

**Potensi Daun Kemangi (*Ocimum basilicum* L.)
untuk Meningkatkan Kapasitas Reproduksi Betina
pada Tikus Wistar (*Rattus norvegicus* Berkenhout, 1769)**

***Potential of Basil Leaves (*Ocimum basilicum* L.)
to Increase Reproductive Capacity of Females
in Wistar Mice (*Rattus norvegicus* Berkenhout, 1769)***

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Abstract: *Basil has been commonly consumed by the people of Indonesia as a complement to the dish. The people of South Sulawesi believe that basil has many benefits, one of which is to increase sexual desire. Library studies report that basil leaf extract can prolong the estrous phase in mice. Basil leaves also have a positive effect on the reproductive system of male rats. The use of basil leaf filtrate to explore its potential for reproductive capacity has never been done. Therefore, this study aims to study the effect of basil leaf filtrate on estrous phase length and structure of female reproductive organs in Wistar rats. A total of 10 mature reproductive individuals were divided into 3 groups: Treatment I = flexed basil leaf filtrate 4.1 g / kg bw; treatment II = strained basil leaf filtrate 12.3 g / kg bw, and control = fed aquades (placebo). It is carried out for 15 consecutive days after the animal is fasted. The phases in the estrous cycle are observed then compared before and during the treatment. Other parameters observed were body weight (BB), body temperature (SB), gonadosomatic index (IGS), and uterine index (IU). Data were analyzed statistically based on the Kruskal-Wallis test followed by the Mann-Whitney U-test ($\alpha = 0.05$). The results showed that the estrus and metestrus phase was prolonged in the treatment group compared to the control but not significant ($p > 0.05$). Meanwhile, BB, SB, IGS, and IU in all groups experienced an increase, although not significantly ($p > 0.05$). It is thought that the phytosterol content in basil leaves has an estrogenic effect that plays a role in the regulation of the female reproductive system, growth and maintenance of secondary sex characteristics, as well as the appearance of sexual drives. Based on these findings, research needs to be continued in order to obtain more complete data, including phytochemical tests, pharmacological effects, hormone analysis, and toxicity for safety information on consuming basil leaves as functional food.*

Keywords: *Basil, *Ocimum basilicum*, female reproductive capacity, estrogenic effect, estrous cycle, phytosterols*

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