

## ABSTRACT

### **The effect of substituent 4-methyl in benzoylurea structure against CNS depressant activity in mice (*Mus musculus*)**

In this research 4-methylbenzoylurea and benzoylurea were tested as a central nervous system (CNS) depressant by the CNS potentiation test method in mice (*Mus musculus*). Those compounds had been synthesized by Siswandono.

Before the activity test, the purity of the compounds have been determined by melting point and Thin Layer Chromatography (TLC) apparatus. The result showed that compound are pure, then they can be used to activity test.

The method of potentiation test consists of two stages, the first is the peak activity period determination and the second is tiopental potentiation test. 4-methylbenzoylurea as a test compound and benzoylurea as a lead compound were given by intraperitoneal injection in mice with dose of 100 mg/kg.

By comparing the CNS depressant activity of those compounds, the result showed that activity of 4-methylbenzoylurea was higher than benzoylurea.

***Keyword : 4-Metylbenzoylurea, CNS depressant activity.***