

**PENGARUH PENAMBAHAN MADU DENGAN
KONSENTRASI BERBEDA DALAM NaCl
FISIOLOGIS TERHADAP MOTILITAS
DAN VIABILITAS SPERMATOZOA
AYAM KAMPUNG**

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INTISARI

Penelitian ini bertujuan untuk mengetahui pengaruh penambahan madu dengan konsentrasi berbeda dalam larutan garam fisiologis (NaCl Fisiologis) terhadap motilitas dan viabilitas spermatozoa ayam kampung. Sperma ayam dikoleksi dari 4 ekor ayam jantan, 2 kali dalam seminggu selama 3 minggu. Pemeriksaan sperma meliputi kualitas makroskopik dan mikroskopik. Madu dilarutkan dalam pengencer NaCl Fisiologis dengan komposisi, 0% (P0), 0,2% (P1), 0,4% (P2), 0,6% (P3), 0,8% (P4) dan disimpan dalam refrigrator dengan suhu 5°C selama 48 jam. Data yang diperoleh dianalisa menggunakan annova pola faktorial 5 x 3. Hasil penelitian menunjukkan bahwa penambahan madu dengan konsentrasi yang berbeda dalam NaCl fisiologis secara signifikan mempengaruhi motilitas *spermatozoa* ayam kampung. Motilitas *spermatozoa* ayam kampung pada P0, P1, P2, P3 da P4 adalah $71,50 \pm 10,31\%$; $43,16 \pm 36,29\%$; $27,63 \pm 36,01\%$; $9,83 \pm 15,23\%$ dan $6,16 \pm 9,60\%$. Terdapat perbedaan yang nyata pada viabilitas dari masing-masing perlakuan. Viabilitas tertinggi dijumpai pada perlakuan P0 yaitu sebesar $68,83 \pm 18,03\%$, sedangkan viabilitas terendah ada pada perlakuan P4 yaitu sebesar $3,83 \pm 6,01\%$. Terdapat interaksi antara penambahan madu dalam NaCl fisiologis sebagai pengencer terhadap motilitas dan viabilitas spermatozoa ayam kampung. Dapat disimpulkan bahwa penambahan madu 0,4%; 0,6% dan 0,8% dalam NaCl Fisiologis sebagai bahan pengencer belum dapat mempertahankan kualitas *spermatozoa* ayam kampung. Bahan pengencer NaCl Fisiologis tanpa penambahan madu dan penambahan 0,2% madu menghasilkan kualitas *spermatozoa* terbaik.

(Kata kunci: ayam, sperma, garam fisiologis dan madu)

THE EFFECT OF HONEY ADDITION WITH DIFFERENT CONCENTRATIONS INTO THE PHYSIOLOGICAL SALINE ON MOTILITY AND VIABILITY OF NATIVE CHICKEN SPERMATOZOA

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ABSTRACT

The study was carried out to determine the effect of honey addition with different concentrations into the physiological saline as dilution on motility and viability of spermatozoa. Sperm were collected from 4 native chicken, 2 times a week for 3 week. Sperm was observed for macroscopic and microscopic quality. As a dilution honey was dissolved in NaCl physiology with honey composition, 0% (P0), 0,2% (P1), 0,4% (P2), 0,6% (P3), 0,8% (P4) and stored in refrigerator 5°C for 48 hours. The data were analyzed using annova factorial 5 X 3. The result showed that sperm with addition of different honey concentration in psysiological saline and stored at 5°C for 48 hours, showed significantly affect on sperm motility. Motility of each treatment were 71,50 ± 10,31% (P0); 43,16 ± 36,29% (P1); 27,63 ± 36,01% (P2); 9,83 ± 15,23% (P3) and 6,16 ± 9,60% (P4). Further more, there were significant different on sperm viability of each treatment. The highest viability was (68,83 ± 18,03%) found in (P0), and the lowest viability was (3,83 ± 6,01%) found in (P4). The interaction between the addition of honey into physiological saline as diluent and stored 5°C during 48 hours showed significant different on motility and viability of spermatozoa. Conclutions, the addition of honey (0,4%, 0,6% and 0,8%) into NaCl fisiologis as not able to maintain sperm quality. NaCl physoology dillution, without or with 0,2% honey results better sperm quality.

(Keywords: chicken, sperm, physiological saline and honey).