

Contents lists available at ScienceDirect

Data in Brief





Data Article

Data on free amino acid contents in Japanese basket clams (*Corbicula japonica*) from Lake Abashiri and Abashirigawa River

Hisaki Enda ^a, Yoshimasa Sagane ^b, Yozo Nakazawa ^b, Hiroaki Sato ^b, Masao Yamazaki ^{b,*}

ARTICLE INFO

Article history: Received 14 September 2017 Received in revised form 17 November 2017 Accepted 21 November 2017

Keywords: Free amino acid Japanese basket clams Habitat

ABSTRACT

This data article provides the free amino acid contents of Japanese basket clams from different areas of Lake Abashiri and Abashirigawa River, which belong to the same water system. Abashirigawa River flows into the south side of Lake Abashiri and then runs out from the northeast side of the lake. Clams were caught in three different areas in Lake Abashiri (Memanbetsu, Yobito, and Katayama) and from one site at Abashirigawa River (Sancho). Free amino acids in the edible portion of the clams were analyzed using an automated amino acid analyzer. The clams showed high contents in β -alanine, alanine, glutamic acid, and glycine. The clams caught in the river contains relatively higher amino acid contents. The analyzed data are provided in table format.

© 2017 The Authors. Published by Elsevier Inc. This is an open access article under the CC BY license (http://creativecommons.org/licenses/by/4.0/).

E-mail address: m-yamaza@bioindustry.nodai.ac.jp (M. Yamazaki).

^a Kohken Food and Flavor Co. Ltd., 2-3-19 Takashima, Nishi-ku, Yokohama 220-0011, Japan

^b Department of Food and Cosmetic Science, Faculty of Bioindustry, Tokyo University of Agriculture, 196 Yasaka, Abashiri, Hokkaido 099-2493, Japan

^{*} Corresponding authors.

Specifications table

Subject area More specific	Agricultural science Food chemistry
subject area	rood enemotif
Type of data	Table
How data was acquired	Free amino acid contents were measured using an automated amino acid analyzer (LaChrom Elite, Hitachi High-Technologies Corp., Japan).
Data format	Raw, analyzed
Experimental	Japanese basket clams were harvested at Abashirigawa River and at three
factors	different areas in Lake Abashiri.
Experimental	Free amino acid analysis
features	
Data source	Lake Abashiri and Abashirigawa River (city of Abashiri and town of Ohzora,
location	Hokkaido, Japan)
Data accessibility	Data are presented in this article.

Value of the data

- The data presented will be useful for nutrient assessments of Japanese basket clams.
- The data will be available for use when comparing the free amino acid compositions of clams caught from other areas.
- The data presented will be available to consider the effect of environmental factors and habitat on amino acid metabolism in these clams.

1. Data

Free amino acid contents of Japanese basket clams were measured using an automated amino acid analyzer. The contents of each type of free amino acid are represented in units of mg/10 g of clam wet weight, and the percentage of each amino acid relative to total amino acids was determined. Table 1 provides the free amino acid contents in the refrigerated clams, whereas Table 2 provides those measured in fresh materials.

2. Experimental design, materials and methods

2.1. Design

Japanese basket clams (*Corbicula japonica*) are harvested commercially in Japan. Lake Abashiri, in Hokkaido, is connected to the sea of Okhotsk by Abashirigawa River, which is near the northern limit of the species [1]. The free amino acid contents and composition in the edible portion of clams are important taste determinants [2]. In this study, we analyzed the free amino acid contents of clams harvested at three different locations in Lake Abashiri in November. Since the clams of Abashirigawa River are harvested only for a limited period in summer at the Sancho area of the river, they were sampled from the end of June to the beginning of July. Lake clams were also sampled during this period for comparison.

Download English Version:

https://daneshyari.com/en/article/6597155

Download Persian Version:

https://daneshyari.com/article/6597155

<u>Daneshyari.com</u>