Pengaruh Maserat Lidah Buaya (*Aloe vera*) Terhadap Histologi Pankreas Mencit (*Mus musculus* Swiss Webter) Jantan yang Diinduksi Aloksan

ABSTRAK

Penelitian dengan tujuan untuk mengetahui pengaruh maserat lidah buaya (*Aloe vera*) terhadap histologi pankreas mencit (*Mus musculus*) jantan yang diinduksi aloksan telah dilakukan. Aloksan disuntikan sebanyak 0.65 ml/100 gram BB secara intravena. Penelitian ini dilakukan dengan menggunakan 25 ekor mencit putih jantan dikelompokkan menjadi lima kelompok, setiap kelompok perlakuan kecuali kelompok kontrol netral diinduksi aloksan sebanyak 0.65 ml/100 gram BB dan diberi terapi dengan pemberian ekstrak daun *Aloe vera* sebanyak 0.70 gram/100 gram BB/hari, 1.05 gram/100 BB/hari, atau 1.40 gram/100 gram BB/hari. Mencit diberi perlakuan dengan pemberian *oral* maserat lidah buaya selama 30 hari. Pada hari ke-31 mencit dibedah dan diambil pankreas lalu dibuat preparat. Dihitung jumlah pulau Langerhans dan luas pulau Langerhans dalam satu preparat dengan tiga pengulangan. Hasil analisis data menunjukkan bahwa maserat *Aloe vera* dapat memperbaiki gambaran histologi pulau Langerhans yang diinduksi aloksan. Dosis *Aloe vera* 0.70 ml/100 gram BB/hari merupakan dosis efektif dalam memperbaiki gambaran histologi pulau Langerhans yang diinduksi aloksan. Berdasarkan hasil penelitian dapat disimpulkan bahwa maserat lidah buaya berpengaruh untuk memperbaiki pulau Langerhans pankreas mencit yang diinduksi aloksan.

Kata Kunci: Lidah Buaya, Histologi Pankreas, Aloksan.

Aloe vera Leaf Gel Macerate Effect to Male Mice (_Mus musculus_ Swiss Webter) Pancreatic Histology with Alloxan-Induced

ABSTRACT

Research with the aim to determine the *Aloe vera* maserat effect on the histology of the mice (*Mus musculus*) pancreatic with alloxan-induced male has been done. Alloxan was induced into mice body as much as 0,65 ml/100 g BW intravenously. This research was conducted using 25 male white mice were grouped into five groups, each treatment group except the neutral control group with alloxan-induced as much as 0.65 ml/100 g BW/day and were treated with *Aloe vera* leaf gel macerate as much 0.70 g/100 g BW/day, 1.05 g/100 g BW/day, or 1.40 g/100 g BW/day. Mice were treated with *Aloe vera* maserat oral administration for 30 days. On day 31, mice were dissected and pancreas were taken and made preparations. Calculated vast number of islands and islets of Langerhans in the preparations with three repetitions. The results of the data analysis showed that administration of *Aloe vera* maserat can fix pancreatic histology with alloxan-induced. *Aloe vera* dose of 0.70 ml/100 g body BW/day is an effective dose in improving pancreatic histology with alloxan-induced. Based on the results of this study concluded that administration of *Aloe vera* maserat effect can improve the mice islets of Langerhans of the pancreas with alloxan-induced.

Keywords: *Aloe vera*, Histology pancreatic, Alloxan.