

Uji Toksisitas Subakut Infusa Biji Alpukat

(*Persea americana* Mill.) Terhadap Gambaran Histopatologis

Ginjal Tikus *Sprague Dawley*

INTISARI

Tujuan penelitian ini untuk mengetahui ada tidaknya perubahan histopatologis struktural organ ginjal pada tikus *Sprague Dawley* yang diberi infusa biji alpukat (*Persea americana* Mill.) dan mengetahui sifat efek toksik yang ditimbulkan infusa biji alpukat (*Persea americana* Mill.) pada organ ginjal tikus *Sprague Dawley*.

Penelitian ini merupakan penelitian eksperimental murni dengan rancangan acak lengkap pola searah. Dalam penelitian ini digunakan lima puluh ekor tikus galur *Sprague Dawley* (25 betina dan 25 jantan), umur 2-3 bulan, berat badan $\pm 150\text{-}250$ g. Tikus dibagi secara acak dalam lima kelompok yaitu kelompok I (kontrol negatif) diberi aquadest, kelompok II, III, IV, dan V merupakan kelompok perlakuan yang diberi infusa biji alpukat (*Persea americana* Mill.) dengan dosis 202,24 mg/kgBB; 360 mg/kgBB; 640,8 mg/kgBB; 1140,6 mg/kgBB. Pemberian infusa biji alpukat (*Persea americana* Mill.) dilakukan, selama dua puluh delapan hari berturut-turut. Setelah dua puluh delapan hari organ ginjal hewan uji akan diambil secara acak dari tiap kelompok perlakuan untuk dibandingkan dengan kelompok kontrol. Analisis hasil dilakukan dengan melihat histologi organ ginjal pada tikus galur *Sprague Dawley*, uji reversibilitas, penimbangan berat badan hewan uji, dan pengukuran asupan pakan dan minum hewan uji.

Hasil penelitian infusa biji alpukat (*Persea americana* Mill.) yang diberikan selama 28 hari dengan dosis 202,24 mg/kgBB; 360 mg/kgBB; 640,8 mg/kgBB; 1140,6 mg/kgBB tidak menyebabkan perubahan struktural terhadap ginjal tikus *Sprague Dawley* dan tidak dapat ditentukan sifat efek toksik akibat pemberian infusa subakut biji *P. americana* Mill. pada organ ginjal tikus *Sprague Dawley*.

Kata kunci : *Persea americana* Mill., uji toksisitas, infusa, subakut

A Subacute Toxicity Test of an Infused Avocado Seed

(*Persea americana* Mill.) Towards the Histopathologic

Condition of Dawley Sprague Rats

ABSTRACT

This research was aimed to find out whether the structural histopathology change of the kidney of *Sprague Dawley* mice which were given *Persea americana* Mill. exists or not. Also, it was to find out the nature of the toxic effects caused by the *Persea americana* Mill. on the kidney of the *Sprague Dawley* mice.

This research was an experimental research with one-way completely randomized design. This research used fifty mice of *Sprague Dawley* (25 females and 25 males), aged about 2-3 months, weighted $\pm 150\text{-}250$ g. The mice were randomly divided into five groups. Group I (negative control) was given distilled water, while Group II, III, IV and V were the treatment groups which were given the *Persea americana* Mill. The dosage was 202,24 mg/kgBB; 360 mg/kgBB; 640,8 mg/kgBB; 1140,6 mg/kgBB. The *Persea americana* Mill. was given for twenty eight successive days. After twenty eight days, the objects' kidney would be randomly taken from each treatment group to be compared to the control group. The result analysis was conducted by observing the kidney histology of *Sprague Dawley* mice, conducting reversibility test, weighing the objects and measuring the supply of the objects' feed and drink.

The research result of *Persea americana* Mill. given in 28 days using the dosage of 202,24 mg/kgBB; 360 mg/kgBB; 640,8 mg/kgBB; 1140,6 mg/kgBB does not cause the structural change of the kidney of the *Sprague Dawley* mice. Also, the nature of the toxic effect due to the infusion subacute of *P. americana* Mill. supply on the kidney of the *Sprague Dawley* mice cannot be determined.

Keywords : *Persea americana* Mill., toxicity test, infusion, subacute