«Influence of habitat factors on economic traits of cows of different lines»

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The issue of increasing the milk and dairy products production is becoming more relevant in conditions of accelerated import substitution, and since currently livestock is intensive, the problem solution largely depends on breeding. Since the genetic potential of livestock is already at a high level, breeders face the task of revealing it. At present it is necessary to control the genealogical structure taking into account linear affiliation and determine prospects for their development in order to determine the direction of selection situation in herds and populations of animals. Each of the economic traits has a different degree of causality by genetic and phenotypic factors. Therefore, the study of influence of housing conditions and feeding cows on the exteriors, milk production and cows’ health, depending on the linear affiliation, is a topical issue.
The studies included analysis of the content system, the exterior particularities of cows and their physiological state, the dynamics of quantitative and qualitative indicators of dairy productivity. The study of maintenance conditions of animals was carried out by estimating the microclimate parameters and describing the structural features of the cattle-breeding premises. To study the microclimate in the cowshed, conventional zoohygienic methods were used. The temperature, relative humidity and air velocity were determined using the "TKA-PKM-60" thermo-anemometer at three points: at the level of 50, 120 and 160 cm, the illumination at the level of 120 cm from the floor by the "Argus-01" luxmeter. The studied indicators were measured 3 times a day: in the morning - 7.00, in the afternoon - 12.00, in the evening - at 19.00 for two adjacent days once a month. The points of measuring the microclimate parameters are combined into the northern, southern and central zones, depending on the location of the buildings on the terrain.
In general, the most favorable conditions of the air environment throughout the year are formed in cowshed of tie-up housing, rather than in cowshed with a yard housing of animal, where the relative humidity and speed of air movement deviated significantly from the norm. Different conditions of housing cows in buildings affected the level of milk yield of animals of all lines: the difference in the milk yield over 305 days of lactation from 59.4 to 252.26 kg is observed with yard housing compared to the indicators at tie-up housing. The minimum difference was observed in the Reflection Sovering line cows (59.4 kg), which indicates the adaptability of animals of this line to less favorable maintenance conditions.
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