POTENSI TEPUNG LABU KUNING (Cucurbita moschata), TEPUNG PORANG (Amorphophallus muelleri blume) DAN KOMBINASI KEDUA TEPUNG TERHADAP MORFOLOGI SPERMATOZOA MENCIT HIPERGLIKEMI

ABSTRAK

Penelitian ini bertujuan untuk mengetahui potensi tepung labu kuning, tepung porang dan kombinasi keduanya *terhadap morfologi spermatozoa mencit hiperglikemi*. Mencit putih jantan di induksi dengan aloksan.Penelitian ini dilakukan di laboratorium fisiologi hewan dan laboratorium utama Universitas PGRI Adibuana surabaya fakultas sains dan teknologi, prodi biologi. Percobaan menggunakan rancangan acak lengkap (RAL) dengan lima perlakuan dan lima ulangan. Perlakuan terdiri dari kontrol negatif yang di induksi aloksan dibiarkan dalam keadaan hiperglikemi dan tanpa perlakuan, kontrol positif di induksi dengan aloksan dan diberi glimepirid 0,0052mg/hari. dan perlakuan labu kuning di berikan dosis harian 134,4 mg dilarutkan ke 2,5 ml air dan diberikan sebanyak 0.5 cc (sesuai kapasitas lambung mencit), perlakuan tepung porang diberikan dosis harian 63 mg dilarutkan ke 2,5 ml air dan diberi 0,5 cc sesuai kapasitas lambung mencit), untuk perlakuan kombinasi diberikan dosis harian dengan perbandingan tepung labu kuning dan tepung porang 50:50. Tepung labu kuning 67,2 mg, dan Tepung porang 31,5 mg dilarutkan sebanyak 2,5 ml aquadest. Diberikan sebanyak 0,5 cc (sesuai kapasitas lambung mencit). Hasil penelitian menunjukkan penurunan kadar gula paling bagus adalah perlakuan kombinasi menghasilkan rata-rata penurunan kadar glukosa sebesar 159,4. Dan peningkatan kualitas morfologi terbaik oleh perlakuan pemberian tepung labu kuning dengan rata-rata sebesar 82,2%. Pemberian tepung labu kuning,tepung porang dan kombinasinya dapat menurunkan kadar glukosa darah Hal ini dapat diketahui karena signifikansi < alpha (5% atau 0,05) dan signifikansi < alpha (5% atau 0,05) untuk kualitas morfologi spermatozoa, sehingga dapat dinyatakan bahwa minimal ada 1 pasang perlakuan yang berbeda signifikan dalam mempengaruhi kualitas (morfologi) spermatozoa mencit hiperglikemi, maka disimpulkan bahwepung labu kuning, tepung porang dan kedua kombinasinya juga berpengaruh signifikan terhadap peningkatan kualitas morfologi spermatozoa mencit.

Kata kunci : Aloksan, tepung labu kuning, tepung porang, penurunan kadar gula, kualitas morfologi Spermatozoa.

POTENTIAL PUMPKIN FLOUR (Cucurbita moschata), PORANG FLOUR (Amorphophallus muelleri blume) AND THE COMBINATION OF BOTH FLOUR AGAINST MORPHOLOGY SPERMATOZOA MICE HYPERGLIKEMI

ABSTRACT

This study aims to find out the potential of pumpkin flour, porang flour and the combination of both against the morphology of spermatozoa mice hyperglikemi.. Male white mice are inductioned with aloksan. This research was conducted in animal physiology laboratory and main laboratory of PGRI Adibuana University surabaya faculty of science and technology, biology program. The experiment used a complete randomized design (RAL) with five treatments and five replays. Treatment consists of negative control in induction of aloksan left in a hyperglycemic state and without treatment, positive control in induction by aloksan and given glimepirid 0.0052mg/day. and pumpkin treatment was given a daily dose of 134.4 mg dissolved to 2.5 ml of water and given as much as 0.5 cc (according to the capacity of the stomach mice), porang flour treatment was given a daily dose of 63 mg dissolved to 2.5 ml of water and given 0.5 cc according to the capacity of the stomach mice), for the combination treatment given a daily dose with a ratio of pumpkin flour and porang flour 50:50. Pumpkin flour 67.2 mg, and porang flour 31.5 mg dissolved as much as 2.5 ml aquadest. Given as much as 0.5 cc (according to the capacity of the stomach mice). The results showed the best decrease in sugar levels was the combination treatment resulting in an average decrease in glucose levels by 159.4. And the best morphological quality improvement by the treatment of yellow pumpkin flour with an average of 82.2%. Administration of pumpkin flour, porang flour and its combination can lower blood glucose levels It can be known due to the significance of < alpha (5% or 0.05) and the significance of alpha < (5% or 0.05) for the morphological quality of spermatozoa, so it can be stated that there is at least 1 pair of different treatments significantly in affecting the quality (morphology) spermatozoa mice hyperglikemi, then concluded bahwepung pumpkin, porang flour and both combinations also have a significant effect on improving the morphological quality of spermatozoa mice.

Keywords : Alloxan, pumpkin flour, porang flour, decreased sugar content, morphological quality of Spermatozoa.