B-68: Preparation of ambulthiyal by making a fish loaf

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Fish ambulthiyal was prepared by making a fish loaf, to find out the possibility of improving the quality and to reduce wastage. Type of fish used was Tuna.

Experiment 1, In treatment A (Control), fish ambulthial was made in the traditional way; treatment B - the fish loaf was made with salt and steamed for 1 h at 120°C. Then the ambulthial mixture was injected into the loaf and the loaf baked for 40 min at 10°C; treatment C - the loaf was made with ambulthial mixture and steamed for 100 min at 120°C; treatment D - the loaf was made with ambulthial mixture and steamed for 1 h at 120°C and then baked for 40 min at 100°C. The products were evaluated by a taste panel on the day of preparation. Treatment D gave the most acceptable fish product, scoring higher marks for juiciness and general acceptability, than other treatments.

Experiment 2 - Treatment D (Control); treatment Q - no garlic in ambulthial mixture; treatment R - no chillie in mixture; treatment S - mustard in mixture; treatment T - no goraka in ambulthial mixture. Products were stored at 18°C and 25°C. A taste panel was conducted on the day of preparation. Treatment R scored higher marks for each quality character than the other treatments. pH, lost water content and TBA value were measured at regular intervals. pH value increased significantly in treatment D,Q,R. & T at 18°C and in all the treatments at 25°C. There was no significant difference in loose water content at 18°C and 25°C and TBA values increased significantly at 18°C and 25°C during the storage period. The physical quality of fish loaf was not acceptable.

Experiment 3 - The best treatment of experiment 2 according to the taste panel scores was the control (treatment R) Treatment Y - ambulthial mixture without gamboge (goraka) mixed with fish was transferred into a mould and steamed for 1 h at 120°C for making the loaf then cut into pieces and dipped in goraka for 3 h and baked for 40 min at 100°C. The product was stored at 18° and 25°C. pH, loose water content and TBA values increased

significantly at 18°C and 25°C during the storage period. There was not much difference in rate of increase of pH and loose water content between the 2 treatments at 25°C and 18°C. The rate of increase of TBA value was more or less the same in both treatments at 18°C and much higher in treatment R at 25°C.

Total bacterial count was higher in samples stored at 25°C than 18°C as well as in treatment R than treatment Y.