

ABSTRACT***EFFECT OF KEPOK BANANA EXTRACT (*Musa Paradisiaca* L.) AS AN ANTIDEPRESSANT IN MICE (*Mus musculus*) WITH ACUTE RESTRAINT STRESS***

*Kepok banana peel (*Musa paradisiaca* L.) is widely used as a source of natural antioxidant because it contains many flavonoid compounds which are expected to act as an antidepressant. This study aimed to prove the effect of kepok banana peel extract (*Musa paradisiaca* L.) as an antidepressant in mice (*Mus musculus*) with Acute Restraint Stress (ARS).*

This study used laboratory experiments design. The male mice were acclimatized for 3 days. Then, twenty-four mice were divided equally into 4 groups. The first group was given a dose of 200 mg / kg BW of the extract, the second group was given a dose of 400 mg / kg BW of the extract, the third group was given a dose of 800 mg / kg BW of the extract, and the fourth group was given water as a control. Each group was given a dose orally for 14 days and then given ARS stress induction for 7 hours. After that, the mice were given treatment to examine their stress behavior using the Tail Suspension Test (TST) and Forced-Swim Test (FST). The data of TST and FST obtained then were collected and analyzed using Independent Sample T-Test.

The test results showed that there was a significant decrease in the duration of immobility at TST and FST compared to the control. The conclusion obtained in this study is that the administration of kepok banana peel extract can effectively work as an antidepressant. The suggestions for the future researchers are to conduct toxicity tests, to give extracts with different types of administrations, and to carry out phytochemical screening.

Keywords : banana peel extract, antidepressant, acute restraint stress, depression, forced-swim test, tail suspension test