[PA1-28] [04/18/2002 (Thr) 14:00 - 17:00 / Hall E]

The Antioxidative Activities of Helichrysum angustifolium

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MeOH extract of Helichrysum angustifolium was fractionated to five solvent fractions, hexane fr (fr I), 90 % MeOH fr (fr II), EtOAc fr (fr III), BuOH fr (fr IV) and H2O fr (fr V). The five fractions were tested for their antioxidative activities by scavenging effects on 1-diphenyl-2-picrylhydrazyl (DPPH) radical and their antioxidative effects were compared to the widely used antioxidants, L-ascorbic acid, 1,2,3-trihydroxybenzene (pyrogallol) and tocopherol. The total phenol content and the approximate flavonoid content was spectrometrically determined at 760 nm and 425 nm, respectively. Among the five fractions, fr II, fr III, fr IV showed the stronger antioxidative effects than other fractions, and the significant relationship between their antioxidative activities and total phenol contents. Fr III showed the strongest activity and the highest flavonoid content, and was suggested to have antioxidative flavonoids.

[PA1-29] [04/18/2002 (Thr) 14:00 - 17:00 / Hall E]

Anti-coagulant and/or Platelet Anti-aggregatory Activities of Hyloceruns trigonus

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MeOH extract of Hyloceruns trigonus was fractionated to five solvent fractions, hexane fr. (fr I), 90 % MeOH fr. (fr II), EtOAc fr. (fr III), BuOH fr. (fr IV) and H2O fr. (fr V). They were investigated on their anti-coagulant and/or platelet anti-aggregatory activities by aPTT and Modified Smear Method. Fr. II showed a potential anti-coagulant activity. Fr III, Fr IV and Fr V showed potential inhibitory effects on rat platelet aggregation against Collagen, against adenosine 5'-diphosphate (ADP) and against collagen and Arachidonic Acid.

[PA1-30] [04/18/2002 (Thr) 14:00 - 17:00 / Hall E]

Anti-angiogenic, antioxidant and xanthine oxidase inhibition activities of the mushroom Phellinus linteus

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Phellinus linteus has been traditionally used as a folk medicine for centuries in Oriental countries, and attracts a great interest owing to its plausible anti-tumor effect. Its fruiting bodies were extracted with 70% ethanol at room temperature. The ethanolic extract (PL) showed high extinction coefficients at the wavelengths of 308 and 350 nm, indicating its UV-protective effect. It is especially rich in D-arabinose and D-glucose. PL showed strong anti-angiogenic activity, which was detected using the chick embryo chorioallantoic membrane assay. The in vitro antioxidant activities of PL were evaluated using two different bioassays. PL was comparable to vitamin C in reducing the stable free radical 1,1-diphenyl-2-picrylhyrazyl (DPPH). It also inhibited lipid peroxidation in a concentration-dependent manner. These findings show significant antioxidant activity of PL. In additon, PL markedly inhibited xanthine oxidase activity.