

338. Electrophoresis profile in plasma semen from Anglo Nubian goats according to freezing ability in northeast of Brazil

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Aiming to investigate the proteins profile from animals that shows semen freezing ability it was used two adult Anglo-nubian goats weighting approximately 45,0 kg, living in the semi arid area of the Northeast of Brazil. These animals showed along its life historic of semen freezing (Animal X) with high percentage (90%) of approved doses and no freezing capacity at all (Animal Y), data observed at Laboratory of Andrology and Artificial Insemination belonging to Embrapa Goats located at Sobral city, State of Ceará, Brazil. The semen collection happened during two weeks at two days intervals through artificial vagina. A pool from all collections from each animal was used to analyze the total proteins and to run the 1D electrophoresis SDS-PAGE. The gel electrophoresis data were analyzed by Life Science Software Doc-It®LS UVP. The results showed nine bands of protein identified on the gel belonging to animal X and five on gel from animal Y. In the animal X it was observed a band of high molecular weight 112,3 kDa and others of 61,3; 43,3 and 30,9 kDa. The animal Y shows a band of 55 kDa and other of 20,6 kDa. Both animals showed in common bands of 67,0; 23,0; 22,0 and 20,6 kDa. The attention is focusing on the presence of high molecular weight band only in animal X and the presence of a protein band of 55 kDa only in animal Y. It is known through literature that spermadesins have molecular weight from 12 - 16 kDa, these bands not found in this study. Concerning to BSPs proteins that shows molecular weight around 28 to 30 kDa, it were found correlated bands (29,1 and 30,9 kDa) in animal X. These proteins are correlated to acrossomic reaction. In buffalo bulls, the literature found a protein band of 55 kDa correlated with sperm viability of fresh semen. We can conclude from these results that the proteins are involved on semen freezing ability in goats, but further studies are necessary to identified makers to select reproducers to be donor of semen.