

## INTISARI

Buah alpukat mengandung senyawa tanin, asam linoleat, dan flavonoid diketahui dapat berpengaruh memperbaiki kerusakan mukosa lambung. Penelitian ini bertujuan untuk mengetahui pengaruh ekstrak buah alpukat terhadap gambaran histopatologi lambung tikus putih jantan galur wistar yang diinduksi aspirin.

Penelitian eksperimental dengan rancangan *post test only control group design* dibagi dalam 5 kelompok secara random. Tiap kelompok terdapat 6 ekor tikus. Semua kelompok mendapatkan pakan standar dan aquadest. Kelompok K adalah kelompok normal tanpa perlakuan. Semua kelompok perlakuan dan kelompok A diinduksi aspirin dosis 120 mg/200gBB/hari selama 3 hari. Kelompok A hanya diinduksi aspirin. Kelompok perlakuan E<sub>30</sub>, E<sub>60</sub>, dan E<sub>120</sub> ditambah dosis bertingkat ekstrak buah alpukat 30 mg/200gBB/hari, 60 mg/200gBB/hari dan 120 mg/200gBB/hari selama 15 hari. Pada hari ke-19 dilakukan pengambilan jaringan lambung dan diamati secara histopatologi menggunakan pengecatan *Hematoxylin Eosin* dengan perbesaran 100x dan 400x. Data dianalisis dengan uji *Kruskal Wallis* dilanjutkan dengan uji *Mann Whitney*.

Nilai rerata skor gambaran histopatologi lambung pada kelompok K 0,0333, A 0,2667, E<sub>30</sub> 0,72, E<sub>60</sub> 0,08, dan E<sub>120</sub> 0,0667. Analisis data menggunakan uji *Kruskal Wallis* menunjukkan perbedaan bermakna antar kelompok ( $p < 0,05$ ). Uji *Mann Whitney* menunjukkan perbedaan signifikan antara kelompok K dan E<sub>30</sub>, K dan A, E<sub>30</sub> dan E<sub>60</sub>, E<sub>30</sub> dan E<sub>120</sub>, E<sub>30</sub> dan A, E<sub>60</sub> dan A, E<sub>120</sub> dan A ( $p < 0,05$ ).

Ekstrak buah alpukat berpengaruh terhadap gambaran histopatologi lambung.

**Kata kunci** : tanin, asam linoleat, flavonoid, ekstrak buah alpukat, gambaran histopatologi lambung

## ABSTRACT

Avocado (*Persea americana* Mill.) fruit containing tannin, linoleic acid, and flavonoids has been shown to repair gastric mucosal damage. This study aimed to determine the effect of avocado fruit extracts on histopathological features of gastric tissues in aspirin induced ulcer in rats. In this experimental research with post test only control group design, 30 rats were randomly divided into 5 groups. All groups received standard diet. Normal group did received standard diet (K). All treatment groups were orally induced with aspirin (120 mg/200gramBB/day for 3 days) before the treatment. Group A were induced with aspirin. Groups E<sub>30</sub>, E<sub>60</sub> and E<sub>120</sub> received serial dose of avocado fruit extracts (30 mg/200gramBB/day, 60mg/200gramBB/day and 120 mg/200gramBB/day respectively) for 15 days. On day 19, gastric tissues of all groups were taken and subjected to histopathologic assessment using hematoxylin eosin staining with magnification of 100x and 400x. The data were analyzed with Kruskal Wallis test followed with Mann Whitney test.

The mean values of score histopathological assessment of gastric tissues in group K , A, E<sub>30</sub>, E<sub>60</sub>, E<sub>120</sub> were 0.0333, 0.2667, 0.72, 0.08, 0.0667 respectively. Kruskal Wallis test showed a significant difference between groups (p <0.05). Mann Whitney test showed a significant differences (p <0.05) between group K and E<sub>30</sub>, K and A, E<sub>30</sub> and E<sub>60</sub>, E<sub>30</sub> and E<sub>120</sub>, E<sub>30</sub> and A, and A E<sub>60</sub>, E<sub>120</sub> and A. In conclusion, Avocado fruit extracts affect histopathological features of gastric tissues in aspirin induced ulcer in rats.

**Keywords** : tannins, linoleic acid, flavonoids, avocado fruit extracts, histopathological features of gastric tissues