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MeOH extract of *Opuntia vulgaris* Mill. 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 and Fr. III showed inhibitory effects on rat platelet aggregation against adenosine 5'-diphosphate (ADP), Collagen and Arachidonic Acid.

[PA1-20] [04/18/2002 (Thr) 14:00 - 17:00 / Hall E]

The Antioxidative Activities of *Petasites japonicus* MAX

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MeOH extract of *Petasites japonicus* MAX 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.

[PA1-21] [04/18/2002 (Thr) 14:00 - 17:00 / Hall E]

Neuroprotective and Neurotropic effect of a isolated Phospholipids from *Bombycis corpus*

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We examined the neuroprotective effects and NGF-potentiating activities of phospholipids compounds isolated from *Bombycis corpus*. Three phospholipids (1 ~ 3) were obtained from Domestic *Bombycis corpus*. On the basis of spectroscopic data, their structures have been elucidated as 1-O-(9Z-octadecenoyl)-2-O-(8Z,11Z-octadecadienoyl)-sn-glycero-3-phosphorylcholine (1), 1,2-di-O-hexadecanoyl-sn-glycero-3-phosphorylcholine (2) and 1,2-di-O-9Z-octadecenoyl-sn-glycero-3-phosphorylcholine (3) Diacylglycerophosphorylcholines (1 ~ 3) from *Bombycis corpus* increased the proportion on the neurite outgrowth from PC 12 cells. By examining the neurite outgrowth from PC12 cells and the synthesis of neurotrophic factor (NGF) in C6 glial cells. These compounds increased the proportion of neurite-bearing cells. In addition, after 6h incubation of C6 cells with this compound, NGF levels in the cultured medium increased 200 fold of the control. In RT-PCR analysis, the NGF gene expression was found to reach 2-fold of the control level we also investigated the effect of this compound on the phosphorylation of MAP kinase (Erk p42/44) which play a crucial role in the survival and differentiation of neurons. These results suggest that these phospholipids might potentially used be as a neuroprotective agent.

[PA1-22] [04/18/2002 (Thr) 14:00 - 17:00 / Hall E]

Experimental Study on Inhibitory Activity Against Platelet Aggregation of 29 Species of Vietnamese Plants