

[PD3-9] [2003-10-11 09:00 - 12:30 / Grand Ballroom Pre-function]

Free Radical Scavenging and Hepatoprotective Effects of Chinese Traditional Prescription, Keokhachukeu-tang

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Keokhachukeu-tang is the one of Chinese traditional prescription used for the treatment of liver disease. This prescription consists of Carthami Flos (6g), Persicae Semen (9g), Pteropi Faeces (9g), Corydalis Tuber (9g), Moutan Radicis Cortex (6g), Paeoniae Radix rubra (9g), Angelicae gigantis Radix (9g), Cnidii Rhizoma (9g), Linderae Radix (12g), Cyperi Rhizoma (12g), Aurantii Fructus (9g), and Glycyrrhizae Radix (3g). Water extract of Keokhachukeu-tang showed a moderate hepatoprotective effect on tacrine-induced cytotoxicity in Hep G2 cells. Three constituents of this prescription, Persicae Semen, Moutan Radicis Cortex, and Paeoniae Radix rubra, exhibited the significant hepatoprotective effects in our bioassay system. DPPH and superoxide free radical scavenging effects of the water extracts of Keokhachukeu-tang and its constituent herbal drugs were also tested.

[PD3-10] [2003-10-11 09:00 - 12:30 / Grand Ballroom Pre-function]

Cytotoxic Effects of Chloroform Extracts and Fraction from Cornis fructus on Cancer Cell Lines

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Cornis fructus were extracted by successive extractions and then fractionated with chloroform extract to get active fractions. This study was performed to determine the cytotoxic effect of chloroform extract from Cornis fructus on NIH 3T3 fibroblasts and cancer cell lines using MTT assay. All extracts did not exhibit cytotoxicity in NIH 3T3 fibroblasts. Chloroform extract exhibited antitumor activity in A549, MDA-MB-123, B16 melanoma and SNU-C4 cells. Further fractionation with chloroform extract was performed to obtain effective fractions. 3 fraction showed the strongest cytotoxic effect against A549, MDA-MB-123, B16 melanoma and SNU-C4 cells. These results suggest that 3 fraction of the chloroform extract from Cornis fructus possessed bioactive material of antitumorous agents.

[PD3-11] [2003-10-11 09:00 - 12:30 / Grand Ballroom Pre-function]

Cytotoxic Effects of Methanol Extracts from Medicinal Plants on Cancer Cell Lines

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This study was performed to determine the cytotoxic effect of methanol extract from medicinal plants. The cell viability was determined by the MTT method. Their cytotoxic activities against three cancer cell lines such as A549, MDA-MB-231 and SNU-C4 cell line were tested. Among them, The methanol extract of Saururus Chinensis Bail showed the strongest cytotoxic effect against SNU-C4 cells. These results suggest that the methanol extract of Saururus Chinensis Bail possessed a potential antitumorous agent

[PD3-12] [2003-10-11 09:00 - 12:30 / Grand Ballroom Pre-function]

Screening for Antioxidative Activity of Pueraria Radix

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The antioxidant activity of solvent extracts of leaves, trunk and root *Pueraria Radix* was determined by measuring the radical scavenging effect on 1,1-diphenyl-2-picrylhydrazyl(DPPH) radical. Extracts prepared from root showed radical scavenging effect on DPPH radical. But, extracts prepared from leaves and trunk did not show activity. The ethyl acetate extract of *Pueraria Radix* root showed radical scavenging activity at an IC 50 value of 75.7 $\mu\text{g/ml}$.

[PD3-13] [2003-10-11 09:00 - 12:30 / Grand Ballroom Pre-function]

Screening and Isolation of Antioxidant from Medicinal Plants

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On the purpose of development of antioxidative compound from natural sources, medicinal plants known to have antioxidant activity have been examined concerning DPPH radical scavenging activity and SOD-like activities. Among 8 plants exhibiting the activity, *Houttuynia cordata* THUNB was selected as resources to search for active compounds due to rareness of study. The antioxidative compounds from *Houttuynia cordata* THUNB, quercitrin was assayed using a DPPH free radical. The DPPH radical scavenging activity of quercitrin was similar to that of BHA and Ascorbic acid

[PD3-14] [2003-10-11 09:00 - 12:30 / Grand Ballroom Pre-function]

Hepatoprotective Effects of *Saururus chinensis* Baill against 2,3,7,8-tetrachlorodibenzo-p-dioxin (TCDD) Induced Toxicity

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Hepatoprotective effects Saururus chinensis Baill on 2,3,7,8-tetrachlorodibenzo-p-dioxin (TCDD) induced toxicity

Saururus Chinensis Baill (Saururaceae) has been used as folk medicine for analgesics, beriberi, edema, hepatitis, and icterus, etc. Hepatoprotective effects of *Saururus chinensis* Baill (SCB) administration on function of the biochemical parameters in liver of 2,3,7,8-tetrachlorodibenzo-p-dioxin (TCDD) treated rats were investigated. After 7 days from TCDD(1 $\mu\text{g/kg}$) injection, SCB(200mg/kg) was administered into rats intraperitoneally for 4 weeks. We examined the antioxidative enzymatic activity by measuring the level of AST and ALT in serum and SOD, Catalase, GPx, GSH and GSSG in liver tissue of rats. SCB and TCDD administered (STT) group showed 70.7% of inhibitory effect in AST activity compared to TCDD-treated abnormal (TTA) group. ALT level of STT group was decreased to the level of non treated group (NTT) group. SOD and Catalase in TTA group were lower than in NTT group, but SOD and Catalase in STT group were increased by 82% and 55.45% respectively compared to TTA group. While GSH contents in STT group were increased compared to TTA group by 74.20%, GSSG contents in STT group were decreased compared to TTA group by 61.08%. Our study suggests that SCB might be a potential scavenger of free radicals in the oxidative stress originated from TCDD-treated rats.

[PD3-15] [2003-10-11 09:00 - 12:30 / Grand Ballroom Pre-function]

The Effects of *Scutellaria baicalensis* and *Scutellaria baicalensis* metabolite on Anxiety in the Elevated Plus-Maze in Rats

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