

322. Seminal parameters and its correlation with plasma proteins in Anglo Nubian goats

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Goats living at semi-arid areas like Northeast of Brazil show periods with better and worst semen quality during the year even without day length variation. Aiming to investigate the reasons why does this happen, it was evaluate some variables from semen throughout the year. It was used five adults male goats from Anglo Nubian breed weighting 35.6 ± 6.43 kg. The animals were submitted to semi extensive system, feeding grass and receiving grass elephant (*Pennisetum purpureum*). The concentrate composed by corn and soy was offered according to body weight and the water and mineral salt *ad libitum*. The semen collection through artificial vagina happened weekly from March/2006 to April/2007. It was analysed the following semen parameters: aspect (1-6), volume (mL), motility (%), vigour (1-5), and concentration ($\times 10^9$ spzts/mL). The total proteins were analysed using the Bradford method during all the year while the protein bands identification, using pool of samples, through one-dimension electrophoresis (SDS-PAGE) and silver staining were analysed on May (rainy period) and November (dry period). It was observed significant ($P < 0,05$) variation concerning to humidity and rain precipitation between the dry and rainy periods. The semen volume, aspect and concentration showed significant difference ($P < 0,05$) between the rainy-dry transition period (June) with the dry period (July, August, September, October, November and December). Also these variables showed significant ($P < 0,05$) difference between the dry and rainy (February, March, April and May) periods. However, the semen motility and vigour didn't show significant ($P > 0,05$) difference among the periods of the year. The total protein ($\mu\text{g}/\mu\text{l}$) presented significant ($P < 0,05$) difference between the rainy-dry transition period and the rainy season; and also a significant ($P < 0,05$) variation between the dry and rainy seasons. The analysis of the one-dimension electrophoresis were analysed using the Doc-It®LS Image Acquisition Software from UVP. The results showed two bands of 79 kDa and 91 kDa on May which they are absent on November. On other hand, November showed three bands of 28kDa, 72kDa and 133kDa that aren't present on May. It was concluded that there were influence of the periods of the year on semen quality and proteins bands in Anglo Nubian goats in Northeast of Brazil.