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This study was carried out to examine the constituents of *Amorpha fruticosa* (Leguminosae), a shrub originated from North Africa. Dried and ground fruit of *A. fruticosa* were extracted with methanol and then concentrated to give the crude extracts. The crude extracts was successively fractionated with organic solvents, such as n-hexane, CH_2Cl_2 and EtOAc. Seven compounds were isolated from the fruits of *A. fruticosa*. On the basis of spectroscopic data, the structures of these compounds were determined as: kaempferol 7-O- α -L-rhamnopyranoside (I), methyl 3, 4, 5- trihydroxybenzoate (methyl gallate, II), tephrosin (III), dalbinol (IV), gallic acid (V), 2",4",5",7-tetramethoxyisoflavone (VI) and Dalbinol 2"-O- β -D-Glucopyranoside (VII) respectively. In addition, treatment of PC12 cells with methyl gallate (II) increased dopamine content in a dose-dependent manner (120.6 % inhibition at 5 mg/ml for 24 hr).

[PD2-6] [2003-10-11 09:00 - 12:30 / Grand Ballroom Pre-function]

Anti-Oxidant and Hepato-protective Activities of the Stems of *Acanthopanax senticosus*

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The anti-oxidant activities of *Acanthopanax senticosus* stems were investigated. The n-BuOH fraction of *A. senticosus* stems exhibited a significant decrease in serum transaminase activities elevated by hepatic damage induced by CCl_4 -intoxication in rats. The n-BuOH fraction inhibited the sGPT activities by 65.79%. The n-BuOH fraction showed the increase in the anti-oxidant enzymes such as hepatic cytosolic superoxide dismutase, catalase and glutathione peroxidase activities by 30.31, 19.82 and 155%, respectively, in CCl_4 -intoxicated rats. These results suggest that the stems of *A. senticosus* possess not only the hepatoprotective, but also the anti-oxidant activities in rats.

[PD2-7] [2003-10-11 09:00 - 12:30 / Grand Ballroom Pre-function]

Two new megastigmane glycosides from *Phyllanthus ussuriensis*

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Phyllanthus ussuriensis Rupr. et Maxim. (Euphorbiaceae) has long been used in folk medicine to treat kidney and urinary bladder disturbances, intestinal infections, diabetes, and hepatitis. Reported chemical constituents of this species are one flavonoid (rutin), two gallotannins (gallic acid, methyl gallate) and two ellagitannins. An investigation of the n-BuOH fraction of *P. ussuriensis* led to the isolation of two new megastigmane glycosides, 10-hydroxy-4,7-megastigmadiene-3-one-9-O-b-D-glucopyranoside (1), 10-hydroxy-4,6-megastigmadiene-3-one-9-O-b-D-glucopyranoside (2) and two known compounds roseoside (3) and 3-oxo-a-ionol-9-O-b-D-glucopyranoside (4). The structural elucidation of these compounds was based on the analysis of spectroscopic data.

[PD2-8] [2003-10-11 09:00 - 12:30 / Grand Ballroom Pre-function]

Catechin-7-O- β -D-apiofuranoside: An Anti-inflammatory constituent from *alnus japonica* bark

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Alnus japonica (Betulaceae) has been traditionally used for purifying blood, and curing feces containing blood,

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 *Periploca* 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 *Periploca* cortex (*Periploca sepium*, Asclepiadaceae, CP 2000) has been used as cardiotoxic, anti-inflammatory, and sedative effect in china. These are called "Namogapi" of *Acanthopanax* cortex and "Bukogapi" of *Periploca* 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, CHCl₃ MeOH H₂O(70:30:4), Pet Et₂O EtOAc HAc(20:3:0.5)], HPLC[C₁₈, AcCN 1% H₃PO₄(15:85), PDA], and GC/FID/Mass[PEG, Oven Temp 150°C/3min->200°C/3min (rate 10°C/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 SC₅₀ 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 μ M. 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 bruises and asthma. On reviewing the literatures of this species, monoterpene glycosides, diterpenoids, triterpene glycosides, cyclic pentapeptides, oligopeptides and flavonoids¹⁾ were isolated and some pharmacological activities were investigated²⁾. In continuation of our search for bioactive 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