ABSTRACT

The objective of these studies are to determine the LD_{50} of mix ethanolic extract sambiloto herbs (*Andrographis paniculata* Nees) and rimpang temukunci (*Boesenbergia pandurata* Roxb) in andrografolida : pinostrobin = 1:1 ratio by acute toxicity test and to determine teratogenic effect of it in mice (*Mus musculus*). Combination both of plants used in this research because each plants has anticancer acitivity with different mechanism so we can get sinergisme without increasing the toxicity.

In acute toxicity test, each mice were given a single dose of 21 g/kg BW of mix ethanolic extract sambiloto herbs (*Andrographis paniculata* Nees) and rimpang temu kunci (*Boesenbergia pandurata* Roxb) in andrografolida : pinostrobin = 1:1 ratio. The test sampel was given orally in CMC-Na 0.5% suspension. At first four hours we observed the acute effect in mice and after 24 hours we observed death mice. The acute toxicity result is no toxic event happened and no nimals died from the administered dose, showing that LD_{50} of mix of sambiloto and temu kunci being greater than 21 g/kg BW.

Teratogenic test was done on pregnant mice in 4 different group with 1 control group and 3 group with different doses (0.147 g/kg BW; 0.441 g/kg BW; 0.735 g/kg BW). The test sampel was given on daily basis from day 7 to day 15 of pregnancy. Caesar surgery was done in the 18th day of the pregnancy times. Observation of the total amount and average weight and average length and abnormal physic of the fetus was done later. The given data by ANOVA one way test with $\alpha = 0.05$ and Chi-Square test with $\alpha = 0.05$, found that there were no significant differences between treatment groups and there were no teratogenic effects between treatment and control groups. So that it was concluded that mix ethanolic extract sambiloto herbs (*Andrographis paniculata* Nees) and rimpang temu kunci (*Boesenbergia pandurata* Roxb) in andrografolida : pinostrobin = 1:1 ratio with doses equivalent to 0.147 g/kg BW; 0.441 g/kg BW; 0.735 g/kg BW did not caused teratogenic effect macroscopically.

Keywords : *Andrographis paniculata* Nees, *Boesenbergia pandurata* Roxb, acute toxicity, teratogenic test, ethanolic extract 1:1 ratio (andrografolida: pinostrobin).