



Food Science and Technology Research Japanese Society for Food Science and Technology Available Issues Japanese **Publisher Site** Author: ADVANCED Volume Page Go Keyword: Search Register

TOP > Available Issues > Table of Contents > Abstract

ONLINE ISSN: 1881-3984 PRINT ISSN: 1344-6606

Food Science and Technology Research

Vol. 14 (2008), No. 1 pp.67-73

[PDF (200K)] [References]

Sugar and Organic Acid Composition in the Fruit Juice of Different Actinidia Varieties

Ichiro NISHIYAMA¹⁾, Tetsuo FUKUDA²⁾, Atsuko SHIMOHASHI¹⁾ and Tadachika $OOTA^{1)}$

- 1) Department of Food and Nutrition, Komazawa Women's Junior College
- 2) Fuchu Branch, Kagawa Agricultural Experiment Station

(Received: April 19, 2007) (Accepted: August 3, 2007)

Soluble sugars, sugar alcohol, and organic acid contents in *Actinidia* fruits at the eatingripe stage were determined in various genotypes using high-performance liquid chromatography: five A. deliciosa, seven A. chinensis, two A. rufa, eight A. arguta, and three interspecific hybrids. The main soluble sugars in A. deliciosa and A. rufa fruits were glucose and fructose, although sucrose was present in smaller amounts. In contrast, sucrose was the predominant sugar in A. arguta fruits, followed by fructose and glucose. Most Actinidia fruits tested here contained myo-inositol as a sugar alcohol component. In particular, myo-inositol contents in A. arguta fruits were 0.575–0.982 g/100 g fresh weight, which is the highest level among all foods. Regarding the organic acid component, citric and quinic acids predominated over malic acid in all Actinidia fruits tested. Compared to A. deliciosa and A. chinensis, the proportion of quinic acid was higher in A. rufa and lower in A. arguta.

Keywords: Actinidia spp., kiwifruit, sugar, organic acid, myo-inositol



Download Meta of Article[Help]
RIS

BibTeX

To cite this article:

Sugar and Organic Acid Composition in the Fruit Juice of Different *Actinidia* Varieties Ichiro NISHIYAMA, Tetsuo FUKUDA, Atsuko SHIMOHASHI and Tadachika OOTA, *FSTR*. Vol. **14**, 67-73. (2008) .

doi:10.3136/fstr.14.67 JOI JST.JSTAGE/fstr/14.67

Copyright (c) 2008 by Japanese Society for Food Science and Technology







Japan Science and Technology Information Aggregator, Electronic

