IH-901 is considered as one of the major metabolites of ginsenoside Rb_1 formed by intestinal bacterial flora. In addition, recent studies show that IH-901 has anti-tumor activities. Ako *et al.* developed a sensitive enzyme immunoassay for the active metabolite, however, the assay seems to be less specific for its side chain moiety (C_{20}-C_{27}). Therefore, we established a specific enzyme-linked immunosorbent assay (ELISA) for measuring IH-901 in biological fluid using polyclonal antibodies, which can recognize the side chain moiety.
In order to obtain the specific antibody for the side chain of IH-901 as well as its aglycone, a carrier protein of bovine serum albumin (BSA) was coupled to the sugar moiety of IH-901. The IH-901-BSA conjugate was inoculated into rabbits as immunogen. 5,000-fold diluted the polyclonal antibodies were employed for the optimization of IH-901-specific ELISA.
The measuring rage of this assay extended from 250 pg/well to 5 ng/well. The effects of plasma and urine on this assay are under investigation.

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

Stilbenes from the Root of Pleuropterus cilinervis Nakai

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*Pleuropterus cilinervis*Nakai(Polygonaceae) is an indigenous plant and distributed in mountain area of Korea. Phytochemical study was carried out the EtOAC fraction from the root of P. cilinervis. Four stilbenes were isolated with the repeated silica gel column chromatography. By using spectroscopic methods, these compounds were identified as *trans*-resveratrol, *trans*-resveratrol-3-O-β
-glucoside(piceid), piceid-6-O-gallate, and *trans*-resveratrol-4'-coumaroyl-glucoside.

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

Lyso-PAF Congeners and Sulphated Sphingosines from the Sponge Spirastrella abata

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In our continuing search for bioactive substances from the marine sponge *Spirastrella abata*, we have further isolated four new lyso-PAF (Platelet Activating Factor) from a brine shrimp active fraction of the methanolic extract of the sponge. Two of them were 2'-methoxy substituted lyso-PAF congeners which were not previously reported from natural sources. Two new sphingosines having a sulphate moiety at position 4 were also isolated from the same fraction. The structures have been determined with the help of modern spectroscopic techniques and mass analyses. This is also the first report of sulphated sphingosines from marine sources. The stereochemistry at C-2 of the lyso-PAF congeners were not determined while the stereochemistry of the sphingosine is being studied. The lyso-PAF congeners displayed mild inhibition on the cholesterol synthesis in the liver cell which might be ascribed to its inherent cytotoxicity.

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

A Series of Acetylenic Compounds and a Novel Pyridinium Alkaloid from the Stony Coral Montipora sp.

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Our studies on marine organisms for the investigation of cytotoxic agents have resulted in the isolation of a series of interesting acetylenic compounds from the methanolic extract of the stony coral *Montipora* sp. In our continuing study on the cytotoxic metabolites from the same coral, a series of acetylenic compounds and a novel pyridinium alkaloid have been isolated. The structures were elucidated based on the analysis of ^{1}H, ^{13}C NMR, and MS data. The nature of the isolated acetylenes was diverse comprising of montiporic acids and ester, α,β-unsaturated ketones, β-hydroxy ketones, cyclohexenone, and alcohols. However, all of them were saturated or unsaturated analogues of diacetylenes. Some of the acetylene compounds showed moderate to marginal cytotoxicity against a small panel of human solid tumor cell lines (A549, SK-OV-3, SK-MEL-2, XF498, and HCT15). One of the major analogues displayed inhibition on cell cycle and induced apoptosis in HCT cell.

[PD2-13] [10/20/2000 (Fri) 11:30 - 12:30 / [Hall B]]

A New Spirobenzylisoquinoline Alkaloids from Corydalis ochotensis

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Previous studies on the chemical constituents of Corydalis ochotensis mainly dealt with the isolation of isoquinoline alkaloids such as ochotensine, yenhusomine, corytenchin and adlumidine. And raddeanamine, aobamine, protopine and dihydrosanguinarine were isolation from C. ochotensis var. raddeana. For the isolation of isoquinoline alkaloids, n-butanol and chloroform soluble fractions were examined. Investigation on the two fractions afforded a new spirobenzylisoquinoline alkaloid, 8-O-acetylcorysolidine along with two known spirobenzylisoquinoline alkaloids.

[PD2-14] [10/20/2000 (Fri) 11:30 - 12:30 / [Hall B]]

A New Dicaffeoyl Quinic Acid of Ligularia fischeri var. spiciformis

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The plant Ligularia fischeri var. spiciformis (Compositae) is a candidate for the available functional food. We have reported the isolation of a new eremophilanolide named 6-oxoeremophilenolide and cytotoxic intermedeol from this plant. As this plant was known to have antidiabetic ability in