principles.

[PD2-44] [04/21/2000 (Fri) 14:50 - 15:50 / [1st Fl, Bldg 3]]

Antilipoperoxidant Activity of Astragali Radix on CCl4-induced Hepatotoxicity

Kim EJ°, Kim YS and Yang KS

College of pharmacy, Sookmyung Women's University

The roots of *Astragalus membranceus* Bunge (Leguminosae) have been used as an antiperspirant, diuretic, or tonics in the folk remedies.
Oxygen free radical injury and lipid peroxidation have been suggested as major causes of atherosclerosis cancer, liver disease, and the aging process.
In this study, we determied effect of CH_2Cl_2, EtoAc, and BuOH fractions of Astragali Radix on CCl_4-induced liver injured rats and measured liver homogenate MDA by TBARS assay and serum parameters.
The results showed that CH_2Cl_2, EtoAc fractions have antioxidative activity on lipidperoxidation.

[PD2-45] [04/21/2000 (Fri) 14:50 - 15:50 / [1st Fl, Bldg 3]]

The effects on renal functions of Phellinus linteus

Jung EJ°, Kim JH, Yang KS, Sung JM

College of Pharmacy, Sookmyung Women's University and College of Agricultural and Life Sciences, Kangwon National Univerrsity

Phellinus linteus(Polyporaceae) has been used as anti-tumor and immumo-stimulating agents in folk medicines.
In order to elvaluate the effects on renal function of natural and cultivated P. linteus, we measured serum chemical parameter(BUN, creatinine, uric acid), urinary electrolyte(Na+, K+, Cl-) and urine volume in HgCl2-intoxicated rats.
The results showed that MeOH Ex. of natural and cultivated P.linteus had significant diuretic effects and inhibited increase of BUN, creatinine, uric acid in renal failure rats.

[PD2-46] [04/21/2000 (Fri) 14:50 - 15:50 / [1st Fl, Bldg 3]]

Effects of the Leaves of Zanthoxylum piperitum on the Formation of Lipid Peroxide In Vivo and Their Phenolic Compounds

Park JC°, Hur JM*, Lee JH*, Sung NJ*, Baek NI**, Kim MS***, Park JG, Kim HJ, Choi JW****

Dept. Oriental Medicine Resources, Sunchon National Univ., *Dept. Food & Nutrition, Kyeongsang National Univ., **Dept. Agronomy, Kyunghee Univ., ***Dong-A Pharm. Co., ****Dept. Pharmacy, Kyungsung Univ.

The effects on the hepatic lipid peroxide in bromobenzene-induced rats and phytochemical study on the leaves of Zanthoxylum piperitum A.P. DC. (Rutaceae) were investigated. The level of lipid peroxide elevated by bromobenzene was significantly reduced by the methanol extract of Z. piperitum. The air-dried leaves of Z. piperitum were extracted with boiling methanol. The extract was then fractionated into dichloromethane, ethyl acetate, n-butanol and water fractions. Silica gel and

Sephadex LH-20 column chromatography of ethyl actate and n-butanol fractions yielded six phenolic compounds. Phenolic compounds were elucidated as 3, 4-dihydroxy benzoic acid, quercetin, quercetin 3-O- -D-galactoside, quercetin 3-O- -L-rhamnoside, kaempherol 3- -L-rhamnoside and hesperidin by spectral analysis.

[PD2-47] [04/21/2000 (Fri) 14:50 - 15:50 / [1st Fl, Bldg 3]]

Four New Neuroprotective Phenylpropanoid Esters of Rhamnose Isolated from Scrophularia buergeriana Roots

Kim SR, Sung SH, Lee EJ°, Kim YC

College of Pharmacy, Seoul National University

Four new phenylpropanoid esters of rhamnose, buergerisides A_1, B_1, B_2 and C_1 were isolated from roots of *Scrophularia buergeriana* MIQ. (Scrophulariaceae). In addition, six known phenylpropanoids were authenticated as: *(E)*-cinnamic acid, *(E)*-*p*-methoxycinnamic acid, *(E)*-*p*-methoxycinnamic acid methyl ester, *(E)*-*p*-coumaric acid, *(E)*-caffeic acid, *(E)*-ferulic acid, and a phenylalcohol, 2-(3-hydroxy-4-methoxyphenyl)ethanol. These ten phenylpropanoids including the four newly-reported compounds, all attenuated glutamate-induced neurotoxicity when added to primary cultures of rat cortical cells in a dose-dependent manner. These results demonstrate that phenylpropanoids isolated from *S. buergeriana* may exert significant protective effects against glutamate-induced neurodegeneration in primary cultures of cortical neurons.

[PD2-48] [04/21/2000 (Fri) 14:50 - 15:50 / [1st Fl, Bldg 3]]

Flavonoids from the leaves of Salix hallaisanensis

Oh MH°, Ham I, Sung HK, Whang WK

College of Pharmacy, Chung-Ang University

For the investgation medicinal resources for salix species, the studies were carried out to evaluate the pharmaco-constituents in the leaves of *Salix hallaisanensis*(salicaceae) which have been used as anti-inflamation, analgergic, and diuretic agents in Korean folk medicine.
Eight flavonoids; three diosmtin glycosides, three quercetin glycosides, one luteolin glycoside, and one kaempfrol glycoside were isolatedby column chromatographic seperating using Diaion HP-20, ODS gel, MCI gel, and sephadex LH-20. The structure of these compound were elucidated by physico-chemical evidence(^{1}H-NMR,^{13}C-NMR, IR, and FAB-MASS).

[PD2-49] [04/21/2000 (Fri) 14:50 - 15:50 / [1st Fl, Bldg 3]]

Pharmacognostical Studies on the Ha Go Cho

Park JH°, Cho CH, Kim JM, Lee YS

부산대학교 약학대학

"Ha Go Cho (夏枯草)" is one of Chinese crude drugs used mainly as a diuretic. With regard to the botanical orgin of "Ha Go Cho", it was reported by Su et al. that those from China was originated in the fruited spica of Prunella vulgaris L. of Labiatae. It was , however, for the herba or spica of Prunella vulgaris L. var. lilacina Nakai from Korea. According to survey of markets in Korea, most of the materials collected in the markets were seemed to be originated in Prunella plant, while some, were seemed to be Thesium plant of Santalaceae.