

**PENGARUH BAHAN PENDINGIN STRAW BEKU MENGGUNAKAN ES
DAN GARAM KROSOK TERHADAP MOTILITAS SPERMATOZOA
SAPI PERANAKAN ONGOLE (PO)**

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INTISARI*)

Tujuan dari penelitian ini adalah untuk mengetahui pengaruh rasio bahan pendingin (es dan garam krosok) dan lama penyimpanan terhadap motilitas semen beku sapi Peranakan Ongole (PO) selama *thawing*. Materi yang digunakan dalam penelitian ini adalah 72 *ministraw* semen beku sapi Peranakan Ongole. Penelitian ini menggunakan Rancangan Acak Lengkap (RAL) Pola searah dan diulang sebanyak 3 kali ulangan. Faktor perlakuan terdiri dari 4 taraf formulasi campuran es dan garam krosok, yaitu sebanyak 250 g es, P₀ (0% garam krosok), P₁ (15% garam krosok), P₂ (20% garam krosok) dan P₃ (25% garam krosok). Variabel yang diamati yaitu suhu dan motilitas spermatozoa. Data yang diperoleh dianalisis dengan menggunakan *analysis of varians* (ANOVA), yang selanjutnya dilakukan uji beda DMRT (*Duncan New Multiple Range Test*). Hasil penelitian menunjukkan rata-rata motilitas spermatozoa dari perlakuan P₀, P₁, P₂ dan P₃, masing-masing adalah 46,66%, 50,83%, 51,66% dan 54,16%. Berdasarkan analisis data menunjukkan bahwa terdapat pengaruh yang nyata antara garam krosok terhadap motilitas semen beku selama 9 jam. Disimpulkan bahwa rasio garam krosok 25% memberikan hasil motilitas yang tertinggi yaitu 54,16% selama 6 jam penyimpanan.

Kata kunci: es, garam krosok, semen beku, motilitas, sapi Peranakan Ongole (PO)

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**THE EFFECT OF COOLANT FROZEN STRAW USING ICE AND
“KROSOK” SALT ON MOTILITY OF ONGOLE CROSSBREED
CATTLE SPERMATOZOA**

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ABSTRACT*)

The purpose of this study is to know the ratio of coolant (ice and “krosok” salt) and long storage frozen semen of ongole crossbreed during thawing. The material used in this study was 72 crossbreed frozen straws. This study used a Completely Randomize Design (CRD) with unidirectional and repeated 3 times (straw) pattern. The treatment factors consisted 4 levels formulation a mixture ice and “krosok” salt, namely 250 g of ice, P₀ (0% “krosok” salt), P₁ (15% “krosok” salt), P₂ (20% “krosok” salt) dan P₃ (25% “krosok” salt). The variables observed were storage temperature and motility of spermatozoa. The data obtained were analyzed using Analysis of Variance (ANOVA), if there were differences, further testing was carried out, namely the Duncan New Multiple Range Test (DMRT) test. The results of the study show that mean motility of spermatozoa in treatment P₀, P₁, P₂ and P₃, each is 46,66%, 50,83%, 51,66% dan 54,16%. Based on data analyze show that exist a significant effect between ratio salt “krosok” on motility of frozen straw in 9 hour storage, conclusion of this research was the ratio “krosok” salt 25% offers the higher motility was 54,16% during 6 hours storage.

Keywords: ice, “krosok” salt, frozen straw, motility, ongole crossbreed

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