ABSTRACT

Study of Androgenic Effect of Ethanolic Extract of Root Purwoceng (Pimpinella alpina KDS) on the Reproduction Performance of Adult Female Rats (Rattus norvegicus)

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ABSTRACT

Purwoceng (Pimpinella alpina KDS) is one of medicinal herbals which had been used in male reproductive research because it has androgenic property. Studies of purwoceng on female reproductive performance is not clearly yet. This research was conducted to explore the effect of purwoceng on duration of each period and total time of estrus cycle. A total of 48 female rats strain of Sprague Dawley were divided into 4 groups based on their estrous period: proestrus, estrus, metestrus and diestrus. Each group consisted of 6 rats as a control and 6 rats as treated animals. Extract of purwoceng was given orally every day for 10 days. After 10 days, half of them were sacrificed and the rest of group were continued for vaginal smears examination until day 15. The results showed that purwoceng given at various periods during 2 cycles of estrous extend the time period of proestrus and estrus, and significantly different in estrous period when given during the period of estrus (P<0.05) compare to other period. Time period of metestrus and diestrus were decreased except period of metestrus which increased during administration of purwoceng on metestrus. The weight of uterine and ovarian was higher on rats receiving purwoceng during estrus period than the control (P<0.05). The conclusion of this research was that the administration of purwoceng was more effective when it was given at times of estrus period.

Keywords: purwoceng, estrous cycles, uterine and ovarian weights