

**THE ROLES OF *INSULINE LIKE GROWTH FACTOR (IGF) COMPLEX*
SEMINAL PLASMA OF PERANAKAN ETAWAH GOATS ON THE
QUALITY INCREASED OF *SWIM UP* SPERMATOZOA**

Riyah Dewi Rokhmani

ABSTRACT

The aims of this research was to know the effect of IGF Complex of seminal plasma of Peranakan Etawah goats on the motility, viability and the integrity of sperm membrane.

The research was done at In vitro Fertilization Laboratory Faculty of Veterinary Medicine, Airlangga University and Biomolecular Laboratory Faculty of Mathematic and Sciences Brawijaya University. The samples of this research were fresh semen of the Peranakan Etawah 2 years old, IGF Complex isolat, BO, HOS and eosin negrosin dissolved. Goat's semen examined by macroscopic and microscopic technique. This research using 3 treatments consisting of BO dissolved as control group (P0), IGF Complex group (P1), and BO dissolved + IGF Complex group (P2). Then semen after treatment motility, viability, and membrane integrity were examined at 30, 45, and 60 second. The data was analyzed by Two Way ANAVA and followed by Duncan test. The result shown that motility, viability, and membrane integrity of spermatozoa significant difference between control group (P0) and IGF Complex protein (P1) addition.

Key words : IGF-1Complex, IGF-1, spermatozoa, seminal plasma,