

[PD2-36] [ 10/20/2000 (Fri) 11:30 - 12:30 / [Hall B] ]

### Hepatoprotective Constituents of *Psoralea corylifolia* against Tacrine -induced Cytotoxicity in HepG2 cells

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Tacrine(1,2,3,4-tetrahydro-9-aminoacridine hydrochloride) is an acetylcholinesterase inhibitor approved for the treatment of Alzheimer's disease. However, reversible hepatotoxicity in 30-50% of patients at therapeutic doses limits clinical use. Therefore, it would be valuable to find substances for the prevention of hepatotoxic effects of tacrine from natural products. Bioassay-guided fractionation of an H<sub>2</sub>O extract of the seeds of *Psoralea corylifolia* has furnished three hepatoprotective compounds, bakuchiol (1), bakuchicin (2) and psoralen (3), against tacrine-induced cytotoxicity in HepG2 cells. The ED<sub>50</sub> values of compounds 1-3 exhibited 3.9, 270, 270 mM, respectively. Compound 1 showed more hepatoprotective effect than silymarin as a positive control.

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### Macrophage activation and antibacterial activities of an aqueous extract of Korean Propolis

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Propolis has been used for thousands of years in folk medicine for lots of purposes including immunostimulating and antibacterial properties made by honeybees from the buds and bark of certain trees and plants. An aqueous extract of Korean propolis was assayed for immune responses and antibacterial activities. It was shown that Korean propolis increased proliferation of total lymphocytes in a dose dependent manner from 5 $\mu$ g/ml to 100 $\mu$ g/ml. Furthermore, nitric oxide release was also measured using the Griess reagent in RAW 264.7 cells. In vitro activities of Korean propolis against 160 strains of *Staphylococcus aureus* and 43 strains of *Enterococcus* sp. were studied and showed that aqueous extract of Korean propolis exerts an antibacterial effect. It is thought that Korean propolis is promising for the immunostimulating and antibacterial drug.

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### An inducible nitric oxide synthesis inhibitor in vitro from the seeds of *Psoralea corylifolia*

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Macrophages play a major role in host defense against infection and tumor development and this activity is regulated through the production of several mediators. In particular, over-expression of