hypertensive rats, BR-A-657 at 3 mg/kg p.o. and 0.3 mg/kg i.v. decreased mean arterial blood pressure (MAP) by 42.8% and 30%, respectively. In spontaneously hypertensive rats, BR-A-657 at 10 mg/kg p.o. induced maximal decrease in MAP by 27%. Any agent did not affect the heart rate significantly at any dose used. These results suggest that BR-A-657 may be potentially useful for treatment of hypertension.

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

Effects of Capsicum annuum L. var. angulosum Mill on changing morphology, and apoptosis of Hepatoma and MCF-7 cell

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Capsicum annuum L. var. angulosum Mill. of edible plants relatively showed good anticancer effects. Morphological characterization, such as apoptic body, of MCF-7 and Hepatoma cell on plants was shown by electronic microscopy. The cells included in medium were investigated to be aggregated and destroyed by treatment with some edible plants. Especially, the case of Capsicum annuum L. var. angulosum Mill, it led sample-treated MCF-7 and Hepatoma cells to apoptosis faster than others. So now, We studied that the solvent, harvest time, and the part of Capsicum annuum L. var. angulosum Mill: Leaf, Fruit unripen, Fruit ripen, Seed ripen, Seed unripen, are how much has the anti-proliferating effect on MCF-7 and Hepatoma cells. Now We'll present the results.
The cells by treated Capsicum annuum L. var. angulosum Mill show the apoptic characterization. all part of *Capsicum annuum* L. var. angulosum Mill was changing faster the morphology of the cells. To continue our search for anticancer effects, we also observed changes through using a fluorescent microscope by PI staining. These results show that each sample exerted anticancer effects on MCF-7 and hepatoma cells. Especially Capsicum annuum L. var. angulosum Mill, Leaf exerted significant anticancer effects.

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

Attenuation of iNOS induction by SNUP through inhibition of I-κBα phosphorylation and of p65 nuclear translocation

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SNUP is a compound isolated from *Beta vulgaris* L. var. *cycla* L.(Chenopodiaceae). The effect of SNUP on the nuclear factor-κB (NF-κB)-mediated inducible nitric oxide synthase (iNOS) gene expression was studied in Raw264.7 cells. Inhibitory effect on NF-κB activation was determined by gel mobility shift assay, immunocytochemistry and immunoblot analysis of I-κBα. Expression of the iNOS gene was assessed by RT-PCR. NO production was monitored using Griess reagents. SNUP(10 μM) inhibited lipopolysaccharide (LPS)-inducible nuclear NF-κB activation and nuclear translocation of p65, which was accompanied by inhibition of I-κBα phosphorylation. LPS-inducible increase in the iNOS mRNA was suppressed by 10 μM SNUP. Immunoblot analysis revealed that SNUP significantly inhibited the induction of iNOS. Production of nitrite and nitrate by LPS in culture medium was also comparably suppressed by SNUP. These results showed that SNUP inhibits LPS-inducible iNOS expression in murine macrophages through suppression of I-κBα phosphorylation and nuclear translocation of p65. Inhibition of LPS-inducible NO production in macrophages may constitute anti-inflammatory effect of *Beta vulgaris* L.var. *cycla* L.

[PA1-19] [04/18/2002 (Thr) 14:00 - 17:00 / Hall E]

Anti-coagulant and/or Platelet Anti-aggregatory Activities of Opuntia vulgaris Mill.

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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 Neurotriopic 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 folded 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