

**THE EFFECT OF OKRA FRUIT (*Abelmoschus esculentus*) EXTRACT ON SPERMATID AND SERTOLI CELLS NUMBER ON MICE (*Mus musculus*) TESTICLE**

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**ABSTRACT**

This research was aimed to determine the effect of *Abelmoschus esculentus* (okra) fruit extract towards spermatid and Sertoli cells number on *Mus musculus* testicle. This study used 20 male mice with an average weight of 25-30 grams. These animals were divided into four groups randomly (P-, P1, P2 and P3). P- (control) was treated with sterile aquadest without adding *Abelmoschus esculentus* fruit extract. P1, P2, and P3 administered orally 200, 400, 800 mg/kg BW/day of okra extract. On the 52<sup>nd</sup> day, the mice were euthanized by cervical dislocation. The spermatid and Sertoli cells could be observed by utilizing 400x microscope magnification. The result was analyzed with *Analysis of Variance* (ANOVA) and followed by *Duncan's Multiple Range Test* (DMRT). The research result demonstrated that the *Abelmoschus esculentus* extract addition could decrease the number of spermatid significantly ( $p \leq 0,05$ ) (P1  $86.260 \pm 0.9290$ , P2  $74.200 \pm 1.3285$ , P3  $50.460 \pm 2.43$ ) and decrease the number of Sertoli cells significantly (P1  $8.800 \pm 0.4690$ , P2  $7.040 \pm 0.2191$ , P3  $8.655 \pm 0.3114$ ). It could be concluded that each dose of the treatment of okra fruit extract could decrease the number of spermatid and Sertoli cells.

**Keywords:** *Abelmoschus esculentus*, *Mus Musculus*, Testicle, Spermatid cells, Sertoli cells.