fraction by consecutive purification using sillica gel, Sephadex LH-20 chromatography and recrystallization.
The chemical structures of these compounds were identified as 1,8-dihydroxy-3-methoxy-6-methyl-9,10-anthraquinone(emodin 3-methyl ether), 1,3,8-trihydroxy-6-methyl-9,10-anthraquinone(emodin), 1,3,8-trihydroxy-6-hydoxymethyl-9,10-anthraquinone(ω-hydroxyemodin), and 3,5,4'-trihydroxystilbene (*trans*-resvertrol) by spectral data including GC-MS, ^{1}H-and ^{13}C-NMR. The IC_{50} values of emodin, emodin 3-methyl ether, ω-hydroxyemodin, and *trans*-resvertrol were 74.07, 2.81, 10.49, and 8.77μM, respectively.
These compounds are expected to be useful for preventing and curing of Influenza disease.

[PD2-22] [10/19/2001 (Fri) 14:00 - 17:00 / Hall D]

Four new sphingolipids from Bombycis corpus 101A and their neurotrophic effects

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Bombycis corpus is a silkworm larvae killed by inoculation of the fungi, *Beauveria bassiana* and a Korean traditional medicine to treat palsy, headache, convulsion, stroke induced speech problem and tremor.[1] *Bombycis corpus* 101A was developed at National Institute of Agricultural Science and Technology in Korea and inoculated by homogeneous fungi, *Beauveria bassiana* 101A. Several sterols were reported from Bombycis corpus.[2] In the course of searching for bioactive compounds from Korean traditional medicine, we have isolated two cytotoxic sterols and two cyclodepsipeptides from a methanolic extract of *Bombycis corpus* 101A[3,4]. In continuation of our research of this source, four new sphingolipids (1 ~ 4) were isolated from the hexane soluble fraction. On the basis of spectroscopic data, their structures have been elucidated as (4*E*, 2*S*, 3*R*)-2-*N*-octadecanoyl-4-tetradecasphingenine (1), (4*E*, 6*E*, 2*S*, 3*R*)-2-*N*-eicosanoyl-4,6-tetradecasphingadienine (2), (4*E*, 2*S*, 3*R*)-2-*N*-eicosanoyl-4-tetradecasphingenine (3), (4*E*, 6*E*, 2*S*, 3*R*)-2-*N*-docosanoyl-4,6-tetradecasphingadienine (4). Neurotrophic effects of isolated sphingolipids were evaluated by microscopically monitoring their potency to induce neurite outgrowth in PC12 cells and showed processes with lengths equivalent to two diameters of the cell body in 10mM.

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[PD2-23] [10/19/2001 (Fri) 14:00 - 17:00 / Hall D]

New Hydroperoxides from Aster oharai

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Aster oharai Nakai (Compositae), a perennial herb, is distributed mainly in the eastern part of South

Korea, and its aerial parts have been used to treat for asthma and diuresis in Korea folk medicine[1]. Literature survey of this plant revealed that no phytochemical and pharmacological studies have been performed. In continuation of our systematic study for korean Compositae medicinal plants, we have isolated four hydroperoxides from this plant, This plant was collected at Ullung island and extracted with MeOH. The methanol extract was fractionated with n-hexane, methylene chloride, ethyl acetate and BuOH. The repeated column chromatographic separation of the n-hexane fraction resulted in the isolation of four new hydroperoxides. Their structures have been established by chemical and spectroscopic means. In this poster we demonstrate the isolation and the structure determination of new hydroperoxides.

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[PD2-24] [10/19/2001 (Fri) 14:00 - 17:00 / Hall D]

Triterpenes and Phenolic Constituents from Viscum album var. coloratum

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Viscum album L. var. *coloratum* (Loranthaceae) has been used in Chinese medicine as anticancer drug[1,2]. On reviewing the literatures of this species, flavonoid, triterpene, lectin, polysaccharide and alkaloid were reported[3] and some pharmacological activites were investigated[4]. In the course of our search for bioactive compounds from natural sources, we have isolated twelve compounds from this source. Their structures were determined by spectroscopic means to lupeol (1), betulonic acid (2), betulinic acid (3), terminic acid (4), ursolic acid (5), β-sitosterol (6), α-spinasterol (7), oleanolic acid (8), 5-hydroxy-1-(4'-hydoxyphenyl)-7-(4"-hydroxyphenyl)-hepta-1-en-3-on (9), 2'-hydroxy-4',6'-dimethoxychalcone-4-*O*-glucoside (10), 2'-hydroxy-4',6'-dimethoxychalcone-4-*O*-[apiosyl(1→2)] glucoside (11) and syringin (12). The cytotoxicity of the isolated compounds was evaluated by SRB assay against five cultured human tumor cell lines.

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[PD2-25] [10/19/2001 (Fri) 14:00 - 17:00 / Hall D]

Sesquiterpenes and Lignans from Ulmus davidiana var. japonica

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Investigation of the constituents of the stem and root barks of *Ulmus davidiana var. japonica* resulted in