DETERMINATION OF TOTAL PHENOLIC CONTENT AND ANTIOXIDANT ACTIVITY IN SEA CUCUMBER BODY WALL

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ABSTRACT

DETERMINATION OF TOTAL PHENOLIC CONTENT AND ANTIOXIDANT ACTIVITY IN SEA CUCUMBER BODY WALL

Sea cucumber has been regarded as one of the contributor of antioxidant. Analysis for the determination of total phenolic content and antioxidant activity in sea cucumber body wall extract was done. The crude product was extracted by using ethanol as solvent and total phenolic content was identified through Folin-Ciocalteu's method and free radical-scavenging activity using 2-2-diphenyl-1-picrylhydrazyl (DPPH) method. All the analysis was done by using UV Spectrophotometer. Gallic acid was used to develop standard curve and the total phenolic content was determined as gallic acid equivalent (GAE). The result of analysis was shown that the total phenolic content in sea cucumber body wall is 2.06 mg/g. By using free radical-scavenging activity method show that sample have positive correlation to the ascorbic acid antioxidant activity, where the increasing of concentration will increase the antioxidant activity.