

CONSTRUINDO SABERES, FORMANDO PESSOAS E TRANSFORMANDO A PRODUÇÃO ANIMAL

## EFFECT OF LIVE WEIGHT OF BEEF COWS ON CALF PRODUCTION EFFICIENCY

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Breeding herds in Brazil have their feed primarily based on natural pastures, all of which depend on climatic conditions. These pastures limit the animals to express their genetic potential for weight gain and reproduction. This situation is aggravated in larger and heavier animal, raising maintenance requirements and causing difficulty to meet them when under food restriction, reducing reproductive performance and production efficiency. Fifty-three secundiparous Braford cows at 48 months of age were divided into three groups of body weight at calving. The groups were based on the weight difference of the cows in function of the standard deviation (22.5 kg) as Small cows (325.2±3.7 kg) cows weighing less than average 0.8 standard deviations, Medium cows (347.7±4.0 kg) weighing more than 0.8 standard deviations below and less than 0.8 above average and Large cows (384.2±4.1 kg) more than 0.8 standard deviations above average. All cows were primiparous at 36 months of age and had their first calves weaned on average 90 days post-calving. Cows were maintained on Brachiaria (*Brachiaria brizantha* cv. Marandu) pasture, and their calves were early weaned with average age of 67 days. Classifications of cow's weight at calving remained the same throughout the experimental period. Large cows (323±18.3 L) had higher total milk yield than Small cows (247±16.4 L), but did not differ from Medium cows (278±17.8 L), reflecting in calves weight at weaning 82.1, 76.6, and 76.9 kg, respectively. Pregnancy rates were 90.0, 70.2, and 65.5%, for Small, Medium, and Large cows, respectively. Small cows were more productive and efficient when production performance was adjusted for the pregnancy rates than Medium and Large cows, which did not differ from each other. Production of kilograms of calves adjusted for pregnancy was 20.5±0.5, 16.2±0.5, and 14.0±0.5 kg for the Small, Medium, and Large cows, respectively. Large and Medium cows were less efficient as compared with the Small ones for production of calves adjusted for their calving interval. The amount of milk for the production of 1 kg of calf was similar among the groups. Small cows produce more kilograms of calf/cow, requiring the same amount of milk to produce one kilogram of calf. Small cows also have higher efficiency converting milk into calf weight than Medium and Large cows. The productivity and efficiency of breeding herds should be evaluated by the combination of pregnancy rate and kilograms of weaned calves per cow exposed to breeding.

**Keywords:** Braford, milk production, pregnancy, weaning, weight gains.

Promoção e Realização:



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