(LPS). It was shown that the whole essential oil inhibited the PGE_2 production in concentration dependent manner and these effects on NO and PGE_2 production shown by the essential oil can be attributed to one of the major components, α-terpinene.

[PD2-6] [04/20/2001 (Fri) 13:30 - 14:30 / Hall 4]

Establishment of an ELISA for the Determination of IH-901 Using the Antibody against Ginsenoside Re-Bovine Serum Albumin conjugate

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A specific enzyme-linked immunosorbent assay (ELISA) for the determination of IH-901, a major and active metabolite of ginsenoside Rb_1, was explored.

Recently, we reported that the production of IH-901-specific antibody (Ab) from rabbits immunized with ginsenoside Re (G-Re)-bovine serum albumin conjugate. Using the polyclonal Ab, a competitive indirect ELISA was established. Four criteria were set to optimize the ELISA procedures: 1) Coating antigen concentration; 2) Primary Ab dilution; 3) Dilution of peroxidase-labeled secondary Ab; 4) Durations of primary and secondary Ab incubation time.

The measuring range of the assay extended from 0.5 ng/well to 250 ng/well. The Abs cross-reacted with some protopanaxatriol-type ginsenosides, such as $G-F_1$, G-Re, and $G-Rg_1$. However, they exhibited minor cross-reactivities with $G-Rb_1$ (0.3%), protopanaxadiol (0.04%) and other ginsenosides tested ($G-Rh_1$: 1.5%; $G-Rh_2$: 0.1%). The ELISA method can be a very useful tool for the pharmacokinetic study of IH-901 because of its high sensitivity and specificity.

[PD2-7] [04/20/2001 (Fri) 13:30 - 14:30 / Hall 4]

Isolation of soya-cerebroside I from the roots of Trichosanthes kirilowii

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In addition to known cucurbitacines, a glucosphingosine type cerebroside and amino acids were isolated from the roots of *Trichosanthes kirilowii*. The structure of cerebroside was determined as soya-cerebroside I by means of spectroscopic methods. Fifteen amino acids were identified as aspartic acid, glutamic acid, serine, glycine, histidene, citrulline, threonine, alanine, proline, tyrosine, valine, isoleucine, leucine, phenylalanine and tryptophan, among which the major components such as citrulline, phenylalanine, leucine/isoleucine and valine were isolated.

[PD2-8] [04/20/2001 (Fri) 13:30 - 14:30 / Hall 4]

Additional antioxidative saponins from the fruits of Ternstroemia japonica Thunberg

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In a previous presentation(49th), we reported the isolation and structure elucidation of five new saponins from the fruits of Ternstroemia japonica Thunberg. All of these saponins have been shown to be 3-O-[β-D-glucopyranosyl(1→2)][α-L-rhamnopyranosyl(1→2)-β-D-galactopyranosyl(1→3)]-β-D-glucuronopyranoside. The present presentation deals with the isolation and structure elucidation of additional two new saponins with 28-O-β-D-glucopyranosyl in addition to the same glycosidic parts of 3-O- from the same source. They are as follows: 1, 3-O-[β-D-glucopyranosyl(1→2)][α-L-rhamnopyranosyl(1→2)-β-D-galactopyranosyl(1→3)]-β-D-glucuronopyranosyl 28-O-β-D-glucopyranosyl 3β,15α,16α,28-tetrahydroxy-olean-12-ene, 2, 3-O-[β-D-glucopyranosyl(1→2)][α-L-rhamnopyranosyl(1→2)-β-D-galactopyranosyl(1→3)]-β-D-glucuronopyranosyl 28-O-β-D-glucopyranosyl 16-O-acetyl primulagenin A.

[PD2-9] [04/20/2001 (Fri) 13:30 - 14:30 / Hall 4]

Chemolin and goniothalamicin, a novel and a known cytotoxic Annonaceous acetogenins from Annona cherimolia seeds

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Annonaceous acetogenins are waxy substances consisting of C_{32} or C_{34} long chain fatty acids which have been combined with a propan-2-ol unit at C-2 to form a γ-lactone. They are only found in several genera of the plant family, Annonaceae. Their diverse bioactivities as antitumour, immunosuppressive, pesticidal, anuprotozoal, antifeedant, anthelmintic and antimicrobial agents have attracted more and more interest worldwide.
Used in traditional medicine as insecticide and parasiticide, *Annona cherimolia* Mill. (Annonaceae) is a traditional tree native to Peru, now cultivated for its edible fruits in the South of Spain.
Previous work on the seeds led to the isolation of ten novel and nine known; in addition, a novel (chemolin) and a known (goniothalamicin) Annonaceous acetogenins have been obtained from the seeds.
Chemolin has a mono-THF ring with one flanking hydroxyl group and possesses an 1,2-diol of the aliphatic chain. Goniothalamicin has a mono-THF ring with two flanking hydroxyl group in their molecules. Goniothalamicin was known, but was newly isolated from this plant.

[PD2-10] [04/20/2001 (Fri) 13:30 - 14:30 / Hall 4]

Comparative Analysis of Diterpenoid Alkaloids with HPLC Detectors

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Aconitum species plants are representative medicinal drugs which contains toxic alkaloids such as diterpenoid alkaloids. But Aconiti sp. is one of the essential herbal medicines which possess anti-inflammatory, analgesic, and cardiotonic effects. We tried to analyse diterpenoids alkaloids in medicinal plants of our country. At first, we collected medicinal herbs of aconitum species. Two species were collected in Chookryong Mt. of maseuk province at Kyungki-do. The one was jiriba flower(Aconitum chiisanensis) and the other was three-leaf hinge (Aconitum triphyllum). one species (three-leaf hinge: Aconitum triphyllum) was also collected in Gaeam Mt. of yanggu province at Kangwon-do.
For the determination of aconitine, hypaconitine and mesaconitine in aconitum sp., A revered phase system consisting of an ODS column and mixture of methanol-water-chloroform-triethylamine