V. I. Ladyka, S. L. Khmelnychyi. Longevity of Ukrainian Black-and-White Dairy cows depending on level of estimation of linear type traits which characterize the condition of feet and legs

Research on assessing the type of first-calf heifers of Sumy interbreed type of Ukrainian Black-and-White dairy cattle was conducted by the method of linear classification in a herd of breeding farm Pidlisnivska branch of private stock company "Rise-Maksymko", Sumy region.

The descriptive traits of type characterizing condition of cow's limbs: hock angle, rear legs rear view, hoof angle and locomotion were studied. According to the research results, hock angle affects greatly longevity of the studied cows in the herd. The longest duration of life had the animals estimated in 6 and 5 points by the trait of hock angle. The difference in longevity between the cows estimated in 6 points compared with the groups of animals with assessment of 1 and 9 points, was 252 and 582 days respectively. Animals with elephantine rear legs rear view was used by 330 days longer, compared with the animals of same age with sickle hocks.

The results proved a positive effect of rear legs rear view on longevity of the animals. The difference between the animal groups with the highest and lowest scores was 735 days with high degree of reliability (P<0.001).

The high influence the trait of hoof angle on longevity of cows was determined. Animals with the highest classification score lived 626 days longer than animals with a score of one point. However, it should be noted that hoof angle had the least impact on longevity among all traits which characterize qualitative condition of hind limbs.

The cows with the assessment the trait of locomotion in 9 points lived 737 days longer compared with the animals with a score of one point. In general, assessing the average longevity of the cows of Sumy interbreed type of Ukrainian Black-and-White dairy breed depending on the level of assessment for the trait of locomotion it was established the most durable cows were with a score above 5 points.

Studying the relationship between linear estimation of traits which characterize condition of feet and legs at the cows of Sumy interbreed type of Ukrainian Blackand-White dairy breed and their longevity it was found that the cows with high scores for condition of development of these traits would have longer productive use. Therefore, degree of development of the indicators of linear estimation of limbs for their daughters should take into account selecting sires to the herd.

Keywords: Ukrainian Black-and-White Dairy breed, linear type traits, longevity