

ABSTRAK

Rifda Rihadatul Aisy, NIM 4191220006 (2023). Efek Hepatoprotektif Ekstrak Rumpum Gandum (*Triticum aestivum* L.) terhadap Histopatologi Hati Tikus Putih (*Rattus norvegicus*) yang Diinduksi Bisphenol A.

Penelitian ini bertujuan untuk mengetahui efek hepatoprotektif ekstrak rumput gandum (*Triticum aestivum* L.) terhadap histopatologi hati tikus putih (*Rattus norvegicus*) yang diinduksi bisphenol A. Penelitian ini didisain secara acak lengkap (RAL) dengan lima kali ulangan dan dilaksanakan pada bulan Mei – Juli 2023 di Laboratorium Biologi dan Rumah Hewan Fakultas Matematika dan Ilmu Pengetahuan Alam, Universitas Negeri Medan serta RSU Haji Medan. Tikus diberi Ekstrak Rumpum gandum (ERG) dengan dosis bertingkat (200, 400 dan 600 miligram) dan Bisphenol A (BPA) (200 miligram) secara oral selama 30 hari berturut-turut. Kelompok kontrol negatif diberi air dan pelet. Untuk kelompok positif hanya diberi Bisphenol A dengan volume yang sama. Pada hari ke-32 tikus dilakukan pembedahan dan diamati gambaran makroskopisnya selanjutnya dilakukan tahap histopatologi hati. Data amatan dianalisis dengan *Analysis of Variance* (ANOVA) dan uji lanjut *Duncan's Multiple Range Test* (DMRT). Hasil penelitian menunjukkan bahwa ekstrak rumput gandum tidak memberikan efek pada gambaran makroskopik hati, tetapi menghasilkan efek hepatoprotektif pada dilatasi sinusoid, diameter vena sentral, dan jumlah sel piknotik hati tikus putih.

Kata Kunci: Ekstrak rumput gandum, histopatologi hati, sinusoid, vena sentral, piknotik.

ABSTRACT

Rifda Rihadatul Aisy, NIM 4191220006 (2023). Hepatoprotective Effect of Wheat Grass Extract (*Triticum aestivum* L.) on Liver Histopathology of White Rats (*Rattus noervegicus*) Induced by Bisphenol A.

This Study aimed to determine the hepatoprotective effect of wheatgrass extract (*Triticum aestivum* L.) on liver histopathology of white rats (*Rattus noervegicus*) induced by bisphenol A. The study was designed in a completely randomized design (CRD) with five replications and was carried out in May – July 2023 at the Biology Laboratory and Animal House, Faculty of Mathematics and Natural Sciences, Medan State University and RSU Haji Medan. Rats were given wheat grass extract (ERG) in graded doses (200, 400 and 600 milligrams) and Bisphenol A (BPA) (200 milligrams) orally for 30 consecutive days. The negative control group was given water and pellets. The positive group was only given the same volume of BPA. On the 32nd day, the rats were disinfected and their macroscopic appearance was observed, then the liver histopathology stage was carried out. Data were analyzed using *Analysis of Variance* (ANOVA) and further *Duncan's Multiple Range Test* (DMRT) test. The results showed that wheatgrass extract had no effect on the macroscopic appearance of the liver, but produced a hepatoprotective effect on sinusoidal dilatation, central vein diameter, and number of pyknotic cells in the liver of white rats.

Keyword: Wheatgrass extract, liver histopathology, sinusoids, central veins, pyknotic.