

ABSTRACT

Antidiabetic Activity of Dry Extract *Andrographis paniculata* Nees. Herbs in Alloxan Induced Diabetic Mice

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Diabetes mellitus is a group of metabolic disorders characterized by hyperglycemia. This research aimed to evaluate antidiabetic activity of dry extract *Andrographis paniculata* Nees. herbs in alloxan induced mice. Dry extract is an extract of the added powder fillers, such as lactose, Avicel, maltodextrin, starch or other inert filler materials with a certain ratio, then dried in a drying cabinet (oven). All mice were is induced with 186,9 mg/kg body weight, alloxan diluted in buffer citrate to induce hyperglycemia. Dry extract *Andrographis paniculata* Nees. herbs with dose 28,57 mg/20g body weight mice, 57,14 mg/20g body weight mice and 114,28 mg/20g body weight mice, was administrated orally every 24 hour on groups III, IV and V. Standard drug Glibenclamide 3 mg/kg body weight (0,06 mg/20 g body weight mice) is used as positive control and CMC-Na 0,5% as negative control. Blood glucose levels were determined at 0, 2, 4, 6 and 24 hour.

After treatment, groups III, IV and V showed that the extract significantly reduce blood diabetic level in hyperglycemia mice. Dry extract of *Andrographis paniculata* Nees. herbs with of a dose 114,28 mg/20 g body weight mice showed the highest reduction in blood diabetic 168,50 ± 54,04 mg/dL. Dose 28,57 mg/20 g body weight mice showed the lowest reduction on blood diabetic 119,67 ± 30,12 mg/dL. The third dose has no significant difference in lowering blood sugar levels, the most effective dose was at 114,28 mg/20 g body weight mice.

Keywords : *Andrographis paniculata* Nees, antidiabetic activity, dry extract