Three pseudoguaianolide type sesquiterpenes, bigelovin, 2,3-dihydroaromaticin, and ergolide were isolated as inhibitory constituents against inducible nitric oxide synthase (iNOS) from the flowers of *Inula britannica*. Bigelovin exhibited a highly potent inhibitory activity on iNOS in murine macrophage RAW 264.7 cells with an  $IC_{50}$  value of 0.14 µg/ml, which is about 4 times more potent than the known selective inhibitors of iNOS, L-N<sup>6</sup>-(1-Iminoethyl)lysine ( $IC_{50} = 0.65 \mu g/ml$ ). 2,3-Dihydroaromaticin and ergolide also exhibited potent inhibitory activity on iNOS with  $IC_{50}$  values of 0.26 and 0.21 µg/ml, respectively.

[PD2-56] [ 10/19/2001 (Fri) 14:00 - 17:00 / Hall D ]

## Studies on antifungal activities of essential oil components in Agastache rugosa

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The antifungal activities of essential oil components in *Agastache rugosa* were investigated by micro broth dilution method and disc diffusion method. As the result, the total oil fraction separated by simultaneous steam distillation-extraction(SDE) from the plants exhibited significant inhibiting activities against *Aspergillus niger*, *A. flavus*, *Trichoderma viride*, *Candida albicans*, *C. utilis*, *C. tropicalis*, *Cryptococcus neoformans*, *Trichosporon mucoides*, *Trichophyton tonsurans* and *Geotrichum capitatum*.

[PD2-57] [ 10/19/2001 (Fri) 14:00 - 17:00 / Hall D ]

## Antitumor activity of Diarylheptanoids from Barks of Alnus japonica on mouse melanoma cell line.

Kim KHO, Cho SM, Kim JH, Kwon YM, Lee JH, Lee YA, Lee MW

Chung-Ang University

The cytotoxic activity of several diarylheptanoids which were isolated from barks of Alnus japonica on mouse melanoma cell line were evaluated by 3-(4,5-dimethylthiazole-2-yl)-2,5-diphenyl-2H-tetrazalium bromide (MTT) colorimetric method. 1,7-bis-(3,4-dihydroxyphenyl)-5-hydroxyheptane, oregonin, hirsutanolol, hirsutenone were shown significant cytotoxic activity at 10-30\mus/ml concentration. Especially, aglycones and monoglycosides of diarylheptanoid showed potent cytotoxic activities on mouse melanoma cell line but diglycosides of diarylheptanoids did not show cytotoxicity.

[PD2-58] [ 10/19/2001 (Fri) 14:00 - 17:00 / Hall D ]

## Sesquiterpenes with Hepatoprotective Activity from Torilidis Fructus on Tacrineinduced Cytotoxicity in Hep G2 Cells

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