COMPARATIVE STUDY OF PRODUCTION TRAITS IN ABERDEEN ANGUS CATTLE RAISED UNDER SEMI-INTENSIVE AND EXTENSIVE SYSTEMS IN ROMANIA

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Abstract

This study evaluates the production performance of Aberdeen Angus cattle under semi-intensive and extensive management systems in Romania. The research analyzed key production traits, including birth weight and average daily gain at 120, 200, and 365 days, for both sires and dams in two herds located in Botosani and Vaslui counties. Data from 27 sires and 27 dams in the semi-intensive system and 15 sires and 15 dams in the extensive system were collected from the Romanian Aberdeen Angus Herdbook and farm records. Statistical analysis was performed using S.A.V.C. software, calculating arithmetic means, standard errors, standard deviations, coefficients of variation, and minimum and maximum values. Results revealed differences in performance between the two systems, with the semiintensive system generally showing superior early growth rates, particularly in sires. However, dams in the extensive system demonstrated higher birth weights and competitive growth rates. The study provides valuable insights into the adaptability of Aberdeen Angus cattle to different management conditions in Romania, offering guidance for optimizing breeding programs and management strategies in the growing Romanian beef sector. These findings contribute to the understanding of genotype-environment interactions in beef production systems and support informed decision-making for producers aiming to improve productivity and meet market demands efficiently.

Key words: Aberdeen Angus, extensive system, growth performance, Romanian beef production, semi-intensive system