

Construction of “The Traditional Fermented Foods of Thailand” Database

Various fermented foods that are produced and utilized in Thailand have been influenced by its neighboring countries. This research, therefore, looked at the possibility of adding more economic value to local food resources by employing traditional production technologies, specific fermentation microorganisms, and characteristic components. A review of existing literature revealed that only a few materials containing comprehensive information on traditional fermented foods of Southeast Asia have been collected. Kasetsart University of Thailand had once published such a book, entitled “The traditional fermented foods of Thailand” (Bhithakpol et al., 1995), but it is difficult to obtain today. With this in mind, JIRCAS constructed and opened an electronic database on traditional fermented foods of Thailand on the web, with recently obtained information from the results of microbiological studies in JIRCAS.

The database (<https://www.jircas.affrc.go.jp/DB/DB11/>) is composed of articles featuring 86 kinds of foods (26 fishery products, 8 animal products, 17 fruits, 23 vegetables, 6 rice products, 4 soybean products, and 2 others). Each article contains the local names in Thailand, ingredients, fermentation process, microorganisms, conditions, ways of eating, general nutritional information and pictures. They also show recent information on microorganisms, such as lactic acid bacteria in fermented fish, which have been identified by JIRCAS researchers. The articles have been organized by material and are easy to search.

Various traditional foods in East and Southeast Asia have many common characteristics and employ similar production technologies. By sharing information, it is expected that the production practices and quality of food in each of the countries are improved, and that newly designed food products would be developed in the future based on traditional technologies.

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Fig. 1. An example of fermented food in East and SE Asia (fermented rice noodle)

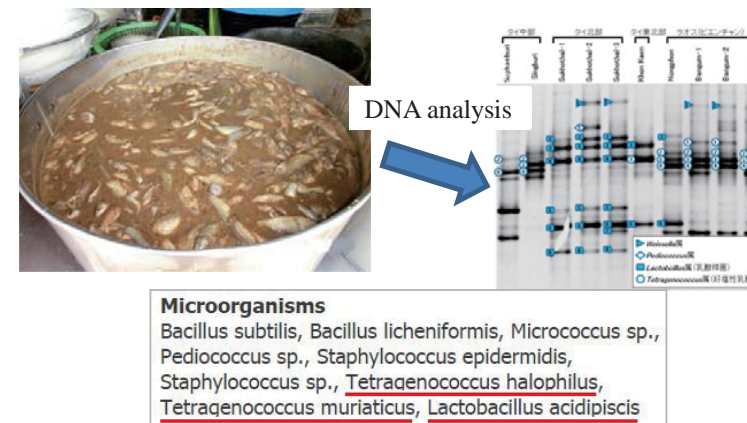


Fig. 2. Newly identified lactic acid bacteria from fermented fish

Chemical composition

Moisture (%)	Protein (%)	Fat (%)	Fibre (%)	Ash (%)	NaCl (%)	Total invert sugar (%)	Acidity as lactic acid (%)	pH	a _w
69.3	5.6	1.1	0.9	0.7	0	0.1	0.2	4.0	0.92

Fig. 3. A sample database page (General nutritional information for fermented rice noodle)



Fig. 4. Database homepage