

EFFECT OF LAMENESS ON MILK PRODUCTION TRAITS IN HOLSTEIN-FRIESIAN DAIRY COWS

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Abstract. The study was conducted to determine the effect of lameness on production traits in dairy cows – milk yield, mil protein and milk fat contents. For this purpose, productivity records of 300 Holstein-Friesian cows (100 from 3 Bulgarian herds) were collected. The results showed that 305-day lactation milk yield of lame cows from the three herds was by 516.8 kg lower compared to that of healthy cows. Milk fat percentage was reduced by 0.16 %, and milk protein – by 0.04 % vs healthy cows. In herd 1, where the average milk yield was the lowest (7074.4 kg), milk yield was by 89.1 kg lower in 38 % of cows affected by lameness. The average milk yield of herd 3 was 7882.3 kg, the milk yield reduction amounted to 565.6 kg in 43 % of lame cows. In herd 2 with the highest milk yield (8660.6 kg), the difference between the lame and healthy cows was 1314.3 kg, and the prevalence of lameness was 61 %. The highest share of lame cows was affected by lameness in the beginning of lactation, 37.3 % - until the 150th day with greatest milk production loss vs healthy cows – 598.3 kg. In the subsequent period of lactation, only 10 % became lame, and milk yield reduction amounted to 211.9 kg.

Keywords: lameness, dairy cows, milk yield