



## **I-INTERNATIONAL MEETING OF ANIMAL SCIENCE IN SEMI-ARID REGIONS**

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Área do trabalho: Nutrição e Produção de Ruminantes

### **Murrah buffalo weight estimation through equation using linear body measurements.**

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The buffaloes were introduced in Brazil in the mid -nineteenth century, and the Murrah breed has the highest predominance in the country due to its ability to adapt and rusticity, as well as its double aptitude in milk and meat production. This study is of paramount importance to the region of the forest zone of Pernambuco due to an increase in the creation of buubalins in the region, but many producers have no scale and thus cannot perform great zootechnical control. Thus, the objective of the work was to develop weight prediction equations from body morphometric measurements to assist producers who do not have scales in their properties. To hold the experiment were accompanied six farms from the municipality of the Mata de Pernambuco area, 635 animals of different sexes, categories (adult, calf and heifer) and blood grade of the Murrah breed were used. For data collection were used, the hypopteryx type cane and cattle weighing tape, where body length measurements (CC), head height (AC), back height (AG) and thoracic perimeter (CC) measurements were made (CC) measurements (CC) and thoracic perimeter (PT). In addition to morphometric measures the animals were heavy in analog scale, always all in a flat place and on the same conditions. For the development of weight prediction equations, models commonly used to measure animal weight using PT and CC, such as V1, Schaeffer, Quetlet, Mathiewitc and the Stepwise computer regression model. It was observed that the adult category, when used the cattle weighing ribbon was the one that best fit the model with an R<sup>2</sup> (0.8561) cattle. Then the equation was obtained, being the probable weight estimated in the balance =  $-13.64246 + 0.85396 * \text{Weight obtained on the cattle tape}$ . Therefore, the use of cattle weighing ribbon showed efficiency and good credibility in measuring the weight of buubalin. PT, CC, AG and AG have low accuracy when used in the equation in isolation.

**keywords: bubalinoculture, linear measures, live weight, morphometric measures.**

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