

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 \rightarrow 2)][α -L-rhamnopyranosyl(1 \rightarrow 2)- β -D-galactopyranosyl(1 \rightarrow 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 \rightarrow 2)][α -L-rhamnopyranosyl(1 \rightarrow 2)- β -D-galactopyranosyl(1 \rightarrow 3)]- β -D-glucuronopyranosyl 28-O- β -D-glucopyranosyl 3 β , 15 α , 16 α , 28-tetrahydroxy-olean-12-ene, 2, 3-O-[β -D-glucopyranosyl(1 \rightarrow 2)][α -L-rhamnopyranosyl(1 \rightarrow 2)- β -D-galactopyranosyl(1 \rightarrow 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 goniothalamycin, a novel and a known cytotoxic Annonaceous acetogenins from *Annona cherimolia* seeds

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Annonaceous acetogenins are waxy substances consisting of C₃₂ or C₃₄ 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, anuprotzoal, 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 (goniothalamycin) 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. Goniothalamycin has a mono-THF ring with two flanking hydroxyl group in their molecules. Goniothalamycin 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 cardiotoxic 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 reversed phase system consisting of an ODS column and mixture of methanol-water-chloroform-triethylamine