

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

### Phytochemical Constituents of *Cirsium setidens*

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*Cirsium setidens* (Compositae), a perennial herb, is distributed mainly in Kangwon province<sup>1)</sup>, and its aerial parts have been used to treat edema, bleeding and hemoptysis<sup>2,3)</sup>. Literature survey of *Cirsium setidens* revealed that no phytochemical and pharmacological studies have been performed. As part of our systematic study for Korean Compositae medicinal plants, *Cirsium setidens* was extracted with methylene chloride and the repeated column chromatographic separation of the extract resulted in the isolation of 15 compounds, four terpenoids, two sterol glycosides, three lipidglycosyl sitosterols and two diacylgalactosyl glycerols, three fatty acids and tocopherol. Their structures were established on the basis of spectroscopic data. The pharmacological research of the isolated compounds are under study.

- 1) Lee, T.B. (1985) Illustrated Flora of Korea, HyangMun Publications, Seoul, p. 769.
- 2) Lee, S.J. (1966) Korean Folk Medicine, Seoul National University Press, Seoul, pp. 145-146.
- 3) Kim, J.G. (1984) Illustrated Natural Drugs Encyclopedia (Color Edition) (Vol. 1), Nam San Dang, Seoul, p.37.

[PD2-20] [ 04/19/2002 (Fri) 10:00 - 13:00 / Hall E ]

### Antimutagenic Effect of the Extract Complex of Korean Anti-thirst Crude Drugs

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The three crude drugs of the *Kalopanax pictus* (Araliaceae) roots (K), *Pueraria thunbergiana* (Leguminosae) flowers (P), and the *Rhus verniciflua* (Anacardiaceae) heartwood (R) were extracted with MeOH, respectively, and the fractionation of the extract produced EtOAc extract. Artificial mixture was also prepared to compare the antimutagenicity in Ames test. In N-methyl-N'-nitro-N-nitrosoguanidine (MNNG, 0.4 µg/plate)-induced test, the activities of artificial complex were observed between the highest antimutagenic K extract and the lowest P extract. In aflatoxin (AFB<sub>1</sub>, 1 µg/plate)-induced test, the EtOAc complex (K:P:R=1:1:3) labeled as E-113 decreased the revertants of *Salmonella typhimurium* TA100 by 95%, which activity were more potent than any other extract or complex. Solvent fractionation mostly increased the antimutagenicity.

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### Flavonoids from the Leaves of *Litsea japonica* and their Anti-complement Activity

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Four known flavonoids, epicatechin (1), afzelin (2), astragaln 7-O-coumaric acid (3), and quercetin (4), were isolated from an EtOAc-soluble fraction of the leaves of *Litsea japonica* (Lauraceae). The structures