MAO-A(IC50 : 6.3 μg). Compound 1 was also revealed to inhibit competitively MAO-B.

[PD2-39] [04/19/2002 (Fri) 10:00 - 13:00 / Hall E]

Free Radical Scavenging and Hepatoprotective Activities of Traxacum mongolicum

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There is now increasing evidence that free radicals and active oxygen species are involved in a variety of pathological events. Free radical-mediated cell damage and free radical attack on polyunsaturated fatty acids result in the formation of lipid radicals. These lipid radicals react readily with molecular oxygen to produce peroxy radicals responsible for initiating lipid peroxidation. The peroxidation of cellular membrane lipid can lead to cell necrosis and considered to be implicated in a number of pathophysiological conditions as well as in the toxicity of many xenobiotics. Therefore, substantial efforts have been made in recent years to identify both natural and synthetic antioxidants. In the course of screening for free radical scavenging activity from plants, the MeOH extract and its fractions of *Taraxacum mongolicum* (Compositae) were examined for their scavenging effects on DPPH and superoxide radicals, and hepatoprotective effects on tacrine-induced cytotoxicity in human hepatoma cell line, Hep G2 cells. Both CH_2Cl_2 and BuOH soluble fractions of the MeOH extract showed the free radicals scavenging and hepatoprotective effects. From these results, it is suggested that hepatoprotective effect of these fractions rely on the free radical scavenging activity in some extent.

[PD2-40] [04/19/2002 (Fri) 10:00 - 13:00 / Hall E]

Anti-inflammatory compounds from Patrinia saniculaefolia

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Two new iridoids, patridoid I , patridoid II , and other constituents nardostachin, squalene, β-farnesene which were isolated from the whole plant of *Patrinia saniculaefolia* Hemsley (Valerianaceae) have been evaluated for their in vitro anti-inflammatory activity.
Anti-inflammatory activity was evaluated by leukotriene C4 (LTC_4)-assay which was tested in cellular system generating 5-lioxygenase (5-LOX) pathways of arachidonate metabolism.
As a result, patridoid I , patridoid II and squalene showed a significant effect with IC_{50} values of 46.98 μM, 41.73 μM and 36.27 μM, respectively.

[PD2-41] [04/19/2002 (Fri) 10:00 - 13:00 / Hall E]

Antioxidative activity of flavonoid compounds from Cudrania tricuspidata root bark

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Cudrania tricuspidata have been used for anti-inflammatory, anti- hepatotoxic, anti-hypertensive and anti-diabetic activities.
In this study, isolation of chemical constituents of *Cudrania tricuspidata* were carried out by extracting with

50% methanol and then partitioned with Ether, EtOAc, BuOH, H_2O Fraction. From Ether, EtOAc Fraction, two new hydroxybenzly flavonoid glycoside (6-p-hydroxybenzyl kaemperol-7-0-β-D-glucopyranoside, 6-p-hydroxybenzyl quercetin-7-0-β-D-glucopyranoside) and three known flavonoids (quercetin-7-0-β-D-glucopyranoside , kaemperol-7-0-β-D-glucopyranoside, aromadendrin) were isolated and elucidated through spectroscopic methods.(IR, Mass, NMR)
In order to evaluate the efficacy of anti-oxidative, its fractions and compounds were measured radical scavening activity and anti-lipid peroxidative efficacy on human low density lipoprotein(LDL) with DPPH method and TBARS assay.
It was revealed that Ether, EtOAc fractions and hydroxybenzyl quercetin glycoside, hydroxybenzyl kaemperol glycoside, quercetin glycoside, kaemperol glycoside have significant antioxidative activity.

[PD2-42] [04/19/2002 (Fri) 10:00 - 13:00 / Hall E]

Antifungal Activity of Herbal Essential Oils against Candida spp.

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The antifungal activities of the essential oils from Anthemis nobilis, Ciderus atlantica, Eukalyptus golbulus, Juniperus communis, Lavandula angustifolia, Pelargonium graveolens, Pogestemon patchouli, Rosmarinus officinals, Styrax tonkinensis, and Thymus vulgaris which have been recommended for the treatment of microbial infections in aromatherapy and complementary medicines, were tested against Candida spp. by broth dilution method and disk diffusion test.

[PD2-43] [04/19/2002 (Fri) 10:00 - 13:00 / Hall E]

α-Glucosidase Inhibitory Activity of Tannins from the Fruits of Rubus coreanum

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Inhibitory activity assay of α-glucosidase on tannins, pedunculagin and 2,3-(S)-HHDP-D-glucose, (+)-catechin, (-)-epicatechin and procyanidin B4 which were isolated from the fruits of Rubus coreanum used as a tonic in Korea, were performed as a research to find out anti-diabetic principle from natural product. This study showed that a part of the hypoglycemic activity of tannins is based on α-glucosidase inhibitory activity.

[PD2-44] [04/19/2002 (Fri) 10:00 - 13:00 / Hall E]

Monoamine Oxidase Inhibitory Component from Lithospermi Radix (II)

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Monoamine oxidase(MAO) [EC 1.4.3.4] is a mitochondrial enzyme responsible for the catabolism of biogenic amines, including serotonin, norepinephrine, and dopamine. Thus, MAO activity might play important roles in some pathological states of central nervous system diseases such as depression, alcoholism and schizophrenia. To investigate the potential antidepressant activity, we had screened medicinal plants to search for MAO inhibitory compounds. By the screening results, we discovered that the MeOH extract of Lithospermi Radix showed high inhibition against MAO. According to the activity-guided fractionation, MAO inhibitory compound was isolated from Hexane fraction. Compound 1 showed significant