

ABSTRACT

TRI YUWONO H4A 003 017. The effect of Using Semen Diluter to Egg Fertility and Hatchability on Artificial Insemination to Produce Bekisar chicken (*Crossbreed*) Mentor (**B. Sutiyono and Yon Supri Ondho**)

The research was carried out to investigate effect of semen diluter to fertility and extended of sperm Green Jungle fowl (*Gallus varius*), and effect of semen diluters to fertility and hatchability of Arab Chicken on artificial insemination to produce chicken Bekisar. The research was held at bekisar breeder "Mitra Sejati" in limbangan Village, Kendal District in November 2004 to Maret 2005

Eighteen laying hens of Arab chicken (*Silver braekel silver*) from 30 to 50 weeks of age were random sampling assigned to one of three groups examination. Every group contain six replication. The eggs from each group were collected and hatched to estimate fertility and hatchability. The semen of Green Jungle fowl (*Galus varius*) 4 roosters, were collected and evaluated to decide semens quality. Dose of artificial insemination could be determined and examined by diluter treatments, the diluter treatments were diluter semen T1 NaCl 0,9%, T2 dextroce 5% and T3 Aquabides-yolk 20%. Experimental was based on two stage. First stage was the semen of Green Jungle Fowl diluen by diluter treatments to measure spermatozoa motility and extended. Second stage was measurement of egg fertility and hatchability of egg were transform to arcsin. Experiment design was randomized completely design using procedure of gazperzt (1991). All data were analyzed by varians, if there were significant different, followed by Duncan's Multiple Range Test.

The result was Dextrose has significant effect to motility and extended of spermatozoa and fertility of egg better than Aquabides-Yolk than NaCl but no significant effect to hatchability of egg.

Keyword : Green Jungle Fowl, Spermatozoa, Diluter, Insemination, Crossing