Development of Chhaipov Paaem (Sweet Radish) Processing in Kandal Province, Cambodia

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Abstract: This study was designed (i) to identify technical issues and constraints in conventional sweet radish processing; (ii) to analyze microbial quality of sweet radish produced by sweet radish processors and trial products; and (iii) to evaluate the quality of sweet radish and trial products using sensory evaluation. It has been observed that there are some technical issues during the routine processing of sweet radish, including inadequate washing to remove adhering dirt; lack of separation of processing areas and workers living area; peeled radish kept in areas where animals were raised. In addition, other problems reported including, lack of finance, lack of raw materials, lack of processing areas and processing materials, and lack of markets. The microbial analysis results revealed that no significant differences in total microbial counts, fecal coliform and *E. coli* count in the products processed by sweet radish processors in Kandal province and the trial experiment products. No significant differences were also found in the sensory evaluation between the products produced by Kandal province processors and the products produced under experimental conditions. The sensory panelist evaluated color, odor, flavor, texture, and general characteristics of the two sources of processed sweet radish. In conclusion, the sweet radish produced using conventional practices by the Kandal province processors was regarded as satisfactory, despite some issues and productions constraints, including unhygienic processing conditions. This finding reflects the fact that the salt and sugar used during processing act as food preservatives, which limit the bacterial growth. However, improvement of processing facilities and hygienic conditions further improve the market needs.

Key words: Sweet radish, processing, quality, hygiene.