

[Shoyakugaku Zasshi, 43, 159 (1989)]

**Studies of Scopoliae Rhizoma(1)Variation of Alkaloid Contents of Cultivated *Scopolia japonica*.**

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*Scopolia japonica* was cultivated under an open (no-shade) condition in a herbal garden with an alt. of 1,600m. The alkaloid contents in various parts of the plant were determined by HPLC. The shape of the cultivated plants was often irregular. The alkaloid contents(hyosyamine contents+scopolamine contents) in the pith of the underground parts were higher than those in other parts. Of the 85 samples tested, 37.6% of the rhizomes and 23.5% of the roots conformed to JPXI(total alkaloid content to be more than 0.3%). Higher alkaloid contents and crop yield may be obtained by using an improved cultivation system and elite strains obtained by phylogenetic selections.

[Shoyakugaku Zasshi, 43, 222 (1989)]

**Studies of Scopoliae Rhizoma(2)Annual Variations of Alkaloid Contents of a Wild *Scopolia japonica*.**

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*Scopolia japonica* was cultivated in the environmental conditions similar to wild ones, *i. e.* under deciduous broad leaf trees. The shape of the rhizomes of 49 plants cultivated and harvested in this experiment was about the same as that of the wild plants: thick roots, which are often produced when the plants were cultivated in sunny places were not found. The alkaloid content of the plant cultivated for one year was not different from that of the wild plant. It was confirmed that the cultivation conditions similar to wild ones did not affect the alkaloid content of *Scopolia japonica*.

[Shoyakugaku Zasshi, 43, 242 (1989)]

**Microscopic Identification of Crude Drug in Jitsubo-san.**

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Today, there are 56 brands of the woman's medicine, "Jitsubo-san", on the market. These commercial preparations consist of 10 to 24 kinds of cut crude drugs. To establish microscopic identification manuals, this study was carried out 13 commercially obtained preparations of this drug. Each cut crude drug ingredient was separated visually, pulverized in mortar and examined microscopically. Identification manuals were established for 27 species of the crude drugs which were compounded in most preparations. Of these crude drugs, pulverized Nupharis Rhizoma, Kaemferiae Rhizoma and Akebiae Caulis were morphologically described in detail as their descriptions were not available in the literature.