Title Quality determination of Thai dried pickled fruits and vegetables

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## **Abstract**

Five varieties of Thai commercial dried and semi-dried pickled fruits and vegetables were sampled from local markets. These were determined for qualities in chemical and microbiological aspects. Each product variety was sampled from five products. The sampling was done in triplication, thus made the total of 75 samples. The products were salted shredded green mango, salted shredded green papaya, sweeten shredded radish pickle, salted whole radish pickle and whole peach pickle. The samples were analyzed for pH, acidity (as lactic acid), aw, moisture, benzoic acid, sorbic acid, saccharin, NaCl and SO<sub>2</sub>. It found that all samples were an acid food, from which its pH were not more than 4.60, except one sample from salted radish pickle had pH 4.67. The mango and papaya pickles had aw < 0.85, while most of the radish and peach pickles had aw > 0.85. Most samples had saccharin, except in the salted whole radish and some samples of papaya, sweeten radish, and peach. Benzoic acid was found in most samples, while there were small amounts of sorbic acid and SO<sub>2</sub> in some samples. The amounts of benzoic acid found in some samples were a little bit higher than 0.1%, especially in the radish pickles and peach pickle. This might be due to their high moisture content and high aw. From the microbiological analysis, it was found that every sample except radish pickles contained TVC, yeast, mold, C. perfringens, S. aureus, and B. cereus less than 10 cfu/g, coliform and E. coli < 3 MPN/g, and Salmonella spp. was not found in 25 g. sample. In the microbiological aspect, the quality of radish pickle samples, except one sample of one brand, passed the Thai commodity product standard for flavored radish pickle set by Thai Industrial Standards Institute. In order to decrease the amount of preservatives being used in the products that contain low microbial inhibiting factors, the producers should keep the products after processing in low temperature less than 4°C.