[PD3-1] [04/19/2002 (Fri) 10:00 - 13:00 / Hall E]

New Lupane-Triterpene Glycosides from Traditional Medicinal Herbal of Acanthopanax gracilistylus W. W. Smith

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Acanthopanax species belong to Araliaceae, and its root and stem barks Acanthopanacis Cortex, are used as tonic and prophylactic in oriental herbal medication from olden times. Up to now, about 30 kinds of Acanthopanax species are found in East Asia and South Asia on the world. There are 26 species of Acanthopanax widely distributed in China, and the dried roots and barks of Acanthopanax gracilistylus W.W. Smith are listed officially in the Chinese pharmacopoeia for the treatment of paralysis, arthritis, rheumatism, lameness, and liver disease, which is grown widely in the provinces of HuBei, HuNan, SiChun, YunNan and GuiZhou. In continuation of our systematic studies on their chemical constituents of the leaves, roots, and stem barks of this plant, collected in ChangSha, HuNan province of China, and identified by Prof. Chang-Soo Yook, KyungHee University. We obtained eight lupane-triterpenoids compounds including two new compounds from the MeOH extracts and seven compounds of essential oils from the leaves, five compounds from the ether extracts and nine compounds of essential oils from its roots and two compounds from the MeOH extracts and ten compounds of essential oils from the stem barks respectively.
On the basis of their spectral evidences and physical properties, their chemical structures were determined. Eight compounds isolated from the MeOH extracts of the leaves are acankoreanogenin, acankoreoside A, acankoreoside C, acankoreoside D, acantrifoside A, 28- O-glycoside of 3-epi-betulinic acid and two new compounds named as wujiapioside A and wujiapioside B, Five compounds obtained from the ether extracts of the roots are (-)-primara-9 (11),15-dien-19-oic acid, (-)-kaur-16-en-19-oic acid, d-sesamin, stigmasterol and b-sitosterol respectively, The MeOH extracts of the stem barks afforded two compounds are syringin, b-sitosterol.

[PD3-2] [04/19/2002 (Fri) 10:00 - 13:00 / Hall E]

Effect of Sanguisorba officinalis on immediate type allergic reaction

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We investigated the effect of aqueous extract of Sanguisorba officinalis L.(Rosaceae) root(SOAE) on the immediate-type allergic reactions in vivo and in vitro. SOAE(0.01 to 1 g/kg) inhibited systemic allergic reaction induced by compound 48/80. When SOAE was employed in a systemic allergic reaction test, the plasma histamine levels were reduced in a dose-dependent manner. SOAE(0.001 to 1 g/kg) dose-dependently inhibited passive cutaneous anaphylaxis(PCA) activated by anti-dinitrophenyl(DNP) IgE. SOAE (0.001 to 1 mg/ml) also dose-dependently inhibited the histamine release from rat peritoneal mast cells (RPMC) activated by compound 48/80 or anti-DNP IgE. The level of cyclic AMP(cAMP) in RPMC, When SOAE was added, significantly increased compared with that of normal control. Moreover, SOAE(0.01 to 1 mg/ml) had a significant inhibitory effect on anti-DNP IgE-induced tumor necrosis factor-α(TNF-α) production. These results suggest that SOAE may be beneficial in the regulation of immediate-type allergic reaction.

[PD3-3] [04/19/2002 (Fri) 10:00 - 13:00 / Hall E]

Effect of Sanguisorbae Radix on immediate-type allergic reaction by anal therapy

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Anal therapy is another way of taking medicine. It is a traditional pathway but not available in common situation. Nevertheless, it has may benefit and usefulness, it has not treated so much. In this study, we investigated the effect of aqueous extract of Sanguisorbae Radix (Rosaceae) (SRAE) by anal administration on mast cell-dependent immediate-type anaphylactic reactions in vivo and in vitro murine models. SRAE (0.01 to 1 g/kg) dose-dependently inhibited systemic anaphylaxis induced by compound 48/80 in mice. SRAE (0.1 and 1 g/kg) also significantly inhibited local anaphylaxis activated by anti-DNP IgE. When SRAE was pretreated at the same concentrations with systemic anaphylaxis, the plasma histamine levels were reduced in a dose-dependent manner. SRAE (0.001 to 1 ㎎/㎖) dose-dependently inhibited the histamine release from rat peritoneal mast cells (RPMC) activated by compound 48/80 or anti-DNP IgE. The level of cyclic AMP (cAMP) in RPMC, when SRAE (1 mg/ml) was added, transiently and significantly increased compared with that of basal cells. Moreover, SRAE (0.01 and 0.1 ㎎/㎖) had a significant inhibitory effect on anti-DNP IgE-induced tumor necrosis factor-α (TNF-α) production from RPMC. These results provide evidence that anal therapy of SRAE may be beneficial in the treatment of allergic disease..

[PD3-4] [04/19/2002 (Fri) 10:00 - 13:00 / Hall E]

Inhibitory Effects of Butyl Alcohol Extract from Caesalpinia

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The heart wood of Caesalpinia sappan L. has been commonly used as an emmenagogue, and analgesic, a cure for contusion and sprain as well as a remedy for thrombosis in the oriental medicine. The main constituent of Caesalpinia sappan L. is brazilein which has a flavonoid structure.
Melanogenesis is a physiological process resulting in the synthesis of melanin pigment. In this study, We examined the inhibitory effect of butanol extract of Caesalpinia sappan L. on proliferation and melanogenesis of Melan-a cells. After 48h treatment of cells with various concentrations of butanol extract, the cells exhibited a dose-dependent inhibition in their proliferation without apotosis. Therefore, the growth retardation may be due to the cell arrest, not due to cytotoxicity. And there were estimated total melanin contents as a final product and activity of tyrosinase, a key enzyme, in melanogenesis. The melanin contents and tyrosinase activity were decreased from butanol extract in a dose dependent manner.

[PD3-5] [04/19/2002 (Fri) 10:00 - 13:00 / Hall E]

Effect on the herbal formulation KH against hemopoietic side effects of 5-FU in mice

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The ability of KH oral liquid to eliminate damage after chemotherapy was assessed in mouse model. The assay carried out administration of KH(1 and 10 human dose, s.c.) after injection of 5-FU(100mg/kg i.p.) in C57BL/6 mice(5wks,male). The 5-FU was repeatedly supplied to mice at 10 days interval. It was demonstrated that the administration of the KH during 6 to 29 days and investigated changing of body weight, spleen weight, antitumor effect and hemopoietic recovery after the treatment of 5-FU and KH. The results show that the KH reduce the decrease of WBC and PLT.
Levels of WBC(68.9%) as well as PLT(42.6%) were enhanced significantly after KH administrationt. Also protection of spleen by KH was markedly enhanced in the treated group was significantly higher than that in control. RBC may be less affected after KH administration. In addition, expression of IL-2 using RT-PCR and In situ hybrisization method shows that KH can recovery of immuno-factors. In the other hands, the