

PENGARUH ARAS KUNING TELUR BURUNG PUYUH PADA PENGECER NaCl FISILOGIS TERHADAP MOTILITAS DAN VIABILITAS SPERMATOZOA ITIK TURI PADA PENYIMPANAN SUHU 5°C

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INTISARI

Penelitian ini bertujuan untuk mengetahui pengaruh aras kuning telur burung puyuh 5, 10, dan 15% dalam bahan pengencer NaCl fisiologis terhadap motilitas dan viabilitas *spermatozoa* itik Turi setelah penyimpanan pada suhu 5°C. Sperma dari 5 ekor itik Turi yang berumur 1 tahun ditampung satu minggu satukali pada pagi hari dan dicampur menjadi satu kemudian dibagi menjadi 3 perlakuan pengenceran: P5= NaCl Fisiologis 95% + 5% kuning telur burung puyuh; P10= NaCl Fisiologis 90% + 10% kuning telur burung puyuh; P15= NaCl Fisiologis 85% + 15% kuning telur burung puyuh. Data diambil selama 3 jam penyimpanan yaitu jam ke-0, ke-1, ke-2, dan ke-3 dan sebanyak 5 kali pengulangan. Data hasil penelitian dianalisis dengan *Analysis of Variance (Annova)* – Rancangan Acak Lengkap Pola Faktorial dan dilanjutkan dengan uji Duncan's Multiple Range Test. Hasil penelitian ini menunjukkan adanya interaksi yang signifikan ($P < 0,05$) antara level pengencer dan lama penyimpanan terhadap motilitas dan viabilitas *spermatozoa*. Rata-rata motilitas *spermatozoa* selama 3 jam penyimpanan pada perlakuan P5, P10, dan P15 berturut-turut adalah $64,70 \pm 13,12$, $67,75 \pm 8,95$, dan $72,25 \pm 6,78$. Rata-rata viabilitas *spermatozoa* selama 3 jam penyimpanan pada perlakuan P5, P10, dan P15 berturut-turut adalah $61,09 \pm 12,27$, $63,95 \pm 11,04$, dan $72,54 \pm 3,79$. Kesimpulan dari penelitian ini adalah Waktu penyimpanan dan penambahan level aras kuning telur burung puyuh memberikan pengaruh nyata terhadap perbedaan motilitas dan viabilitas *spermatozoa* itik Turi setelah penyimpanan pada suhu 5°C. Interaksi antara waktu penyimpanan dan penambahan level pengencer juga berpengaruh nyata terhadap motilitas dan viabilitas. Pada Level Pengenceran 15% dan waktu pengamatan 0 jam setelah pengenceran menghasilkan motilitas dan viabilitas yang paling baik.

(Kata Kunci: Itik, *Spermatozoa*, NaCl fisiologis, Kuning Telur Burung Puyuh, Motilitas, Viabilitas)

THE EFFECT OF VARIOUS LEVEL OF QUAIL EGG YOLK IN PHYSIOLOGICAL NaCl ON THE MOTILITY AND VIABILITY OF *TURI* DUCK SPERMATOZOA STORED IN 5° C TEMPERATURE

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ABSTRACT

The aim of this research was to determine the effect of various levels of quail egg yolk, which were 5%, 10% and 15% diluted in physiological NaCl on the Turi duck spermatozoa motility and viability after stored at 5°C. The semen from five Turi ducks consist at ten-month old were collected once a week in the morning and divided into three treatment were P5 = 95% Physiological NaCl + 5% quail egg yolk; P10 = 90% Physiological NaCl + 10% quail egg yolk; P15 = 85% Physiological NaCl + 15% quail egg yolk. The data were collected in four storage periods which were 0, 1, 2, and 3 and repeated for five times. Data were analysed by Analysis of Variance (Annova) Total Random Factorial Design and followed by Duncan's Multiple Range Test. The results showed that the significant interaction ($P < 0,05$) between the dilution levels and the storage periods to the spermatozoa motility and viability. The average of *spermatozoa* motility during the four storage periods in P5, P10, and P15 were $64,70 \pm 13,12$, $67,75 \pm 8,95$ and $72,25 \pm 6,78$, respectively. The average of *spermatozoa* viability during the four storage periods in P5, P10 and P15 were $61,09 \pm 12,27$, $63,95 \pm 11,04$, dan $72,54 \pm 3,79$, respectively. Based on the results of this research, it can be concluded that the storage periods and the additional levels of quail egg yolk were significantly influenced the spermatozoa motility and viability of Turi duck after stored at 5° C. The interaction between the storage periods and the additional levels of dilute were significant on spermatozoa motility and viability. Level 15% quail egg yolk and 0 hour after dilutation are the bestest storage and dilatation for spermatozoa motility and viability of Turi duck.

(Key words : duck, *Spermatozoa* ,Physiological NaCl, quail egg yolk, motility and viability)