ABSTRACT

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APLIKASI TEPUNG TULANG IKAN PATIN (Pangasius hypophthalmus) SEBAGAI SUMBER KALSIUM DAN FOSFOR PADA PRODUK CRACKERS

(xiii + 64 pages: 18 figures, 11 tables, 15 appendices)

By-product catfish (Pangasius hypophthalmus) bones were treated by acid solution to produce fish bone powder with reduced fat and protein content. The aim of this study was to determine the effect of pH (0, 1, 3, 5) of acid solution and time of boiling (30, 60, 90 min) to result fish bone powder with the optimum physicochemical properties. The selected fish bone powder had 51.44% yield, 61.55% rate of whiteness, bulk density of 0.79 g/ml, water absorption value of 0.064 g/ml, 16.85% fat, 21.73% protein, 61.22% ash, 2.63% moisture, 24.67% calcium and 11.16% phosphorus. The selected fish bone powder was then used to fortify crackers with different levels of concentration (0; 2.5; 5; 7.5; 10%). The crackers up to 10% fish bone powder were well received by the panelists based on organoleptic test. The crackers produced contained 4.84% calcium and 2.35% phosphorus. One serving (16 g) fulfills 77% and 54.29% of calcium and phosphorus needed in adults diet per day.

Keywords: Catfish bone powder, acid treatment, fortification, calcium, phosphorus

References: 46 (1992-2014)