

## ABSTRAK

### **PENGARUH PENGGUNAAN MADU SUMBAWA DAN MADU OLAHAN BERBAGAI KONSENTRASI TERHADAP KUALITAS SPERMATOZOA EPIDIDIMIS DOMBA SETELAH PENYIMPANAN DALAM REFRIGERATOR**

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Inseminasi Buatan merupakan usaha dalam melestarikan sumber genetik. Informasi mengenai penggunaan madu dalam pengencer spermatozoa masih sedikit. Penelitian dilakukan untuk mengetahui pengaruh madu sumbawa dan madu kemasan berbagai konsentrasi terhadap kualitas spermatozoa epididimis domba setelah penyimpanan dalam *refrigerator*.

Materi utama yaitu 5 buah testis domba. Koleksi spermatozoa melalui *cauda epididimis* yang ditambahkan PBS 5 ml dan dilakukan pencincangan. Sampel dipisahkan menjadi 7 perlakuan yaitu madu sumbawa 1%, madu sumbawa 2%, madu sumbawa 3%, madu olahan 1%, madu olahan 2%, madu olahan 3%, dan kontrol menggunakan glukosa. Penilaian dilakukan secara mikroskopis meliputi motilitas dan viabilitas. Data dianalisis secara statistik menggunakan *One Way Anova* pada program SPSS statistics 16.0.

Hasil penelitian menunjukkan tidak adanya perbedaan nyata/signifikan ( $P > 0,05$ ) pada motilitas dan viabilitas spermatozoa pada perlakuan madu sumbawa 1%, madu sumbawa 2%, madu sumbawa 3%, madu olahan 1%, madu olahan 2%, madu olahan 3%, dan kontrol. Kesimpulan penelitian ini adalah madu dalam pengencer tidak berpengaruh signifikan pada kualitas spermatozoa.

Kata kunci: Domba, Inseminasi Buatan, kualitas spermatozoa epididimis, madu, pengencer spermatozoa

## **ABSTRACT**

### **THE EFFECT OF SUMBAWA AND PROCESSED HONEY WITH VARIOUS CONCENTRATION ON THE QUALITY OF RAM'S SPERM AFTER PRESERVATION**

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Artificial Insemination used to conserve genetic resources. Information regarding the use of honey in the sperm diluent is still less in number. This research used to determine the effect of sumbawa honey and processed honey with various concentrations on the quality of sperm after preservation.

The main materials used were five ram testicles . Sperm collection took from cauda epididymis which is added with 5 ml PBS and minced. The sample were separated into 7 groups of treatment: 1% Sumbawa honey, 2% Sumbawa honey, 3% Sumbawa honey, 1% processed honey, 2% processed honey, 3% processed honey, and control using glucose. The assessment was carried out microscopically including motility and viability. Data were analyzed statistically using One Way Anova on the SPSS statistics 16.0 program.

The results showed no significant difference ( $P > 0.05$ ) in the motility and viability of sperm of 1% Sumbawa honey, 2% Sumbawa honey, 3% Sumbawa honey, 1% processed honey, 2% processed honey, 3% processed honey, and control. The conclusion of this study is that honey in sperm diluent has no effect on the quality of sperm.

**Keywords:** Sheep, Artificial Insemination (IB), sperm quality, honey, sperm diluent