

Yook CS^o, Inn MK, Chang JW, Kim YH, Jeong JH

College of Pharmacy, Kyung Hee University, Dongdaemoonku Hoegidong #1, Seoul 130-701, Korea

Dendranthema zawadskii grows wild in all areas of Korea. Its herb and flower have been used as folk medicine for a long time in Korea. Its usages are related to woman's disease, stomach disease, and appetite-induced drug.

The following monoterpene have been found:

(1R)-alpha-pinene, 1-methyl-3-(1-methylethyl)benzene, trans-1-methyl-4-(1-methylethyl)-2-cyclohexene, 2-methyl-5-(1-methylethyl)-(1-alpha,2-alpha,5-alpha)-bicyclo[3,1,0]hex-3-en-2-ol, 1-methyl-4-(1-methylethenyl)benzene, o-isopropentyltoluene.

The following sesquiterpene have been found:

(1-alpha,4a-alpha,8a-alpha)-1,2,3,4,4a,5,6,8a-octahydro-7-methyl-4-methylene-1-(1-methylethyl)naphthalene, (1S-cis)-1,2,3,4,5,6,7,8-octahydro-1,4-dimethyl-7-(1-methylethylidene)azulene.

[PD3-4] [10/19/2000 (Thr) 15:00 - 16:00 / [Hall B]]

Pharmacognostic Studies on Genus *Gentiana* Plants

Nam JY^o, Ryu JH, and Yook CS

Department of Oriental Pharmaceutical Science, College of Pharmacy, Kyung Hee University

Various species of *Gentianaceae* have been esteemed as restoratives, febrifuges and improvers of the appetite and are recommended in old herbals; the leaves and roots were used medicinally in Korea and China. In this studies, we used 4 kinds of species, such as *Gentiana sutchuenensis*, *Gentiana zollingeri*, *Gentiana squarrosa* and *Gentiana thunbergii* for the anatomical analysis from roots, stems and epidermis. >From that studies, it was proved that all mentioned above are originated from *Gentiana sutchuenensis*. And also we purified from the *Gentiana sutchuenensis* 3-nitro-1,2-benedicarboxylic acid di(2-ethylhexyl)adipeate as essential oils.

[PD3-5] [10/19/2000 (Thr) 15:00 - 16:00 / [Hall B]]

Coumarine Glycosides from Seeds of *Fraxinus sieboldiana* var. *serrata*

Yook CS^o, Nam JY, Chung JH, Ryu JH, Yang KS, Yang KS¹, Ro SH, and Rho YS

College of Pharmacy, Kyung Hee University and ¹College of Pharmacy, Sook Myung University

Fraxinus sieboldiana var. *serrata* is distributed in Korea, and the roots and seeds of this species are used as gout, myalgia and rheumatism. The dried seeds of *Fraxinus sieboldiana* var. *serrata* were extracted with hot methanol repeatedly to give an extract (50.6 g), which was chromatographed on silica gel with CHCl_3 -MeOH-H₂O and sephadex LH-20 (MeOH). They were identified as 3β-hydroxy-urs-12-en-28-oic acid, fraxin (formula, C₁₆H₁₈O₆, mp. 204-205°C) and aesculin (formula, C₁₅H₁₆O₆, mp. 193°C).

[PD3-6] [10/19/2000 (Thr) 15:00 - 16:00 / [Hall B]]

Triterpenoids from the Leaves of *Gentiana sutchuenensis*

Nam JY⁰, Whang WK¹, Chang SY², Park SY², Ryu JH, and Yook CS

College of Pharmacy, Kyung Hee University, ¹College of Pharmacy, Chung Ang University and
²KFDA

Gentiana sutchuenensis has been used for the sore throat, hepatitis, dysentery, appendicitis, hematuria, and loss of appetite as medicinal plants in China. In this study, ether extracts were subsequently chromatographed on silica gel using the gradient elution of n-hexane-ethylacetate (=20:1→2:1) to give five fractions. Compound I was identified as 3β-hydroxy-12-ursen-28-ol (formula C₃₀H₅₀O₂, mp. 232°C), compound II was identified as 3β-hydroxy-olean-12-en-28-oic acid (formula C₃₀H₄₈O₃, mp. 310°C), and compound III was identified as 3β-hydroxy-urs-12-en-28-oic acid, which is a ursane triterpenoid (formula C₃₀H₄₈O₃, mp. 286–287°C).

[PD3-7] [10/19/2000 (Thr) 15:00 – 16:00 / [Hall B]]

Phellinus linteus as Ethano-medical preparation

Whang W.K⁰, Shim S.S, Ham I, Sung W.K, Lee S.D*, Choi Y.S**.

ChungAng University, College of Pharmacy, *KyongNam Agricultural Research and Extension Services, **Mushroom company

Phellinus linteus (polyporaceae) has been used as anti-cancer agent in Korea. We were studied to evaluate the anti-tumor and immunopotential effect of *Phellinus linteus* (PL) single and mixing administration with three anti-tumor agent in folk medicines (*Ulmus davidiana* var. *japonica*, *Cudrania tricuspiata*, and *Bupleurum pycnanthum*). Oral administration to tumor bearing mice significantly prolonged survival rate compared to control group with the prolongation ratio of 2% to 9%. Nitrite production of Raw 264.7 cell was increased dose-dependently.

[PD3-8] [10/19/2000 (Thr) 15:00 – 16:00 / [Hall B]]

Inhibitory effect of immediate-type allergic reaction by *Prunella vulgaris*

Shin TY⁰, Kim YK, Kim DK, Suh ES, Eom DO, Lim JP and Chae BS¹

College of Pharmacy, Woosuk University/¹College of Science and Engineering, Woosuk University

We studied the effect of aqueous extract of *Prunella vulgaris* (PVAE) on immediate-type allergic reactions. PVAE (0.005 to 1 g/kg) dose-dependently inhibited systemic anaphylactic shock by compound 48/80 in rats. When PVAE was given as pretreatment at concentrations ranging from 0.001 to 1 g/kg, the serum histamine levels induced by compound 48/80 were reduced in a dose-dependent manner. PVAE inhibited the passive cutaneous anaphylaxis activated by anti-dinitrophenyl (DNP) IgE. PVAE also inhibited the histamine release induced by compound 48/80 or anti-DNP IgE from the rat peritoneal mast cells (RPMC). The level of cyclic AMP in RPMC, when PVAE was added, significantly increased compared with that of normal control. Moreover, PVAE (0.001 to 0.1 mg/ml) had a significant inhibitory effect on anti-DNP IgE-induced tumor necrosis