



OPTIMATION TO MAKE PROTEIN ISOLATE FROM BEANS

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ABSTRACT

This research was done to make protein isolate from mung bean (*Phaseolus aureus*), bengkok bean (*Mucuna pruriens*), gude bean (*Cajanus cajan*), kecipir bean (*Psophocarpus tetragonolobus*) and turi seed (*Sesbania grandiflora*). This research was done to get maximum protein level and amino acids measurement.

The isolate was made from legumes protein which was extracted and precipitated by acid and bases liquid. This process was completed by washing and drying. Process variation was done on extraction, precipitation and washing phase.

The result of this research was showing that the contained protein for 58-86%, fat for 1-4.6%, ash for 2-3.5%, carbohydrate for 1.8-34% and water for 9.5-14%. From this result, was showing that optimum condotion was unreachable. Isolat have composed amino acid as egg protein and soy bean protein. Contained of lisin, leusin, and phenilalanin amino acid was higher than egg and soy bean protein but contained of metionin was lower.