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The Optimization of Protease Enzyme Extraction from Streblus Asper (Kesinai)

Abstract

Protease from Streblus asper (Kesinai) is an interesting rennet substitute and yet very few studies had been conducted so far. In the present study, the leaf extract of Kesinai had been discovered to investigate the ability of this milk coagulating enzyme. The development of the optimized conditions for enzyme extraction was analyzed by using Central Composite Design (CCD). The studied factors were ratio of sample to buffer, weight of sample (g) and homogenization time (min). It was found that a 30 g of S. asper leaves sample with the ratio of the sample to buffer of 1:1 and at a mixing rate of 2 minutes established the most desirable conditions for serine proteases extraction from the S. asper leaves sample.