quinolone alkaloid, 4-carbomethoxy-6-hydroxy-2-quinolone(1), showing a moderate antioxidative activity in a 1,1-diphenyl-2-picrylhydrazyl free-radical scavenging assay, was isolated from 0.5% HCl in ethylalcohol soluble fraction(IC_{50} = 28.9㎍/ml) by activity-guided fractionation method. The structure was determined on the basis of physical and spectroscopic evidences.

[PD2-45] [10/19/2001 (Fri) 14:00 - 17:00 / Hall D]

Isolation of Lignans from the Roots of Acanthopanax chiisanensis having Inhibitory Activity on Prostaglandin E2 Production

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The chloroform fraction from the roots of *Acanthopanax chiisanensis* exhibited a significant inhibition of TPA-induced PGE_2 production in rat peritoneal macrophages. Five lignans were isolated from the chloroform fraction and their structures were elucidated as l-sesamin, helioxanthin, savinin, taiwanin C and cis-dibenzylbutyrolactone. Among the lignans tested, taiwanin C showed the most potent inhibitory activity on PGE_2 production with a relative order of potency, taiwanin C ≫ cis-dibenzylbutyrolactone > savinin = helioxanthin. l-sesamin showed no inhibitory activity at 30 μM.

[PD2-46] [10/19/2001 (Fri) 14:00 - 17:00 / Hall D]

Monoamine Oxidase Inhibitory Component from the Fruits of Evodia officinalis

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MAO plays an important role in the metabolism of monoamines in the central nervous system and its inhibitors are expected to be useful in the therapy of psychosis, depression, schizophrenia, and so on. Up to now, many inhibitory compounds toward it have been isolated from natural substances or synthesized for development of medicine. 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 *Evodia officinalis* showed high inhibition against the MAO. According to the activity-guided fractionation, a MAO inhibitory compound was isolated from CH_2Cl_2 fraction by Silica gel column chromatography and Sepadex LH-20 chromatography. The compound was identified as 1-methyl-2-undecyl-4(1H)-quinolone. The compound showed selective inhibition of MAO-B with IC_{50} value of 15.27 μM. It represented competitive mode at 0.02 ㎍/㎖ and 0.1 ㎍/㎖.

[PD2-47] [10/19/2001 (Fri) 14:00 - 17:00 / Hall D]

Inhibitors of 5α-Reductase from the Roots of Angelica koreana