Preparation and Chemical Evaluation of Angelica dahurica Root (Part VI**1)
Changes of Starch, Sugars and Dilute Ethanol-soluble Extract Contents
by Cold Treatment of Fresh Root of Angelica dahurica

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Summary

The time course of changes in starch, fructose, glucose, sucrose and dilute ethanol-soluble extract contents in the fresh roots of Angelica dahurica harvested in September, October and November were investigated during storage at 4°C for 3-45 days.

The content of sucrose in the roots increased with longer duration of low-temperature treatment and that of dilute ethanol-soluble extract correspondingly increased. The contents of sucrose and dilute ethanol-soluble extract in the roots stored at 4°C for 45 days were higher than those in the roots dried outdoors for 45 days (i.e., without low temperature treatment). The contents of both components increased as the harvesting time of the roots became later. The content of starch also varied according to the harvesting time. These results suggested that the increase of sucrose content was not due only to the saccharification of starch.

Key words

Angelica dahurica root, Angelica dahurica, Cold treatment, Starch, Sucrose, Dilute ethanol-soluble extract