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Effects Of Malaysia's Tualang honey on Anxiety Behaviours In Ovariectomised Rats exposed to Social Instability Stress.

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ABSTRACT

The present study aimed to test the effects of Tualang honey on anxiety behavior of eight-week-old female Sprague–Dawley rats. The animals were divided into six groups of 8 each: i) sham-operated control rats with no stress, ii) sham-operated control rats exposed to stress, iii) Ovariectomized that not exposed stress, iv) Ovariectomized exposed to stress v) Ovariectomized which exposed to stress and treated with 17 β -estradiol (20 μ g daily, sc) and finally the iv) Ovariectomized which exposed to stress and treated with Tualang honey (0.2g/kg body weight, orally). The Open field test. was used to measure and evaluate the anxiety behavior of the animals either exposed to social instability stress or not exposed to stress. Rats were subjected to social instability stress procedure consists of alternating periods of crowding and social isolation in unpredictable manner for 15 days. Following the stress procedure, rats were trained for three days 15 minutes training session. The animals were than placed in the square open field, (140 *1 40 cm) for 15 minutes duration test session. The mean number of crossed squares, rearing number, grooming time, and defecation score were tested and video recorded in this study.

The results were analysed using one-way ANOVA and p value of <0.05 was considered as significant. The data showed locomotor activity was decreased in the OVX group (P<0.01) compared to other rats in this study, where as using Tualang honey 0.2g/kg in ovx rats managed to reverse this decreased activity p<0.05. In conclusion, these findings suggest that chronic Tualang honey administration could be **the future medicine** in the treatment of depression symptoms in female menopausal patients.

Keywords: Social instability stress, ovariectomized rats, Tualang honey, Open field test, anxiety behavior