

EVALUATION OF REPRODUCTIVE INDICES AND MILK PRODUCTION IN CARPATHIAN GOATS UNDER REPRODUCTIVE ACTIVITY MODULATION

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Abstract

Goats represent a species of major interest for animal husbandry in Romania, and the Carpathian breed plays an essential role as an indigenous genetic resource, valued for its adaptability and dual-purpose use. The age at first kidding and the time of mating directly influence productive and reproductive performances. The aim of this study was to evaluate the impact of reproductive activity modulation on milk and meat production in Carpathian goats registered in the Genealogical Register. The research was carried out on two groups of 50 primiparous goats each: group 1 was artificially inseminated on induced estrus between August 15–30, while group 2 was naturally mated on estrus between September 15–30, monitoring fertility and prolificacy. Productive indices were recorded during the first lactation. The results showed superiority for group 1 compared to group 2: fertility 94% vs. 90%, prolificacy 155.32% vs. 141.66%, and a milking period longer by 30 days (the suckling period being 70 days in both groups). These differences confirm that reproductive modulation directly influences milk production and reproductive indices, highlighting the importance of reproductive management strategies in breeding programs to increase economic efficiency and better exploit the productive potential of the Carpathian breed.

Key words: goats, fertility, prolificacy, milk