using a scintillation proximity assay(SPA) method. The compounds were also evaluated for cytotoxicity against human cancer cell lines.

[PD2-30] [04/19/2002 (Fri) 10:00 - 13:00 / Hall E]

A new flavonol glycoside from Brassica juncea L.

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Mustard leaf (Brassica juncea L.), a cormophyte vegetable that belongs to cruciferous family, originated from China and has been widely distributed in Korea and Japan. The seeds are consumed for mustard (a spice) and the leaves are used as food spices or folkloric uses such as stimulant, diuretic and expectorant. From the leaves of B. juncea, a new rare flavonol glycoside was isolated and characterized as kaempferol 7-O-β-D-glucopyranosyl-(1→6)-[β-D-glucopyranosyl-(1→3)]-β-D-glucopyranoside (1), together with known kaempferol-3-O-(2-O-feruloyl-β-D-glucosyl-(1→2)-β-D-glucoside)-7-O-β-D-glucoside (2) and kaempferol-3-O-β-D-glucosyl-(1→2)-O-β-D-glucoside-7-O-β-D-glucoside (3). Compounds 1 and 2 were found to be a scavenger of 1,1-diphenyl-2-picrylhydrazyl radical.

[PD2-31] [04/19/2002 (Fri) 10:00 - 13:00 / Hall E]

A New Ergostane-Type Cholesterol Biosynthesis Inhibitor from Cladosporium resinae

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A new ergostane-type steroid, 3β-hydroxy-1,11-dioxo-ergosta-8,24(28)-diene-4α-carboxylic acid, was isolated from *Cladosporium resinae* as a cholesterol biosynthesis inhibitor. This compound showed a significant inhibitory activity on the post-lanosterol pathway of cholesterol biosynthesis in human liver cells.

[PD2-32] [04/19/2002 (Fri) 10:00 - 13:00 / Hall E]

Isolation of cerebrosides from Euphoria longana

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Two cerebrosides, YA-3-2, and YA-3-3, were isolated from the pulp of *Euphoria longana*. YA-3-2 was characterized as 1-O-β-D-glucopyranosides of sphingosine type ceramides comprised of a long chain base (2*S*,3*R*,4*E*,8*E*/*Z*)-2-amino-4,8-octadecadiene-1,3-diol and fatty acids. The fatty acyl chain of ceramide moieties was determinded as palmitic acid(0.9%), oleic acid(1.9%), stearic acid(1.9%), lignoceric acid(2.8%) and (2*R*)-2-hydroxylignoceric acid(92.6%). YA-3-3 was characterized as 1-O-β-D-glucopyranosides of phytosphingosine type ceramides comprised of a long chain base (2*S*,3*R*,4*R*,8*E*/*Z*)-2-amino-8-octadecene-1,3,4-triol and fatty acids. The fatty acyl chain of ceramide moieties was determinded as palmitic acid(9.4%), oleic acid(2.9%), stearic acid(2.7%), and (2*R*-hydroxylignoceric acid (85%).

[PD2-33] [04/19/2002 (Fri) 10:00 - 13:00 / Hall E]

Antioxidative Phenolic Compounds from the Cambodian Mushroom Phelinus Linteus

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In continuing search for antioxidative compounds from natural sources, we found an antioxidative activity in the methanolic extract of the Cambodian mushroom *Phelinus Linteus*. After partitioning between $CHCl_3$ and 30% MeOH, the former layer was purified by a series of ODS flash, Shephadex LH-20, silica column chromatography to give two antioxidative phenolic compounds, 4-(3,4-dihydroxyphenyl)-(*E*)-3-buten-2-one (1) and caffeic acid (2). Compounds 1 and 2 like stilbenes or flavonoids with a catechol moiety showed high radical scavenging effect on DPPH radicals with RC_{50} values of 7.9 and 8.7 μg/mL, respectively.

[PD2-34] [04/19/2002 (Fri) 10:00 - 13:00 / Hall E]

An Antioxidative Dimeric C-Glucoside from Ardisia japonica Blume

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In our ongoing researches for bioactive compounds from natural sources, our attentions were focused on potent antioxidants from *Ardisia japonica*. The methanolic extract of the plant was partitioned in accordance with the Kupchan's scheme. Chromatographic purification of the *n*-BuOH layer afforded an unprecedented dimeric *C*-glucoside (1). The molecular formula of 1 was established as $C_{28}H_{30}O_{18}$ by the HRFAB mass and ^{13}C NMR data, indicative of 13 degree of unsaturation. Its structure was elucidated by the interpretation of the NMR spectra and its stereochemistry determined by *J*-coupling constants and NOE experiments. Compound 1 exhibited moderate antioxidative activity with RC_{50} value of 4.6 μg/mL.

[PD2-35] [04/19/2002 (Fri) 10:00 - 13:00 / Hall E]

Four Anti-tumor Sesquiterpenes from the Red Alga Laurencia okamurae

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Some halogenated metabolites from marine organisms are believed to play the role of chemical defence substances against marine herbivores. Among the chemical constituents isolated from the red algae in genus *Laurencia* (Ceramiales, Rhodomelaceae) was an unusual tricyclic sesquiterpene named as aplysin. The co-occurrence of brominated and non-brominated aplysins in many natural sources prompted speculation that the debromo-analogues scavenged reactive halogens from the marine environment before they could inflict damage on the host. The aplysins are also believed to act as anti-feedant preventing the predatory advances of other marine organisms. As a part of our continuing searches for anti-tumor agents from Korean marine algae, we found a potent anti-tumor activity in the methanolic extract of *Laurencia okamurae*. We herein report the isolation, structural elucidation, and biogenesis of four aplysin-related sesquiterpenes. Among them, laurinterol (1) showed potent anti-tumor activity against A549, SK-OV-3, SK-MEL-2, XF498, and HT15 with EC_{50} values of 2.6-3.6 μg/mL, respectively.

[PD2-36] [04/19/2002 (Fri) 10:00 - 13:00 / Hall E]