

**THE EFFECTS OF *Lampes (Ocimum sanctum Linn)* LEAF EXTRACT ON MICE (*Mus musculus*) SPERMATOZOA MOTILITY AND VIABILITY**

Mirna Triastuty

**ABSTRACT**

*Lampes*, also known as Holy basil (*Ocimum sanctum Linn*) has many medicinal properties, including antifertility effect. This research was aimed to determine the effects of *Ocimum sanctum L.* leaf extract on spermatozoa motility and viability of mice (*Mus musculus*). Twenty four male mice were divided into four groups. Mice from control group were only given aquadest, mice from treatment groups were given 125, 250, and 500 mg/KgBW/day of *Ocimum sanctum L.* leaf extract for 10 days orally by inserting the gastric tube directly into the gastric of mice. At the end of the treatments, mice were euthanized and the testes were taken. After semen collected, the observations of spermatozoa motility and viability were done. Data was analyzed by ANOVA and continued with Tukey test. Research result showed there were significant differences ( $p < 0.05$ ) among the treatment groups. The highest reduction of spermatozoa motility and viability was reached by the administration of 500 mg/kgBW/day of *Ocimum sanctum L.* leaf extract. In conclusion, *Ocimum sanctum L.* leaf extract decreased spermatozoa motility and viability of mice (*Mus musculus*).

**Keywords :** *Mus musculus*, *Ocimum sanctum L.*, spermatozoa motility, viability