



HORTICULTURAL RESEARCH (JAPAN)
JAPANESE SOCIETY FOR HORTICULTURAL SCIENCE

[Available Issues](#) | [Japanese](#) >> [Publisher Site](#)

Author: [ADVANCED](#) | Volume Page

Keyword: |



[TOP](#) > [Available Issues](#) > [Table of Contents](#) > [Abstract](#)

ONLINE ISSN : 1880-3571

PRINT ISSN : 1347-2658

Horticultural Research (Japan)

Vol. 9 (2010) , No. 3 367-372

[\[PDF \(624K\)\]](#) [\[References\]](#)

Quick Preparation of Kaki-tannin from De-astringent Persimmon Fruit Treated by Ethanol

[Sadahiro Hamasaki](#)¹⁾

1) Nara Fruit Tree Research Center

(Received July 17, 2009)

(Accepted December 15, 2009)

Recently, the various functions of kaki-tannin have been the focus of attention in many fields. The common and traditional method of preparing kaki-tannin as Kakishibu requires considerable time, usually more than 3 years, because this method includes a fermentation process in the preparation. Therefore, a novel method of quickly preparing kaki-tannin is described in this paper. Immature and mature fruits of 'Tone-wase' persimmon were harvested respectively and then treated with ethanol for removal of astringency, and homogenized by a juicer. These homogenates were centrifuged at $1,630 \times g$ for 15 mins to show 3 or 4 layers in the centrifuging tubes, depending on the harvest time. Each layer was separated, removed from the tubes, and then freeze-dried. The dried powders were then solubilized to extract kaki-tannin by heating in water (121°C for 15 mins), respectively. Most of solubilized kaki-tannin was obtained from layer No. 3 in the case of immature persimmon fruit and from layer No. 2 in the case of mature fruit. The maximum recovery of kaki-tannin after astringent removal from fruit tissues was about 2% per fresh weight of the immature fruit. This method requires only 8 days to prepare kaki-tannin from immature persimmon fruits after harvest, in contrast to the traditional method. As indicated above, this method is considered very useful for preparing a large amount of kaki-tannin and it may open the door to the industrial utilization of kaki-tannin.

Key Words: [centrifugation](#), [kakishibu](#), [immature fruits](#)

[\[PDF \(624K\)\]](#) [\[References\]](#)

To cite this article:

Sadahiro Hamasaki. 2010. Quick Preparation of Kaki-tannin from De-astringent Persimmon Fruit Treated by Ethanol . Hort. Res. (Japan) 9: 367-372 .

doi:10.2503/hrj.9.367

JOI JST.JSTAGE/hrj/9.367

Copyright (c) 2010 by Japanese Society for Horticultural Science



[Japan Science and Technology Information Aggregator, Electronic](#)

