

Orasa Suriyaphan : Utilization of Mung Bean Protein Waste from Vermicelli Industry in Flavour Sauce Production . Thesis Advisor : Asso. Prof. Patcharee Pankun, Ph.D. 178 pp.

The purpose of this research was to study the feasibility of utilizing mung bean protein concentrated (NP) waste from vermicelli industry in flavour sauce production. The result showed that the optimum condition for hydrolyzing the mung bean hydrolysate (MPH) was at MP:5 N HCl ratio of 1:2.5 (wt. by vol.) for period of 3 hours. The MPH obtained from this condition had Sp.gr. 1.210 ± 0.002 at room temperature, pH 5.15 ± 0.11 , total nitrogen 32.71 ± 1.25 g/l, amino acid nitrogen 20.72 ± 1.55 g/l and sodium chloride 206.85 ± 2.15 g/l. Deodorization by vacuum evaporator at 50°C for 45-minutes could reduce the fishy sauce and typical mung bean odor markedly. The MPH could be mixed with soybean hydrolysate at 10% (by vol.) without any change in organoleptic property. The flavor of this mixture could be enhanced by adding 3% sugar and 0.20% monosodium glutamate (by wt.). This flavour sauce was found acceptable by panelists at the level of slightly like to medium like and could be stored for 3 months at room temperature.