

Dose Determination of Tenebrio molitor (Mealworm) Extract as an Anti-Diabetic Agent

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Abstract : Diabetes mellitus is still known as one of diseases which give a big amount of death in the world. From 2012 to 2014, diabetes is estimated to have resulted in 1.5 to 4.9 million deaths each year. In this paper, we present our research in the analysis and dose determination of Tenebrio molitor (Mealworm) extract as an anti-diabetic agent which is believed by Indonesian people as a traditional treatment to prevent and treat diabetes. We found that Tenebrio molitor extract has a potential as an anti-diabetic agent by in vitro test to Mus musculus which were divided into six group of treatment. Our dose determination analysis gave a conclusion that at 2,5 g/mL of concentration of the extract would give the optimal result in healing a wound given to Mus musculus which were induced by aloxane monohydrate. These results show that Tenebrio molitor extract is potential to be used as an Anti-Diabetic agent.

Keywords : diabetes, extraction, Tenebrio molitor, traditional medicine

Conference Title : ICMSTE 2016 : International Conference on Medical Science, Technology and Engineering

Conference Location : Rome, Italy

Conference Dates : May 02-03, 2016