

## ABSTRACT

DIA LAILA GAFUR, Quality of Frozen Semen of Bali Cattle at the Department of Agriculture of Gorontalo province Post Thawing with different distances and times. Supervised by MOHAMAD ERVANDI as Chairman and TERRI REPI as members.

This research aims to determine the quality of frozen semen of post thawing bali cattle at different distances and times with the observed parameters of motility, viability and abnormalities of spermatozoa. The research method used is experimental laboratory. This research used frozen semen of Bali cattle at the Gorontalo Provincial Agriculture Office whose distribution came from BBIB Singosari. The research design used a factorial completely randomized. The data obtained were analyzed using two-way ANOVA. The highest mean percentage of spermatozoa motility was found at a distance of 10 cm for 15 seconds, the highest mean percentage of spermatozoa viability was found at a distance of 15 cm for 20 seconds, the highest mean percentage of spermatozoa abnormalities was found at a distance of 20 cm for 20 seconds post thawing. The conclusion indicates the distance and time of transfer of raw raw materials from the surface of liquid nitrogen did not affect the quality of frozen semen (motility, viability and spermatozoa abnormalities) of post thawing bali cattle but were suitable for AI in the field.

**Keywords: Frozen Semen, Distance and Time Of Straw Removal, PostThawing, Bali Cattle, Artificial Insemination.**

## ABSTRAK

DIA LAILA GAFUR, Kualitas Semen Beku Sapi Bali Di Dinas Pertanian Provinsi Gorontalo *Post Thawing* Dengan Jarak Dan Waktu Yang Berbeda. Di bimbing oleh MOHAMAD ERVANDI sebagai Ketua dan TERRI REPI sebagai anggota.

Penelitian ini bertujuan untuk mengetahui kualitas semen beku sapi bali *post thawing* dengan jarak dan waktu yang berbeda dengan parameter yang diamati motilitas, viabilitas dan abnormalitas spermatozoa. Metode penelitian yang digunakan yaitu eksperimental laboratory. Penelitian ini menggunakan semen beku sapi bali di Dinas Pertanian Provinsi Gorontalo yang distribusinya berasal dari BBIB Singosari. Rancangan penelitian menggunakan Rancangan Acak Lengkap Faktorial. Data yang diperoleh dianalisis menggunakan ANOVA dua arah. Hasil rerata persentase motilitas spermatozoa tertinggi terdapat pada jarak 10 cm selama 15 detik, rerata persentase viabilitas spermatozoa tertinggi terdapat pada jarak 15 cm selama 20 detik, rerata persentase abnormalitas spermatozoa tertinggi terdapat pada jarak 20 cm selama 20 detik *post thawing*. Kesimpulan dari hasil penelitian jarak dan waktu pemindahan straw dari permukaan nitrogen cair tidak mempengaruhi kualitas semen beku (motilitas, viabilitas dan abnormalitas spermatozoa) sapi bali *post thawing* namun layak digunakan untuk IB dilapangan.

**Kata Kunci: Semen Beku, Jarak Dan Waktu Pengangkatan Straw, PostThawing, Sapi Bali, Inseminasi Buatan.**