

Preliminary Study of Fermented Pickle of Tabah Bamboo Shoot: Gigantochloa nigrociliata (Buese) Kurz

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Abstract : Tabah Bamboo (*Gigantochloa nigrociliata* (Buese) Kurz) is the indigenous bamboo species which grows in District of Pupuan, Tabanan at Province of Bali. Compared to the others, this shoot has low concentration of hydrocyanide acid (HCN). However, as found for almost of bamboo shoot, its seasonal availability, perishable in nature, and short-lived. This study aimed to gather information about total of lactic acid bacteria (LAB), pH, total acidity, HCN content, detection of LAB's type involved during fermentation, and organic acids' profiles of fermented pickles of Tabah bamboo shoot. The pickle was made by natural fermentation with 6 % salt concentration and fermentation conducted for 13 days. The result showed during the fermentation time, in the fourth day we found LAB's number was highest as much as 72×10^7 CFU/ml and the lowest pH was 3.09. We also found decreasing in HCN from 37.8 ppm at the beginning to 20.52 ppm at the end of fermentation process. The total number of indigenous LAB isolated from the pickle are 48 strains we found 18 out of these had rod shape. For the preliminary study, all of the LAB with rod shape were detected by PCR as member of *Lactobacillus* spp., in which 17 strains detected as *L. plantarum*. The organic acids detected during the fermentation were lactic acid with the highest concentration was 0.0546 g/100 g and small amount of acetic acid.

Keywords : fermentation, LAB, pickle, Tabah Bamboo shoot

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