

**PERBEDAAN GAMBARAN HISTOLOGI MUKOSA GASTER TIKUS  
PUTIH JANTAN PASKA PEMBERIAN EKSTRAK DAUN SIRSAK  
(*Annona muricata* L.) BERBAGAI DOSIS SECARA SUBKRONIK**

**Uji Toksisitas Subkronik Ekstrak Daun Sirsak**

**ABSTRAK**

**Latar Belakang :** Daun sirsak banyak dikonsumsi karena terbukti berpotensi sebagai antioksidan, kemopreventif, serta antikanker. Konsumsi obat herbal per oral dalam jangka panjang berpotensi menimbulkan kerusakan pada mukosa gaster. Uji toksisitas diperlukan guna mengetahui keamanan daun sirsak terhadap mukosa gaster.

**Tujuan :** Mengetahui perbedaan gambaran histologi mukosa gaster tikus putih jantan paska pemberian ekstrak daun sirsak berbagai dosis secara subkronik.

**Metode :** Penelitian eksperimental dengan *post test only with control group design*. Tiga puluh ekor tikus putih jantan dibagi dalam 5 kelompok. Kelompok A diberikan 3 ml larutan Tween 80 1,75% dalam akuades, kelompok B ekstrak etanol daun sirsak 75 mg/kgBB, kelompok C ekstrak etanol daun sirsak 150 mg/kgBB, kelompok D ekstrak etanol daun sirsak 300 mg/kgBB, dan kelompok E ekstrak etanol daun sirsak 450 mg/kgBB yang diberikan selama 28 hari. Setelah perlakuan, tikus didekapitasi untuk diambil gasternya dan dibuat sediaan histologi dengan pewarnaan HE dan dinilai secara semikuantitatif dengan skor Lacy&Ito

**Hasil :** Hasil rerata skor kerusakan mukosa gaster kelompok A  $0,44 \pm 0,27$ ; kelompok B  $0,8 \pm 0,28$ ; kelompok C  $0,56 \pm 0,52$ ; kelompok D  $1,28 \pm 0,71$ ; dan kelompok E  $1,00 \pm 0,58$ . Uji *Kruskal-Wallis* tidak menunjukkan perbedaan signifikan ( $p=0,162$ )

**Kesimpulan :** Tidak terdapat perbedaan signifikan terkait gambaran histologi mukosa gaster tikus putih jantan paska pemberian ekstrak daun sirsak dosis 75 mg/kgBB, 150 mg/kgBB, 300 mg/kgBB, dan 450 mg/kgBB selama 28 hari.

Kata kunci : uji toksisitas, daun sirsak, subkronik, mukosa gaster, Lacy&Ito

**DIFFERENCES IN MALE ALBINO RATS MUCOSAL GASTRIC  
HISTOLOGICAL CHANGES AFTER VARIOUS DOSES OF  
SUBCHRONIC SOURSOUP LEAF EXTRACT (*Annona muricata* L.)  
ADMINISTRATION**

**Subchronic Toxicity Test of Soursoup Leaf Extract**

**ABSTRACT**

**Background :** Soursop leaves had widely consumed because it's potential as antioxidants, chemopreventive and anticancer. Long term consumption of herbal medicine potentially cause damage in gastric mucosa. Toxicity test is needed to determine the soursoup leaves safety in gastric mucosa.

**Objective :** This study aimed to determine differences in male albino rats mucosal gastric histological changes after various doses of subchronic soursoup leaf extract (SLE) administration.

**Method :** Research method was experimental study with posttest only with control group design. Thirty male albino rats were divided into 5 groups. Group A received Tween 80 1,75% in 3 ml of aquades, group B SLE 75 mg/kgBB, group C SLE 150 mg/kgBB, group D SLE 300 mg/kgBB, and group E SLE 450 mg/kgBB for 28 days. After treatment rats were decapitated, the gaster was taken and made histological preparations with HE staining and semiquantitative assesed with Lacy&Ito score.

**Result :** The result of gastric mucosal damage mean score in group A was  $0,44 \pm 0,27$ ; B was  $0,8 \pm 0,28$ ; C was  $0,56 \pm 0,52$ ; D was  $1,28 \pm 0,71$ , and E was  $1,00 \pm 0,58$ . Kruskal-Wallis test did not show significant differences ( $p=0,162$ )

**Conclusion :** There were no differences of males albino rats gastric mucosa histological changes after subchronic soursoup leaf extract dose of 75 mg/kgBB, 150 mg/kgBB, 300 mg/kgBB, and 450 mg/kgBB administration for 28 days.

Keywords :toxicity test, soursoup leaves, subchronic, gastric mucosa, Lacy&Ito