IDENTIFICATION OF THE SPERM QUALITY AND MORPHOMETRY FROM RAMBON CATTLE IN KEMIREN VILLAGE GLAGAH SUBDISTRICT BANYUWANGI DISTRICT

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ABSTRACT

The aim of this research was to identify the quality of fresh semen and sperm morphometry of Rambon cattle. Semen was collected using artificial vagina from six Rambon cattle. The research was descriptive and presented in the form of pictures and tables. Parameter observed were macroscopic test (volume, smell, colour, consistency and pH), microscopic test (motility, viability, concentration and abnormality of sperm) and sperm morphometry. The result showed that macroscopic test were volume 5,1±0,9 ml, a neutral smell, colour semen was white, consistency was thick and pH 6,7±0,5. The result showed that microscopic test were motility 83,3±4,1% (progressif), viability 86,7±2,3 %, concentration 2730±550,9 million/ml, primary abnormality 0,2±0,4 % and secondary abnormality 6±2,8%. Sperm morphometry were measured by Nikon® microscope with micrometer scale after applying eosin-nigerosin staining technique. Each sperm was measured for primary spermatozoa head dimensional parameters length (L), width (W), middle piece (MP), principal piece (PP) and total sperm length. The result showed that sperm morphometry of Rambon cattle were identified L = 9,56±0,70 µm, W = 4,27±0,41 µm, MP = 12,9±0,92 µm, PP = 43,18±2,40 µm and total sperm length = 65,73±2,14 µm. In conclusion, quality of fresh semen and sperm morphometry of Rambon cattle were good and deserve to be frozen semen for insemination.

Key words: Rambon cattle, motility, viability, abnormality, morphometry.