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Increasing Food Security through Evaluation of Prospects Cattle Stallions of the Breed Simmental and Simbrah

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Abstract

In Mexico, agricultural and forestry production are the main land use activities, covering 57.3 % of the country. These land use activities in the state of Nuevo Leon cover 5.5 million hectares, representing 86% of the state are; 386.474 heads of cattle are kept in this state, ranking 20 for the country wide production of domestic beef. Additionally, in Nuevo León the per capita meat consumption is with 37 kg per year the highest in the country (national average 21 kg meat per capita). Simmental and Simbrah breeds might be an alternative to meet the state needs for beef meat. Therefore, studies are needed to corroborate the ability of these two breeds to adapt to the ecological and economic conditions of the country, especially in northern Mexico. The aim of this study was to evaluate different production traits of economic importance of the breeds Simmental and Simbrah under a suitable environment. Behavioural tests were used to evaluate the stallions (prospect to be a stallion). The study was performed during a 4 months of observation period, in Linares, Nuevo León, Mexico. Measurements were made monthly. The variables evaluated were: daily gain for the period (ADG), daily gain for age (GDE), weight adjusted to 365 days, loin eye area, intramuscular fat percentage, back fat, genetic markers (smooth and marbling), body size and scrotal circumference. The results showed that the Simmental breed behaved better than the Simbrah, with respect to the variables: Increase in daily weight and increase in final weight. Likewise, it was noted that there were no statistically significant differences between the two breeds with respect to the variables weight adjusted to 365 days, area of the loin eye, percentage of intramuscular fat, fat, genetic markers (softness and “marmoleo”), body size and scrotal circumference.

Keywords: Genetic markers, race Simbrah, race Simmental, Scrotal circumference, stallions