

PENGARUH PENAMBAHAN LEVEL KUNING TELUR PADA BAHAN PENGECER NaCl FISIOLIS TERHADAP VIABILITAS DAN MOTILITAS SPERMATOZOA ITIK TURI YANG DISIMPAN PADA SUHU 5°C

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INTISARI

Penelitian ini bertujuan untuk mengetahui pengaruh penambahan bahan pengencer terhadap kualitas *spermatozoa* itik Turi. Bahan pengencer yang digunakan NaCl fisiologis dengan penambahan kuning telur ayam kampung 8%, 10%, dan 12%. Parameter yang diamati dalam penelitian ini adalah kualitas *spermatozoa* itik, seperti viabilitas (%) dan motilitas (%). Data dianalisis dengan *Analysis of Variance* (ANOVA) rancangan acak lengkap pola faktorial 3x4. Hasil penelitian menunjukkan bahwa kualitas dan kuantitas itik Turi segar adalah volume sperma $0,48 \pm 0,08$ ml, berwarna putih susu, cenderung kental, pH $7,26 \pm 0,27$, konsentrasi $2,47 \pm 0,32$ milyar/ml, motilitas $7,26 \pm 10,16$ %, viabilitas $84,60 \pm 2,00$ %, dan abnormalitas $42,82 \pm 8,13$ %. Hasil analisis statistik menunjukkan bahwa level kuning telur 8, 10, dan 12% berpengaruh nyata ($p \leq 0,05$) terhadap motilitas *spermatozoa* yaitu $67,80 \pm 12,31$ %, $67,85 \pm 12,38$ %, dan $60,60 \pm 13,04$ %, lama penyimpanan 0, 1, 2, dan 3 jam berpengaruh nyata ($P \leq 0,05$) yaitu $79,33 \pm 6,22$ %, $69,20 \pm 8,54$ %, $61,33 \pm 8,11$ %, dan $51,80 \pm 8,22$ %, tetapi tidak berpengaruh nyata terhadap viabilitas *spermatozoa* berupa level kuning telur 8, 10, dan 12% yaitu $63,65 \pm 10,5$ %, $63,30 \pm 9,25$ %, dan $63,80 \pm 8,58$ %, lama penyimpanan 0,1, 2, dan 3 jam sebesar $65,60 \pm 9,45$ %, $66,06 \pm 11,67$ %, $64,40 \pm 8,27$ % dan $64,93 \pm 9,77$ %. Interaksi antara level kuning telur ayam kampung dan lama penyimpanan menunjukkan hasil yang tidak berbeda nyata terhadap viabilitas dan motilitas *spermatozoa*. Dari penelitian ini dapat disimpulkan level kuning telur 10% mempunyai motilitas paling tinggi yaitu $55,40 \pm 11,10$ % dan rata-rata untuk viabilitas tertinggi didapat pada level kuning telur 8% yaitu sebesar $70,20 \pm 11,30$ % sampai penyimpanan 3 jam.

(Kata kunci : Itik Turi, sperma, kuning telur ayam kampung, dan NaCl fisiologis).

**THE EFFECTS OF ADDITIONAL EGG YOLK LEVEL IN
PHYSIOLOGICAL NaCl DILUENT ON VIABILITY AND MOTILITY TURI'S
DRAKES SPERMATOZOA STORED AT 5°C**

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ABSTRACT

The aim of this research was to determine the effect of diluent on the sperm quality of Turi drakes. The diluent was used physiological NaCl with the addition of 8%, 10%, and 12% of chicken egg yolk. The parameters in this study were observed the spermatozoa quality of Turi drakes, such as viability (%) and motility (%). Data were analyzed of Variance by (ANOVA) completely randomized factorial design 3x4. The results showed that the quality and quantity of fresh sperm on Turi drakes were in normal and good condition. The volume of sperm $0,48 \pm 0,08$ ml, white milk, condensed, pH $7,26 \pm 0,27$, concentration $2,47 \pm 0,32$ milyar/ml, motility $7,26 \pm 10,16\%$, viability $84,60 \pm 2,00\%$, and abnormality $42,82 \pm 8,13\%$. The statistics analyzed showed that yolk level 8, 10, and 12% had significant difference ($P \leq 0,05$) on spermatozoa motility $67,80 \pm 12,31\%$, $67,85 \pm 12,38\%$, and $60,60 \pm 13,04\%$, for stored 0, 1, 2, and 3 hours respectively, and had significant ($P \leq 0,05$) $79,33 \pm 6,22\%$, $69,20 \pm 8,54\%$, $61,33 \pm 8,11\%$, and $51,80 \pm 8,22\%$, not significant that level of yolk 8, 10, and 12% on spermatozoa viability $63,65 \pm 10,5\%$, $63,30 \pm 9,25\%$, and $63,80 \pm 8,58\%$, for stored 0, 1, 2, and 3 hours respectively, and had no significant $65,60 \pm 9,45\%$, $66,06 \pm 11,67\%$, $64,40 \pm 8,27\%$ and $64,93 \pm 9,77\%$. There had no significant differences interaction between the level of yolk and storage time. It can be concluded, the level of 10% egg yolk showed the highest spermatozoa motility is $55.40 \pm 11.10\%$ and the average for the highest spermatozoa viability was obtained on the 8% egg yolk in the amount of $70.20 \pm 11.30\%$ to 3 storage.

(Keywords: Turi drakes, sperm, chicken egg yolk, and physiological NaCl)