SEMEN CHARACTERISTICS AND FREEZING CAPABILITY OF MADURA'S CATTLE

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Introduction

Madur cattle is a Bali-Ongole-Java native composite breed, develop from Bali (*Bibos banteng*), Java-native (*Bos javanicus*) and Ongole (*Bos indicus*). To improve the quality of Madura cattle, Lembang artificial insemination center produces frozen semen of this breed. This research aimed to study the characteristics of Madura's bull fresh semen and freezing capability to predict the amount of the straw produce of each ejaculate.

Methodology

Five Madura bull belong to National Lembang AI center used for this research, in total 185 ejaculates during 2015, age 5-7 years, body weight 500-600 kg belong to Lembang Artificial Insemination Center was used as a sperm source.



Results

Table 1 The quality of Madura bull semen*

| Semen Characteristics | Bull Number | | | | | |
|--|-------------------|-------------------|-------------------|-----------------|-----------------|--|
| | 161001 | 161002 | 161203 | 161204 | 161205 | |
| Volume (ml) | 5.16 ± 1.04 | 5.34 ± 1.34 | 4.42 ± 1.00 | 5.98 ± 1.39 | 5.72 ± 1.17 | |
| Sperm Motility (%) | 70 ± 0.01 | 70 ± 0.01 | 72 ± 0.03 | 70 ± 0.00 | 70 ± 0.00 | |
| Sperm Concentration (X 10 ⁶) | 1.071.75 ± 267.81 | 1.160.53 ± 280.48 | 1.305.52 ± 228.77 | 919.39 ± 210.79 | 746.67 ± 187.74 | |

*185 ejaculate during 2015

Table 2 Recovery rate and Number of straws yield per ejaculate of Madura bull semen

| Semen atribut | Bull number | | | | | |
|------------------------------|----------------|----------------|----------------|----------------|----------------|--|
| | 161001 | 161002 | 161203 | 161204 | 161205 | |
| Raw Semen Motility (%) | 70 ± 0.01 | 70 ± 0.01 | 72 ± 0.03 | 70 ± 0.00 | 70 ± 0.00 | |
| No. of Straw per ejaculation | 209.40 ± 64.89 | 237.97 ± 93.58 | 218.09 ± 66.87 | 209.00 ± 61.54 | 163.33 ± 52.44 | |
| Post Thawing Motility (%) | 52.41 ± 16.27 | 59.50 ± 23.37 | 54.43 ± 16.73 | 52.32 ± 15.41 | 40.78 ± 12.96 | |
| Recovery rate (%) | 74.87 | 85.00 | 75.59 | 74.74 | 58.26 | |

In conclusion semen characters of Madura's bull, number straw produced from single ejaculation are good and had a high recovery rate.







