

[*Shoyakugaku Zasshi*, 42, 48 (1988)]

Relation between Leaf Age and Geraniin Content of *Geranium nepalense* and *G. thunbergii*.

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Geranium nepalense contains geraniin as its main tannin. The geraniin content of *G. nepalense* is higher than that of *G. thunbergii* in all seasons. In order to investigate the seasonal variation of geraniin distribution in the plant, the geraniin content was determined at various seasons. The geraniin content is the highest in the leaves at the top part of the stem or at growing point, and decreases gradually as the leaves grow older. In summer, *G. nepalense* vigorously branches and accordingly has more young leaves which contain more geraniin. These observations show that *G. nepalense* is valuable as resources for geraniin.

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Microscopic Identification of the Chinese Patent Medicine Niu Huang Qingxin Wan.

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Niu Huang Qingxin Wan is a Chinese patent medicine, which is used for apoplexy in China, Korea and Japan. In future, the demand for the drug is likely to increase, as number of aged people increases. This medicine is consisting of honey and about 30 kinds of powdered crude drugs in the form of large pills. In China, several prescriptions have been used, some of which are known also in Japan. In this paper, we examined a sample of the medicine obtained in Japan with light microscope, and identified 24 crude drugs and a piece of gold leaf in it.

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Utilization of Fructo-oligosaccharide from Mai-Meng-Dong by intestinal Flora.

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A saccharide fraction called GFx was obtained from *Ophiopogon* in 50% yield. GFx was tested for its effect on a number of clinically separated intestinal bacteria, *in vitro*. GFx and neosugar P which is commercially available fructo-oligosaccharide mixture were utilized by *Bifidobacterium*, but, they were not utilized by *Lactobacillus*, *Enterococcus*, *Escherichia coli*, *Serratia marcescens*, *Proteus vulgaris*. It was confirmed that GFx was selectively utilized by *Bifidobacterium*. This suggested that the administration of GFx may be beneficial for the improvement of human intestinal flora.