

INFLUENCE OF THE DEGREE OF HOLSTEINIZATION AND LEVEL OF FEEDING ON PRODUCTIVITY OF LITHUANIAN BLACK-AND-WHITE CATTLE

K. Pauliukas

Summary. The investigation was conducted to determine the milk yielding capacity of holsteinized Lithuanian black-and-white cows and meat yield of steers of three generations F_1 , F_2 , F_3 with different levels of Holstein-Friesian blood infusion and different levels of feeding.

The animals were distributed in to three groups. In the first group 5500 fodder units were fed per head every year and the daily weight gain steers was 900 – 1100 g. In the second group 4000-5000 f.u. were fed and the daily weight gain of steers was 700-800 g while the third group consisted of cows obtaining 3000-4000 fodder units per year and the daily weight gain of steers was 550-700 g.

The milk yielding capacity of the first group of crossbred cows with a half or more Holstein-Friesian blood, was 16,3 – 18,7 % higher in comparison with pure-bred Lithuanian black-and-white cows, but the protein content was 0,01-0,05 % lower, except for the cows with 3/8 Holstein-Friesian blood infusion. The fat content was variable.

1) Crossbred steers with a half or more Holstein-Friesian blood had a 6,2 - 11,3 % higher daily weight gain in comparison with pure-bred steers. The carcass yield, the yield of carcass and fat in abdominal cavity as well as the percent age of soft parts in the left halves of the carcass were 0,1-5,1 % lower in comparison with those of pure-bred steers. The influence of Holstein-Friesian blood on the productivity of both cows and steers in the second group was insignificant.

The milk yielding capacity of the holsteinized cows and weight gain of the fattening steers in the third group was 2,1-5,5 % and 2,9-10,4 % lower for cows and steers respectively in comparison with pure-bred Lithuanian black-and-white cattle.

Keywords: cattle, breed, Lithuanian black-and-white, Holstein-Friesian, cross-breeding, milk yielding capacity, feeding.