

ABSTRACT

Brotowali (*Tinospora crispa* (L.) Miers.) functions as antipyretic, analgetic and stomacic. It is used for fever, diabetes mellitus, reumatic, headache, stomache, jaundice, tonic and itch (to bathe). Pain is direct response toward unhappy event/condition related to tissue damage like wound, inflammation or cancer.

The aim of the research is to know whether ethanolic extract of brotowali's stem by chemical induction method has analgetic effect for Swiss female white mice and to know how much the percentage to give analgetic effect. This research is pure experimental research with one way random design.

Ethanolic extract is produced by percolation. The test subjects uses female white mice, Swiss groove, it weights 20-30 grams, age is 2-3 months, and separated on 6 groups. Group I as a negative control used CMC Na (natrium carboxymethyl cellulose) 0.5%. Group II as a positive control used paracetamol suspension in CMC Na 0.5% which dosage was 91 mg/kg of body weight. Groups III-VI as groups test used brotowali's stem ethanolic extract which dosage were 66, 132, 264 and 528 mg/kg of body weight which given by oral injection. Fifteen minutes later, acetic acid dosage 100 mg/kg of body weight was given in mice by intraperitoneal administration. The writhing respond are watched closely and booked every 5 minutes in 60 minutes. The accumulation numbers of the writhing respond are transferred into the form of resistance percentage toward the writhing respond. The data which is got is analyzed statistically by *Kolmogorov-Smirnov*, *oneway ANOVA test*, then the step is continued with *LSD test* with interval 95%.

The result showing that ethanolic extract of brotowali's stem at 66 mg/kg BW, 132 mg/kg BW, 264 mg/kg BW, 528 mg/kg BW and paracetamol 91 mg/kg BW respectively 38.81%, 61.19%, 80.95%, 84.05% and 57.86%.

Key words : analgetic, ethanolic extract of brotowali's stem