

ABSTRAK

EFEK PEMBERIAN MINYAK ATSIRI UMBI RUMPUT TEKI (*Cyperus rotundus L.*) TERHADAP GAMBARAN HISTOPATOLOGI LAMBUNG TIKUS PUTIH (*Rattus novergicus*) YANG DIINDUKSI ALKOHOL

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Latar Belakang: Penyerapan alkohol sebanyak 20% di lambung bisa memicu kerusakan mukosa lambung. Dibutuhkan antioksidan yang berguna untuk mengikat oksidan bebas yang dihasilkan oleh alkohol. Rumput teki (*Cyperus rotundus L.*) yang tumbuh di Indonesia mengandung minyak atsiri di bagian umbinya yang berguna sebagai antioksidan.

Tujuan: Untuk mengetahui efek pemberian minyak atsiri umbi rumput teki (*Cyperus rotundus L.*) terhadap gambaran histopatologi lambung tikus putih (*Rattus novergicus*) yang diinduksi alkohol.

Metode: Penelitian ini menggunakan 25 ekor tikus putih jantan galur *Sprague dawley* yang dibagi menjadi 5 kelompok, yaitu K- yang diberi aquades, K+ yang diberi alkohol 43% dengan dosis 0,0116 ml/grBB/hari, dan kelompok P1, P2, P3 yang diberi alkohol 43% dengan dosis 0,0116 ml/grBB/hari dilanjutkan pemberian minyak atsiri umbi rumput teki dengan dosis 0,025 ml/hari; 0,05 ml/hari; 0,1 ml/hari selama 14 hari. Pada hari ke 15 tikus diterminasi dan diambil organ lambungnya untuk pembuatan preparat mikroskopis.

Hasil: Rerata skor kerusakan lambung adalah K-= 0,80; K+= 11,20; P1=9,80; P2=7,60; P3=7,40. Dengan pengujian statistik SPSS didapatkan perbedaan bermakna antara kelompok K-&K+, K-&P1, K-&P2, K-&P3, K+&P1, K+&P2, K+&P3, P1&P2 sedangkan P2&P3 tidak ada perbedaan bermakna.

Simpulan: Terdapat efek antioksidan dari pemberian minyak atsiri umbi rumput teki (*Cyperus rotundus L.*) terhadap gambaran histopatologi lambung tikus putih yang diinduksi alkohol.

Kata Kunci: Antioksidan, *Cyperus rotundus L.*, Lambung, minyak atsiri, umbi rumput teki.

ABSTRACT

THE EFFECT OF NUTGRASS TUBER ESSENTIAL OIL (*Cyperus rotundus L.*) GIVING ON GASTRER HISTOPATHOLOGICAL APPEARANCE OF WHITE RAT (*Rattus novergicus*) THAT INDUCED by ALCOHOL

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Background: Absorption 20% of alcohol in the stomach causing damage to the gastric mucosa. Antioxidants are needed which are useful for binding free oxidants that produced by alcohol. Nutgrass (*Cyperus rotundus L.*) that grows in Indonesia contains essential oils in its tuber which are useful as antioxidants.

Purpose: To find out the effect of nutgrass tuber essential oil (*Cyperus rotundus L.*) giving on gaster histopathological appearance of white rat (*Rattus novergicus*) that induced by alcohol.

Method: This study used 25 male white *Sprague Dawley* rats which were divided into 5 groups, K- group only given aquades, K + which was only given 43% alcohol at a dose of 0.0116 ml/grBB/day, and groups P1, P2, P3 who were given 43% alcohol with a dosage of 0.0116 ml/grBB/day and then continued with the administration of the nutgrass tuber essential oil with a dose of 0.025 ml/day; 0.05 ml/day; 0,1 ml/day for 14 days. Then the white rats were terminated on the 15th day and their gastric organs were taken to make microscopic preparations.

Result: The average score of gastric damage were K- = 0.80; K+ = 11.20; P1 = 9.80; P2 = 7.60; P3 = 7.40. The data were tested by SPSS as statistic application and get the obtained significant differences between the K- & K +, K- & P1, K- & P2, K- & P3, K + & P1, K + & P2, K + & P3, P1 & P2 while P2 & P3 have no significant differences.

Conclusion: There is an antioxidant effect of nutgrass tuber essential oil (*Cyperus rotundus L.*) giving on gaster histopathological appearance of white rat that induced by alcohol.

Keyword: Antioxidant, *Cyperus rotundus L.*, essential oil, gaster, nutgrass tuber