

**TOKSISITAS SUBKRONIK EKSTRAK ETANOL DAUN PACING
(*Costus speciosus*) TERHADAP FUNGSI ORGAN HATI PADA TIKUS**

FARIZKAH RAHMAH

201FF03003

Program Studi S1 Farmasi, Fakultas Farmasi
Universitas Bhakti Kencana

ABSTRAK

Untuk pengembangan obat bahan alam dari ekstrak etanol daun pacing (*Costus speciosus*) harus dilakukan uji keamanan secara praklinik agar diketahui keamanannya jika digunakan jangka panjang. Uji toksisitas subkronis ekstrak etanol daun pacing dilakukan dengan menilai fungsi hati hewan uji setelah diberikan sediaan uji secara oral selama 90 hari sesuai metode yang digunakan yaitu OECD 408. Hewan uji dibagi menjadi 2 kelompok perlakuan: kelompok kontrol diberi Na CMC 0,5% dan kelompok uji diberi ekstrak etanol daun pacing dosis 300 mg/kg BB. Parameter yang diamati berupa bobot badan, indeks organ dan pemeriksaan biokimia darah. Hasil penelitian menunjukkan bahwa pemberian ekstrak etanol daun pacing dosis 300 mg/kg BB tidak mempengaruhi bobot badan, indeks organ dan kadar biokimia darah (SGOT & SGPT) secara signifikan ($p > 0,05$). Dari penelitian dapat disimpulkan bahwa pemberian ekstrak etanol daun pacing (*Costus speciosus*) pada dosis 300 mg/kg BB tidak menimbulkan efek toksik yang signifikan terhadap fungsi organ hati pada tikus selama periode pengujian 90 hari.

Kata Kunci: Toksisitas subkronik, *Costus speciosus*, SGOT, SGPT

SUBCHRONIC TOXICITY OF ETHANOL EXTRACT OF PACING LEAVES (*Costus speciosus*) ON LIVER ORGAN FUNCTION IN RATS

FARIZKAH RAHMAH

201FF03003

Bachelor Program in Pharmacy, Faculty of Pharmacy
Bhakti Kencana University

ABSTRACT

For the development of natural drug materials from the ethanol extract of *Costus speciosus* leaves, a series of preclinical safety tests must be conducted to determine its safety for long-term use. The subchronic toxicity of the ethanol extract of *Costus speciosus* leaves was carried out by assessing the liver function of test animals after being administered the test preparation orally for 90 days according to the method used, which is OECD 408. The test animals were divided into 2 treatment groups: the control group was given 0.5% Na CMC, and the test group was given the ethanol extract of *Costus speciosus* leaves at a dose of 300 mg/kg body weight. The parameters observed included body weight, organ index and blood biochemical examination using a microlab. The research results showed that the administration of the ethanol extract of *Costus speciosus* leaves at a dose of 300 mg/kg body weight did not significantly affect body weight, organ index, and blood biochemical levels (SGOT & SGPT) ($p>0.05$). From the research, it can be concluded that the administration of the ethanol extract of *Costus speciosus* leaves at a dose of 300 mg/kg body weight does not cause significant toxic effects on liver function in rats over a 90-day testing period.

Keywords: Subchronic, toxicity, *Costus speciosus*, SGOT, SGPT