

CONSTRUINDO SABERES, FORMANDO PESSOAS E TRANSFORMANDO A PRODUÇÃO ANIMAL

PHYSIOLOGICAL PARAMETERS OF NELORE AND GIROLANDO BREEDS SUBMITTED TO DIFFERENT BLOOD COLLECTORS

Vitória SOARES^{1*}, Fabiana Costa da FONSECA¹, Evellyn Richelly Ferreira da SILVA¹,
Genilson Fernando da COSTA¹, Aldair Félix da SILVA¹, Dalton Mendes de OLIVEIRA¹,
Marcus Vinicius Morais de OLIVEIRA¹, André Luiz Julien FERRAZ¹

*v.vitoriasoares@gmail.com

¹State University of Mato Grosso do Sul, Aquidauana, MS, Brasil

The study aimed to evaluate the physiologic responses in cattle submitted to blood collection in the coccygeal and jugular veins with different blood collectors. In this sense, three different collectors were used: Traditional, Vacutainer and Krev. The Traditional consists in a separate needle from the manifold tube. The Vacutainer has a separate needle collector tube, with a needle adapter that assists at the time of blood collection. In Krev, the needle is attached to the flexible collector tube. During collection, the respiratory (RF) and cardiac (CF) frequencies of each animal were measured. The CF was expressed in number of beats per minute, measured through a stethoscope and using a stopwatch for a period of 30 seconds, the result multiplied by two to obtain this variable in minutes. The RF was obtained by counting the movements of the animal's flank with a stopwatch for 30 seconds and multiplying the value by two to obtain this variable in minutes. We used 150 animals from each genetic group, Nelore and Girolando ($\frac{3}{4}$ Holstein and $\frac{1}{4}$ Gir), totaling 300 animals. The RF and CF data were obtained through ranges, which consist of the difference between the maximum and minimum values, to better express the results. The means when significant were compared by the Tukey test at 5%. There was a significant difference between the genetic groups for RF during puncture of the coccygeal vein, being the highest values for the Nelore breed in relation to Girolando animals. In the jugular vein there was difference between the collectors in the Girolando animals. With the Vacutainer collector the Girolando animals presented a reduction of RF in the jugular vein when compared to the Traditional collector. As for Nelore CF, a greater variation in heart rate ($P < 0.05$) was observed than in Girolando animals, both in the coccygeal and jugular vein, with values -5.53 and -1.98 for Nelore and -1.11 and 1.32 for Girolando respectively. No significant differences in RF between blood collectors were observed for both puncture sites. The Nelore breed proved to be more reactive to different blood collectors.

Keywords: collection devices, technological innovation, wellness

Acknowledgments: FUNDECT, Empresa Brasil CZ Scientific Products