THE POTENTIAL OF SHALLOT EXTRACT (*Allium ascalonicum* L) ON HYPERGLYCEMIC RATS (*Rattus norvegicus*) SKELETAL MUSCLE CELLS DIAMETER

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**ABSTRACT**

This aim of this study is to determine the hypoglycemic and antidiabetic effect of shallot’s extract (*Allium ascalonicum*) in alloxan induced diabetic rats (*Rattus norvegicus*). Samples consist of 20 male Wistar rats were induced with alloxan 120mg/kgBW intraperitoneally. After became hyperglycemia (KGD≥ 135 mg/dL), the rats were divided into 5 groups: 1) negative control group (K-) were treated with CMC Na 0.5%. 2) group (P0) treated with metformin 45 mg/kgBW as the standard drug, 3) *Allium ascalonicum* extract 250 mg/kgBW (P1), 4) *Allium ascalonicum* extract 500 mg/kgBW (P2), 5) *Allium ascalonicum* extracts 750 mg/kgBB (P3) daily for 14 days. The Hematoxylin Eosin staining method were used to measure the diameter of muscle cells from M. rectus femoris. The result showed an average diameter of muscle cells in the treatment group K-, P0, P1, P2, P3 respectively are 56.11 μm, 139.36 μm, 121.94 μm, 137.75 μm, and 156.22 μm. P1, P2, and P3 non significantly difference with P0. Shallot’s extract can maintain the diameter of the muscle cells.

**Keywords:** *Allium ascalonicum*, Alloxan, Skelet Muscle Cell, Rats, Hyperglycemia