

Dried fruits of *Lycium chinense* were extracted with EtOH and evaporated in vacuo. The extract was suspended in water and partitioned CHCl₃-MeOH mixture (5:1). The extract was fractionated by RP column chromatography using MeOH to give 7 fractions. Fraction 3 was chromatographed on SiO₂ (CM=10:1→0:1), sephadex LH-20 column (MeOH), and then was purified by HPLC (AcCN-H₂O=25:75) to afford compound 1. Fraction 4 was subjected to SiO₂ column chromatography to give 6 subfractions. HPLC (AcCN-H₂O=25:75) of subfraction 2, 5 afforded compound 2, 3 respectively. The structures of these compounds were identified as 4-[2-formyl-5-(hydroxymethyl)-1H-pyrro-1-yl]butanoic acid (1), 4-[2-formyl-5-(methoxymethyl)-1H-pyrro-1-yl]butanoic acid (2), 4-[2-formyl-5-(methoxymethyl)-1H-pyrro-1-yl]butanoate (3).

[PD2-5] [10/20/2000 (Fri) 11:30 - 12:30 / [Hall B]]

Quantitative analysis of orcinol and acute toxicity of *Gyrophora esculenta*

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In previous study, *Gyrophora esculenta* showed significant inhibitory effect on α -glucosidases *in vitro* and blood glucose elevation *in vivo*. In the isolating process of active substance, orcinol was separated from *Gyrophora esculenta*. Orcinol is known to be toxic, therefore, in this study, it was analyzed by the TLC densitometry method for quantitative determination from *Gyrophora esculenta*. The average amount of orcinol of *Gyrophora esculenta* was 0.2%. For the purpose of removing orcinol, the water extract of *Gyrophora esculenta* was sequentially fractionated by organic solvents, and the acute toxicity of each fraction was assessed in mice. Among them, the LD₅₀ of butanol fraction was 1.19g/kg(p.o.) and the weight increase of mice in that group was somewhat retarded.

[PD2-6] [10/20/2000 (Fri) 11:30 - 12:30 / [Hall B]]

Separation of *Cornus Officinalis* components by Centrifugal Partition Chromatography

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Centrifugal Partition Chromatography(CPC) method has advantages for separation of compounds from complex natural product mixtures, such as herbal medicines, by reducing material losses and allowing a higher stationary phase to sample volume ratio than allowed by Counter Current Chromatography(CCC) or HPLC. With these advantages, CPC may be a separation method of choice in the area of natural products, especially in supporting the bioassay-guided fractionation of extracts. The most important factor for successful CPC separation is an appropriate two phase solvent system, and so designing a solvent system is the focal point of the isolation operation. Here we separated and identified four iridoids and other two compounds from fruits extracts of *Cornus officinalis*(Cornaceae) that are used as a traditional medicine in Korea, Japan, and China for kidney tonic, analgesic, diuretic and antiosteoporotic effect of type 1 osteoporosis, using two different solvent systems: dichloromethane-methanol-n-propanol-water(5:6:1:4) and chloroform-methanol-water(9:12:8) using both two ascending and descending modes.