

INTISARI

Lamtoro Gung (*Leucaena leucocephala*) merupakan tanaman tropis kacang-kacangan. Biji lamtoro gung memiliki kandungan protein yang tinggi. Selain mengandung protein, lamtoro juga memiliki kandungan senyawa antigizi seperti mimosin. Keberadaan senyawa antigizi ini akan mempengaruhi nilai cerna protein. Tujuan penelitian ini adalah mengetahui proses perebusan dan pengukusan dengan waktu terpilih berdasarkan kesukaan terhadap senyawa antigizi dan nilai cerna protein secara in vitro

Proses perebusan dan pengukusan menggunakan variasi waktu 5;7;9 dan 11 menit. Hasil penelitian menunjukkan bahwa proses pengolahan kukus dan rebus yang paling disukai panelis secara berturut-turut yaitu biji lamtoro kukus 7 menit, dan rebus selama 5 menit. Biji selanjutnya dievaluasi nilai gizi, senyawa antigizi, total asam amino dan nilai cerna protein secara in vitro. Hasil penelitian menunjukkan bahwa pengukusan dan perebusan secara signifikan meningkatkan nilai cerna protein, sekitar 62-68%. Secara umum, perebusan dan pengukusan secara signifikan menurunkan protein, asam fitat, tripsin inhibitor dan mimosin serta menurunkan total asam amino pada biji lamtoro.

Kata kunci : Biji Lamtoro Gung, Proses Pengolahan, Nilai Gizi, Senyawa Antigizi, Nilai Cerna Protein.

ABSTRACT

Lamtoro seeds (*Leucaena leucocephala*) is a tropical plant of nuts that has a high protein content. Moreover, it also contains antinutrition compounds, such as mimosine. The presence of antinutrition will affect protein digestibility value. This study was aimed to investigate the process of boiling and steaming in selected time, based on predilection the preference to antinutrition compound and in vitro protein digestibility.

Boiling and steaming process were done by variation of time 5, 7, 9 and 11 minutes. The results showed that the most preferred by panelist was steaming for 7 minutes and boiling for 5 minutes. The seeds were then evaluated for the nutritional value, the antinutrients, the total amino acids and in vitro protein digestibility. The results showed that steaming and boiling process significantly increased in vitro protein digestibility, around 62-68%. In general, boiling and steaming process significantly decreases protein, phytic acid, trypsin inhibitor and mimosine, also decreased total amino acid in *Leucaena leucocephala*.

Keyword: *Leucaena leucocephala*, processing, nutritional, antinutritional compound, in vitro protein digestibility