

Chemical and Physical Properties of Instant Edible-Swift Let Bird Nest

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Abstract:

The purpose of this study was to investigate the physical and chemical properties of instant edible-swift let bird nests. The samples were produced by two processes, heat-treated by boiling in water bath at 100 °C at the various times, and the other was steamed at a pressure cooker at 121 °C at the various times. The samples then were dried in a hot air oven at 60 °C until water activity (a_w) dropped below 0.5. The qualities of dried products were analyzed as well the suitable formulation and consumer acceptability were evaluated. The results revealed that dry bird-nest should be pretreated by soaking to saturate in water with the ration of the 1 g of bird nest to 100 g of water for 1 hour before cooking. To reach the target water activity, the samples that were cooked by boiling in water bath for 30, 60 and 90 minutes required the drying times of 210, 210 and 180 minutes respectively, while the steaming samples of 10, 20 and 30 minutes required the drying times of 150, 150 and 120 minutes respectively. Moisture contents among the products were not significantly different ($P < 0.05$). The brightness (L^*), of dried products produced from the boiling process and the steaming process were 53.41–58.23 and 49.97–54.16, respectively. The physical properties of the sample powder revealed that the sample steamed for 20 minutes obtained the acceptable properties.

Keywords: Swift let bird nest, instant, cooking, drying