



ELSEVIER

Contents lists available at ScienceDirect

Data in Brief

journal homepage: www.elsevier.com/locate/dib

Data Article

Q1 Data on the chemical properties of commercial fish sauce products

Mitsutoshi Nakano^{a,b}, Yoshimasa Sagane^a, Ryosuke Koizumi^a, Yozo Nakazawa^a, Masao Yamazaki^a, Toshihiro Watanabe^a, Katsumi Takano^c, Hiroaki Sato^{a,*}^a Department of Food and Cosmetic Science, Faculty of Bioindustry, Tokyo University of Agriculture, 196 Yasaka, Abashiri, Hokkaido 099-2493, Japan^b The Organization for the Promotion of International Relationship, 709, 1-1-7 Motoakasaka Minato-ku, Tokyo 107-0051, Japan^c Department of Applied Biology and Chemistry, Faculty of Applied Bioscience, Tokyo University of Agriculture, 1-1-1 Sakuragaoka, Setagaya-ku, Tokyo 156-8502, Japan

ARTICLE INFO

Article history:

Received 1 September 2017

Received in revised form

5 October 2017

Accepted 10 October 2017

Keywords:

Fish sauce

Chemical property

Salinity

Protein digestion

Fermented foods

ABSTRACT

This data article reports on the chemical properties of commercial fish sauce products associated with the fish sauce taste and flavor. All products were analyzed in triplicate. Dried solid content was analyzed by moisture analyzer. Fish sauce salinity was determined by a salt meter. pH was measured using a pH meter. The acidity was determined using a titration assay. Amino nitrogen and total nitrogen were evaluated using a titration assay and Combustion-type nitrogen analyzer, respectively.

The analyzed products originated from Japan, Thailand, Vietnam, China, the Philippines, and Italy. Data on the chemical properties of the products are provided in table format in the current article.

© 2017 Published by Elsevier Inc. This is an open access article under the CC BY license

(<http://creativecommons.org/licenses/by/4.0/>).

* Corresponding author.

E-mail address: hsato@bioindustry.nodai.ac.jp (H. Sato).

<http://dx.doi.org/10.1016/j.dib.2017.10.022>

2352-3409/© 2017 Published by Elsevier Inc. This is an open access article under the CC BY license

(<http://creativecommons.org/licenses/by/4.0/>).

Specifications Table

Subject area	Chemistry
More specific subject area	Food Chemistry
Type of data	Table
How data was acquired	Moisture analyzer (MX-50, A&D, Japan) Salt meter (B-721, HORIBA, Japan) pH meter (D-52, HORIBA) Combustion-type nitrogen analyzer (SUMIGRAPH NC-220F, Sumika Chemical Analysis Service, Japan)
Data format	Raw, analyzed
Experimental factors	Pretreatment for the acidity and nitrogen measurements: dilution in distilled water
Experimental features	Solid content analysis in a moisture analyzer. Direct measurements of pH and salinity. Total acidity determination by basic titration with phenolphthalein as indicator. Total nitrogen content determination by elemental analysis. Amino nitrogen content determination by formol titration.
Data source location	Tokyo, Fukuoka and Hokkaido, Japan
Data accessibility	All data are presented in this article

Value of the data

- The presented data on the chemical properties of 46 commercially available fish sauce products from Japan, Thailand, Vietnam, China, the Philippines, and Italy may be used as a reference for culinary studies of the fish sauces and related products.
- The data will be useful for nutritional assessment of the fish sauce products based on the chemical properties of these products.
- The presented data will allow the prediction of consumer preferences with regard to fish sauce products in each country.

1. Data

Fish sauce is a popular condiment on account of its distinctive flavor and taste. It is obtained by mixing fish material with salt, which is subsequently fermented under natural conditions [1]. In Japan, fish sauce is mainly used as a condiment in “Nabe” cuisine, a Japanese-style stew [1]. Among the Southeastern Asian countries, the widest variety of fermented fish products is found in Thailand [2]. In Vietnam, the fish sauce is used for dipping in a wide variety of dishes [3]. In China, fish sauce is used as a substitute for soy sauce in some dishes [1]. Patis, a Philippine fish sauce, is used in a citrus fruit soup [2]. The Italian fish sauce is based on Garum, which is the earliest reported fish sauce highly appreciated in the Roman era [4]. In general, fish sauces have a predominantly salty and umami taste, and distinctive flavor [5]. Therefore, data on the following were generated: fish sauce salinity, determining the salty taste; acidity, which roughly reflects the organic acids associated with the distinctive flavor and sour taste of the fish sauce; and nitrogen, representing the amino acids associated with the umami taste. Data on the chemical properties of 46 commercial fish sauce products produced in several countries (Japan, Thailand, Vietnam, China, the Philippines, and Italy) are presented. The origin and materials of the analyzed fish sauce products are provided in (Table 1). The data on their dried solid content, salinity, pH, acidity, and nitrogen content are shown in Table 2.

Download English Version:

<https://daneshyari.com/en/article/6597272>

Download Persian Version:

<https://daneshyari.com/article/6597272>

[Daneshyari.com](https://daneshyari.com)