

## **Product development of Kembayau (*Canarium Odontophyllum*) exotic fruit sauce**

### **Abstract**

*Canarium Odontophyllum* or known as Kembayau and/or Dabai (*Dacryodes rostrata* f. *cuspidate*) is an underutilized exotic (indigenous) fruit that can be found in Borneo region particularly Sabah, Sarawak, Brunei and Kalimantan tropical forest. Kembayau is less popular compared to Dabai fruit due to the taste and thickness of flesh. It is rich in minerals, proteins and carbohydrates with milky taste. This study was done to determine the suitability of Kembayau fruit as a sauce. Three formulations, F3, F5 and F8 out of nine were chosen after going through BIB ranking test and F8 then chosen through hedonic test for proximate analysis, microbial storage study and quality sensory. F8 contains 45% Kembayau fruit puree, 30% sucrose, 18% water, 1.53% modified corn starch, 0.1% xanthan gum, 4% margarine, 0.9% salt, 0.4% citric acid and 0.07% sodium benzoate. As result, Kembayau fruit sauce contains  $60.43 \pm 0.40$  moisture,  $0.50 \pm 0.10$  ash,  $0.75 \pm 0.03$  fat,  $1.40 \pm 0.07$  protein, and  $0.92 \pm 0.02$  crude fibre and  $35.50 \pm 0.04$  carbohydrates. Physicochemical shown sample had pH at  $3.15 \pm 0.10$ ,  $34.00 \pm 0.01$  °Brix, viscosity at  $24.42 \pm 0.10$  cP and  $L^*a^*b^*$  was at  $39.75 \pm 0.18$ ,  $6.12 \pm 0.07$ , and  $12.42 \pm 0.08$  respectively. From the view of storage studies, at eight week of storage, sample are contains bacteria and yeast at  $3.11 \times 10^2$  (power 2) cfu/ml and  $3.55 \times 10^1$  (power 2) respectively at concentration  $10^{-1}$  (power negative 1). Consumer test shows that Kembayau sauce is acceptable among consumers. As conclusion, Kembayau is a potential exotic fruit to be studied for the food product development.