

**PENGARUH PENYUNTIKAN *PREGNANT MARE SERUM GONADOTROPHIN* DAN
HUMAN CHORIONIC GONADOTROPHIN TERHADAP KUALITAS DAN
KUANTITAS SPERMA AYAM KAMPUNG**

Ronald Leopold Aipipidely
98/118770/PT/03582

INTISARI

Penelitian ini bertujuan untuk mengetahui pengaruh penyuntikan *Pregnant Mare Serum Gonadotrophin* (PMSG) dan *Human Chorionic Gonadotrophin* (hCG) terhadap kualitas dan kuantitas sperma ayam kampung. Penelitian ini menggunakan 20 ekor pejantan ayam kampung umur 20-22 minggu dibagi menjadi 4 kelompok perlakuan, yaitu (A) kontrol, (B) PMSG, (C) hCG dan (D) PMSG+hCG. Penyuntikan hormon dilakukan sebanyak tiga kali secara intramuskuler pada otot dada setiap dua hari sekali sebanyak tiga kali dengan dosis 25 IU/kg berat badan setara dengan 0,1 ml/kg berat badan. Setelah 21 hari penyuntikan hormon pertama dilakukan penampungan sperma dua kali dalam seminggu pada sore hari dengan metode *Quinn* dan *Burrows*. Variabel yang diamati meliputi volume sperma(ml), derajat keasaman(pH), konsentrasi *spermatozoa* (10⁹/ml), motilitas *spermatozoa*(%) dan abnormalitas *spermatozoa*(%). Data kemudian dianalisis dengan menggunakan Rancangan Acak Lengkap Pola Searah dan apabila terjadi perbedaan, maka dilanjutkan dengan uji DMRT (*Duncan's New Multiple Range Test*). Hasil penelitian menunjukkan bahwa pengaruh penyuntikan PMSG dan hCG secara tunggal berpengaruh secara tidak nyata terhadap kualitas dan kuantitas sperma ayam kampung, tetapi penyuntikan dengan kombinasi (PMSG+hCG) berpengaruh sangat nyata ($P < 0,01$) terhadap peningkatan kualitas dan kuantitas sperma yang meliputi volume sperma (ml), derajat keasaman (pH), konsentrasi *spermatozoa* (10⁹/ml), motilitas *spermatozoa*(%) dan terjadi penurunan abnormalitas *spermatozoa*(%) ayam kampung. Dapat disimpulkan bahwa untuk meningkatkan kualitas dan kuantitas sperma ayam kampung sebaiknya disuntik dengan kombinasi hormon (PMSG+hCG).

(Kata kunci: PMSG, hCG, *Spermatozoa*, Sperma, Ayam kampung jantan)

THE EFFECT OF PREGNANT MARE SERUM GONADOTROPHIN AND HUMAN CHORIONIC GONADOTROPHIN INJECTION ON THE QUALITY AND QUANTITY OF NATIVE COCKEREL SEMEN

Ronald Leopold Aipipidely
98/118770/PT/03582

ABSTRACT

The experiment was conducted to determine the effect of Pregnant Mare Serum Gonadotrophin (PMSG) and Human Chorionic Gonadotrophin (hCG) injection on the quality and quantity of native cockerel semen. Twenty native cockerels were used in this research and divided into four groups treatment, namely (A) control,(B) PMSG,(C) hCG and (D) PMSG+hCG. Hormones were injected three times by intramuscular every two days with dose 25 IU/kg weight equivalent with 0,1 ml/kg weight. After 21 days first hormone injection, semen were collected twice a week in the afternoon by *Quinn* and *Burrows* methods. The observed variabls were volume of semen (ml), acidity (pH), concentration (10⁹/ml), motility (%) and abnormality (%). The data were analyzed by analysis of variance on Completely Randomized Design. If there were any differences would be continued by DMRT (*Duncan's New Multiple Range Test*). The results showed that the injection of PMSG and hCG were not significantly affect the quality and quantity of native cockerel semen, but injection with (PMSG+hCG) combination were very significant ($P < 0,01$) on increasing quality and quantity semen, it was included volume of semen (ml), acidity (pH), concentration (10⁹/ml), motility (%) and decreasing of abnormality (%) native cockerel. It could was concluded that to increase quality and quantity of native cockerel semen could be injected by hormone combination (PMSG+hCG).

(Key words: PMSG, hCG, Spermatozoa, Semen, Native cockerel)