

## STUDY OF THE TEMPERAMENT OF *BOS INDICUS* CALVES ON WEANING<sup>1</sup>

### *ESTUDO DO TEMPERAMENTO DE BEZERROS *BOS INDICUS* NA DESMAMA*

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Ones of the largest commercial cattle herd in the world, Brazil has its cattle characterized by the use of an extensive system and the predominance of zebu breeds, especially the Nelore and its crosses. In this system the temperament of cattle becomes a problem because of the low human-animal interaction, and bad-tempered animals can cause accidents, increase maintenance costs of facilities and provide poorer quality of the carcass, meat and leather. The aim of this study was to evaluate the temperament of 24 calves Nelore and Guzerath purebreds, with a mean of  $235.81 \pm 39.95$  days of age after submitted into two treatments during the breeding season of the cows. The treatments were: T1 - calves submitted to the management of permanent feeding (PF) and T2 - calves submitted to the management of controlled feeding (CF). Ninety days after the beginning of the breeding season, the CF was interrupted and the calves stayed with their mothers until weaning. The temperament of calves was evaluated in the weaning management through the following methods: escape velocity in meters/second (EV), reactivity test in the contention trunk (RT), crush score (CS) and escape distance (ED). The EV was obtained with the use of the equipment "flight speed" placed in the exit of the trunk contention. The animals with higher velocity were considered the worst temperament. The CS, on a scale of 1 to 5, evaluated the general condition of the animals including movement, stress, behavioral signs of stress such as muscle tone, sclerotic membrane and muscle shake. The highest scores were given to animals with worst temperament. The ED was held inside the barn (97m<sup>2</sup>), where the observer moved toward the animal (one step per second) and registered the distance in meters of how the animal allowed the approach before starting the escape. The animals that maintained for a period more than 60 seconds inside the barn had the highest ED (8.5 m). With the adoption of the CF and a good management, the animals tend to get used to it and, consequently, to humans, resulting in less react. To verify possible statistical differences in the reactivity of the animals, was used the Mann-Whitney test. Through the displacement ( $z = 0.26$ ,  $P = 0.84$ ), stress ( $z = 1.32$ ,  $P = 0.24$ ), CS ( $z = -0.49$ ,  $P = 0.67$ ), ED ( $z = -1.68$ ,  $P = 0.10$ ) and EV ( $z = 0.23$ ,  $P = 0.84$ ), no significant difference was observed between treatments. The ED variable showed a higher standard deviation, possibly because of the number of evaluated animals. Under the daily management of controlled feeding, it was expected a lower ED of the animals submitted to the T2 treatment, but it can conclude that the animals of CF and PF have an equidistant reactivity at weaning, probably this is due the fact of the reduction of human-animal interaction after the end of the breeding season and also because of the increased expression of natural behaviors that zebu cattle have, such as high reactivity and fear of man.

Key words: adaptation, animal welfare, management, temperament.