

Korea, and its aerial parts have been used to treat for asthma and diuresis in Korea folk medicine<sup>1)</sup>. Literature survey of this plant revealed that no phytochemical and pharmacological studies have been performed. In continuation of our systematic study for Korean Compositae medicinal plants, we have isolated four hydroperoxides from this plant. This plant was collected at Ullung Island and extracted with MeOH. The methanol extract was fractionated with n-hexane, methylene chloride, ethyl acetate and BuOH. The repeated column chromatographic separation of the n-hexane fraction resulted in the isolation of four new hydroperoxides. Their structures have been established by chemical and spectroscopic means. In this poster we demonstrate the isolation and the structure determination of new hydroperoxides.

1) Kim, T. J., Wild flowers of Korea. *Kugilmedia* p. 232 (1996)

[PD2-24] [ 10/19/2001 (Fri) 14:00 - 17:00 / Hall D ]

### Triterpenes and Phenolic Constituents from *Viscum album* var. *coloratum*

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*Viscum album* L. var. *coloratum* (Loranthaceae) has been used in Chinese medicine as anticancer drug<sup>1,2)</sup>. On reviewing the literatures of this species, flavonoid, triterpene, lectin, polysaccharide and alkaloid were reported<sup>3)</sup> and some pharmacological activities were investigated<sup>4)</sup>. In the course of our search for bioactive compounds from natural sources, we have isolated twelve compounds from this source. Their structures were determined by spectroscopic means to lupeol (1), betulonic acid (2), betulinic acid (3), terminic acid (4), ursolic acid (5),  $\beta$ -sitosterol (6),  $\alpha$ -spinasterol (7), oleanolic acid (8), 5-hydroxy-1-(4'-hydroxyphenyl)-7-(4''-hydroxyphenyl)-hepta-1-en-3-on (9), 2'-hydroxy-4',6'-dimethoxychalcone-4-O-glucoside (10), 2'-hydroxy-4',6'-dimethoxychalcone-4-O-[apiosyl(1 $\rightarrow$ 2)] glucoside (11) and syringin (12). The cytotoxicity of the isolated compounds was evaluated by SRB assay against five cultured human tumor cell lines.

1) Bae, K.H., The medicinal plants of Korea. *Kyohaksa*, p.79 (2000) 2) Park, W. B. and Kim, H. S., *Yakhak Hoeji*, 38, 418-424 (1994)

3) Fukunaga, T., Kajikawa, I., Nishiya, K., Watanabe, Y., Takeya, K., *Chem. Pharm. Bull.* 35(8), 3292 (1987)

4) Khwajawa, T. A., Dias, C. B. and Pentecost, S. *Oncology*, 43 (Suppl 1), 42 (1986)

[PD2-25] [ 10/19/2001 (Fri) 14:00 - 17:00 / Hall D ]

### Sesquiterpenes and Lignans from *Ulmus davidiana* var. *japonica*

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Investigation of the constituents of the stem and root barks of *Ulmus davidiana* var. *japonica* resulted in