

INTISARI

Produk SKM merupakan produk herbal yang dikembangkan sebagai obat antihipertensi berisi kombinasi ekstrak herba seledri (*Apium graveolens* L.), daun kumis kucing (*Orthosiphon stamineus* Benth.), dan buah mengkudu (*Morinda citrifolia* L.). Hasil uji farmakologi produk SKM mampu menurunkan tekanan darah sistol dan diastol tikus betina *Sprague Dawley*. Penelitian ini bertujuan untuk mengevaluasi ketoksikan subkronis produk SKM pada tikus jantan Wistar ditinjau dari histopatologi organ.

Metode yang digunakan adalah uji toksisitas subkronis *OECD Guideline* 408. Sebanyak 40 tikus dikelompokkan menjadi 1 kelompok kontrol dan 3 kelompok perlakuan sediaan uji produk SKM dosis 121,5; 364,5; dan 1093,5 mg/kgBB ditambah 5 tikus satelit kontrol dan 5 tikus satelit dosis 3 (1093,5 mg/kgBB). Suspensi sediaan uji dipejankan secara oral sekali sehari berulang selama 90 hari. Pengamatan yang dilakukan meliputi gejala toksik klinis, perkembangan berat badan, asupan makan, asupan minum, berat organ dan pemeriksaan histopatologi.

Pemberiaan produk SKM 121,5; 364,5; dan 1093,5 mg/kgBB secara oral sekali sehari berulang selama 90 hari pada tikus jantan Wistar tidak menimbulkan gejala toksik klinis dan kematian, tidak mempengaruhi asupan makanan dan minuman. Namun berpengaruh terhadap purata kenaikan berat badan perhari (PKBP) tikus jantan Wistar kelompok 364,5 mg/kgBB. Pemberian produk SKM 121,5; 364,5; dan 1093,5 mg/kgBB tidak menyebabkan perubahan berat organ dan histopatologi jantung, paru, lambung, ginjal, hati, dan limpa.

Kata kunci: toksisitas subkronis, herba seledri, daun kumis kucing, buah mengkudu, histopatologi

ABSTRACT

SKM product is a herbal product developed as anti-hypertensive medicine containing combination of celery herb extract (*Apium graveolens* L.), cat's whiskers leaves (*Orthosiphon stamineus* Benth.), and morinda fruit (*Morinda citrifolia* L.). Pharmacologic test result of SKM product has shown its ability to lower systolic and diastolic blood pressure of female rats *Sprague Dawley*. This research was aimed to evaluate sub-chronic toxicity of SKM product on male Wistar rats from the histopathological view of its organ.

The method used is sub-chronic toxicity test from OECD Guideline 408. As many as 40 rats were separated into 1 control group and 3 treatment groups of SKM product test preparation at dose amount of 121,5; 364,5; and 1093,5 mg/kg body weight and additional 5 control satellite rats and 5 satellite rats of the third dose (1093,5 mg/kg body weight). The preparations of the SKM suspension were administered orally once a day for 90 days. The observation conducted includes clinical toxic symptoms, body weight development, food and water intake, organ weight, and histopathological observation.

Repeated administration of SKM product of 121,5; 364,5; and 1093,5 mg/kg body weight orally within 90 days on male Wistar rats did not result in clinical toxic symptoms and mortality, and it did not affect food and water intake. However, such administration affect the average body weight gain per day of male Wistar rats from the group of 364,5 mg/kg body weight. Administration of SKM product of 121,5; 364,5; and 1093,5 mg/kg body weight did not change the weight and the histopathology of heart, lung, stomach, kidney, liver, and spleen of particular subjects.

Keywords: sub-chronic toxicity, celery herb, cat's whiskers leaves, morinda fruit, histopathology