



# UNIVERSITAS SYIAH KUALA

## UPT. PERPUSTAKAAN

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## ELECTRONIC THESIS AND DISSERTATION UNSYIAH

### TITLE

PENGARUH EKSTRAK ETANOL BATANG SIPATAH-PATAH (*CISSUS QUADRANGULA SALISB.*) TERHADAP KUALITAS SPERMATOZOA MENCIT (*MUS MUSCULUS*)

### ABSTRACT

#### ABSTRAK

Telah dilakukan penelitian tentang pengaruh ekstrak etanol batang sipatah-patah (*Cissus quadrangula Salisb.*) terhadap kualitas spermatozoa mencit (*Mus musculus*) secara oral, melalui intubasi esofagus. Pelaksanaan penelitian pada bulan Maret hingga Agustus 2016 di Laboratorium Mikroteknik Fakultas Matematika dan Ilmu Pengetahuan Alam Universitas Syiah Kuala. Penelitian ini menggunakan Rancangan Acak Lengkap (RAL) yang terdiri atas empat perlakuan, dengan lima ulangan. Perlakuan terdiri atas pemberian ekstrak batang sipatah-patah dengan dosis 0 mg/kg bb (P0), 52,5 mg/kg bb (P1), 105 mg/kg bb (P2) dan 210 mg/kg bb (P3) yang diberikan sekali sehari selama 14 hari. Parameter yang diamati meliputi jumlah motilitas spermatozoa, jumlah spermatozoa hidup dan jumlah spermatozoa abnormal. Data hasil penelitian dianalisis menggunakan analisis varian (ANOVA) dan dilanjutkan dengan uji Duncan. Hasil penelitian menunjukkan bahwa pemberian ekstrak batang sipatah-patah berpengaruh nyata terhadap kualitas spermatozoa mencit. Pemberian ekstrak batang sipatah-patah dapat menurunkan jumlah spermatozoa motil dan spermatozoa hidup serta dapat meningkatkan jumlah spermatozoa abnormal.

Kata kunci : *Cissus quadrangula Salisb.*, antifertilitas, kualitas spermatozoa.

#### ABSTRACT

The present study was carried out to investigate the effect of the ethanolic extract of sipatah-patah (*Cissus quadrangula Salisb.*) stem on the quality of spermatozoa of mice (*Mus musculus*). The ethanolic extract of sipatah-patah was given to mice orally through esophageal intubation. The experiments were conducted from March to August 2016 in the Microtechnic Laboratory, Faculty of Mathematics and Natural Sciences Syiah Kuala University. This study used a completely randomized design (CRD) consisting of four treatments, with five replicates. The treatment consisted of giving sipatah-patah stem extract at a dose of 0 mg / kg bw (P0), 52.5 mg / kg bw (P1), 105 mg / kg bw (P2) and 210 mg / kg bw (P3) given once daily for 14 days. The parameters observed were motility of spermatozoa, live spermatozoa, and abnormal spermatozoa. The data were analyzed using analysis of variance (ANOVA) followed by Duncan test. The results showed that the extract of sipatah patah stem have a significant effect on the quality of sperm in mice. The extract of sipatah patah stem can reduce the number of motile spermatozoa, alive spermatozoa and can increase the number of abnormal spermatozoa.

Keywords: *Cissus quadrangula Salisb.*, antifertility, quality of