP 2000) has been used as cardiotonic, anti-inflammatory , and sedative effect in china. These are called "Namogapi" of Acanthopanax cortex and "Bukogapi" of Periplocae cortex in Chinese herbal market. These herbal medicines are sometimes circulated as the same herbal medicine "Ogapi". It's mistaken clearly. So we showed that these herbal medicines were discriminated by organic senses, microscopic identification, and spectroscopic evidences of HPTLC[silica gel, $CHCl_3$ MeOH H_2O(70:30:4), Pet Et_2O EtOAc HAc(20:3:0.5)], HPLC[C_{18}, AcCN 1 %H_3PO_4(15:85), PDA], and GC/FID/Mass[PEG, Oven Temp 150℃/3min->200℃/3min (rate 10℃/min), He].

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

Antioxidant and inhibitor of matrix metalloproteinase-1 expression from leaves of Zostera marina L.

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Apigenin-7-O-β-$_D$-glucoside, chrysoeriol, and luteolin were isolated from the aqueous ethanolic extract of Zostera marina L. leaves as the scavengers of reactive oxygen species (ROS) with the SC_{50} values of 0.18 mM, 0.68 mM, and 0.18 mM against 1,1-diphenyl-2-picrylhydrazyl (DPPH) and 0.04 mM, 0.03 mM, and 0.01 mM against superoxide radicals in the xanthine/xanthine oxidase system, respectively. The luteolin suppressed the expression of matrix metalloproteinase-1 (MMP-1) up to 44% at 4.0 μM. Also, it inhibited the production of interleukin 6 (IL-6), which were known as cytokines of MMP-1.

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

Terpene Constituents from Aster spathulifolius

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Aster species has been used in traditional chinese medicine for treatment of a bruies and asthma. On reviewing the literatures of this species, monoterpene glycosides, diterpenoids, triterpene glycosides, cyclic pentapeptides, oligopeptides and flavonoids [1] were isolated and some pharmacological activites were investigated [2]. In continuation of our search for bioative components from Korean medicinal plants, we have examined Aster spathulifolius, collected from Jeju island on August 2001. The MeOH extract of the aerial parts of this source was