[PD2-27] [04/20/2001 (Fri) 13:30 - 14:30 / Hall 4]

Inhibitory effects of Diarylheptanoids from the Barks of Alnus hirsuta Turcz on the Melanin Biosynthesis

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Four diarylheptanoids, hirsutanonol, oregonin, (5R)-1,7-bis-(3,4-dihydroxyphenyl)-5-hydroxyheptane, (5R)-1,7-bis-(3,4-dihydroxyphenyl)-heptane-5-O-β-D-glucoside were isolated from barks of Alnus hirsuta Turcz. The diarylheptanoids inhibited melanin biosynthesis 5-10 times stronger than kojic acid at 10㎍/ml concentration at various concentrations in B16 mouse melanoma cell lines on the pigmentation of skin.
These results show that diarylheptanoids from the barks of Alnus hirsuta Turcz could be developed as skin whitening component of cosmetics.

[PD2-28] [04/20/2001 (Fri) 13:30 - 14:30 / Hall 4]

Antioxidative compounds from <I>Smilax china</I>

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The herb of Smilax species have been used for scrofular, goat, frambesa.
In this study, isolation of chemical constituents of *Smiax china* were carried out by extracting with methanol and then partitioned with $CHCl_3$, H_2O, 20% MeOH, 40% MeOH, 60% MeOH, and 100% MeOH. In order to evaluate the efficacy of anti-oxidative, its fractions(H_2O, 30%, 60%, 100Fr.) were measured radical scavening activity with DPPH method. It was revealed that H_2O, 20% and 40% MeOH fractions have significant antioxidative activity.
From 20% and 40% MeOH fraction, two flavonoids were isolated and elucidated as apigenin glycosides through spectroscopic methods.

[PD2-29] [04/20/2001 (Fri) 13:30 - 14:30 / Hall 4]

Inhibitory effect of protoberberine alkaloids from Coptidis Rhizoma upon Acetylcholinesterase (AchE)

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The bioassay-directed fractionation of the MeOH extract of Coptidis Rhizoma (Ranunculaceae) yielded five active constituents (1-5) responsible for the inhibition on the acetylcholinesterase (AChE EC 3.1.1.7) in vitro. They(1-5) were identified by spectral evidences as berberine (1), groenlandicine (2), epi-berberine (3), coptisine (4) and jateorrhizine (5), respectively. All of them (1-5) were comprised in