The Effects of Crude Protein Bovine Seminal Plasma Addition in Skim Milk and Egg Yolk Diluent to Motility, Viability, DNA Fragmentation, and Necrosis of Ram Spermatozoa after Equilibration

Erry Tri Sheliana Adikara¹, Suherni Susilowati², Sri Pantja Madyawati³
Student¹, Department of Reproduction Veteriner², Department of Reproduction Veteriner³
Faculty of Veterinary Medicine Airlangga University

ABSTRACT

The aim of this research was to determine the effects of crude protein bovine seminal plasma addition in skim milk and egg yolk diluent in increased motility and viability as well as decreased of DNA fragmentation and necrosis of ram spermatozoa (Domba Ekor Gemuk). This study was used Complete Random Design with six replications and three treatments. Control treatment (P0) is consist (ram semen + diluent); treatment I consist of (ram semen + diluent) crude protein bovine seminal plasma in the 1:1 proportion; treatment II consist of (ram semen + diluent) crude protein bovine seminal plasma in the 1:2 proportion, then stored at 5°C. All treatments examined after 1 hour after equilibration. The results showed that addition of crude protein bovine seminal plasma (1:1 proportion) in skim milk and egg yolk diluent gave significant effects on motility, viability, DNA fragmentation, and necrosis of ram spermatozoa, whereas addition of crude protein bovine seminal plasma (1:2 proportion) had cause law motility, more proteins binding with sperm membrane will restricts movement of spermatozoa.

Key words : Crude protein bovine seminal plasma, DNA Fragmentation, Necrosis, Ram Spermatozoa.