HANDLING PRACTICES AND FOOD SAFETY MEASURES ABOUT UMAI DELIGHTS AMONG BINTULU LOCALS, BORNEO SARAWAK

S. Aini-Nasuha¹, K. Harizt¹, S. R. Sarbini², S. Hassan³, S. S. Syed-Hussain⁴, N. I. Ahmad⁵, M.Z. Hassan⁶, S. Mustafa¹ & J. Kamaludeen¹

¹Department of Animal Science and Fishery, Faculty of Agriculture, Science and Technology, Universiti Putra Malaysia Bintulu Sarawak Campus, Bintulu, Sarawak, Malaysia.

 ²Department of Crop Sciences, Faculty of Agriculture, Science and Technology, Universiti Putra Malaysia Bintulu Sarawak Campus, Bintulu, Sarawak, Malaysia.
³Department of Forestry, Faculty of Agriculture, Science and Technology, Universiti Putra Malaysia Bintulu Sarawak Campus, Bintulu, Sarawak, Malaysia.
⁴Department of Votorinary, Clinical Studies, Faculty of Votorinary, Medicine, Universiti

⁴Department of Veterinary Clinical Studies, Faculty of Veterinary Medicine, Universiti Putra Malaysia, Serdang, Selangor, Malaysia

⁵Department of Veterinary Pathology and Microbiology, Faculty of Veterinary Medicine, Universiti Putra Malaysia, Serdang, Selangor, Malaysia ⁶Department of Aquaculture, Faculty of Agriculture, Universiti Putra Malaysia, Serdang, Selangor, Malaysia

juriahk@upm.edu.my

ABSTRACT

Umai is a popular traditional dish among the Melanau ethnic group indigenous to Sarawak. The local people believed that the acidity of the citrus juice can slightly cook the fish and remove the fishy smell. The aim of the study was to investigate the *umai* preparation process and to study the food safety awareness among the locals in Bintulu. A purposive sample of 100 umai makers divided into two equal groups; the professionals and non-professionals, participated in the study. The most recommended fish for making *umai* in the professional and non-professional group were Spanish Mackerel (62%; 32/50) and Empirang (82%; 41/50), respectively. Majority of the respondents in both groups (>60%) determined the freshness of the fish by observing the condition of the gills. Both groups were using calamansi juice as their main ingredients, as well as vinegar, lemon juice, asam paya and salt. Only 12% of the professional and 14% of the non-professional respondents agreed on freezing the raw fish chunks before processing them into *umai*. Most of the respondents indicated, that soon after marinating the raw fish in calamansi juice with other ingredients, the *umai* dish is ready to eat. A higher proportion of the non-professional (60%) compared to the professional respondents (50%) affirmed *umai* need to be chilled for 30 min before serving. Overall, the respondents showed little understanding of food safety measures. Hence, this study revealed that, the handling and processing of *umai*, and the food safety measures need to be improved among the Bintulu population.

Key terms: Raw fish dish, food handling, food safety awareness