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ESTIMATION OF POSTERITY OF LINES AND BULLS OF HOLSTAINBREED OF CANADIAN SELECTION BY SIGNS OF THE LIFELONG PRODUCTIVITY

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By the results of researches in herd of Holstain breed cows of the Canadian selection the reliable inherited influence of lines and bulls is set on term of the economic and productive using of cows, by the milk productivity, from data of the first and best lactations, and indices which characterize the lifelong productivity.

Keywords: Holstain breed, yeild, line, bulls, lifelong productivity.

Taking into account the outlined problem, the study of features of the economic use of cows of Holstain breed Canadian selection became the aim of work in the new ecological terms of Ukraine accordingly with influence of the genealogical forming and bulls.

Materials and methods of researches. The experimental base of researches was imported animals of Holstain breed of the Canadian and domestic selection of pedigree farm "Zolotoniske" Cherkassy region. Efficiency of the lifelong use of cows was studied on a drop-out population without including to the acouting animals without 1 lactation at least. The biometrical analisis of experimental data was conducted after methodologies of E. K. Mercurieva on the personal computer with software.

Results of researches. The analysis of indexes which characterize the milk and lifelong productivity of cows of the most widespread lines showed reliable interlinear differentiation after separate estimated useful signs. After a milk yield the best was posterity of Valiant 1650414 line, which better from other lines in 135-762 kg, however a difference appeared reliable only in comparing to the descendants of Chef line o1427381 ($P<0,001$) and Elevation 1481007 ($P<0,01$).

The best result by fat had Elevation line 1481007 with avarege of fat in milk 3,83 %.

The results of researches are got by us testify that the signs of the lifelong use of cows are determined by heredity of bulls of corresponding lines. Descendants of Starbak line352790 had the longest productive use (1611 days) with the reliable

exceeding of cows of Valiant line 1650414 on 380 days (P<0,01), Inhanser lines 343514 - on 480 days (P<0,01) and Chef line 1427381 - on 256 days (P<0,05).

As evaluated by duration of the economic use of Holstain an interlinear difference and its authenticity yet more grew in behalf on posterity of line of Starbak 352790, which exceeded the cows of other genealogical forming : Inhanser 343514 - on 744 days (P<0,001), Valiant 1650414 - on 506 days (P<0,001) and Chef 1427381 - on 346 days (P<0,05).

By two next indices: amount of calving during the life and coefficient of the economic use of cows, also the best were descendants of Starbak line 352790 with reliable advantage above animals which belong to the Valiant line 1650414 and Inhanser 343514 - accordingly, 1,3 and 1,7 calving (P<0,01) and 4,6 and 6,3 conditional unit (P<0,01).

The lifelong milk productivity of cows is evidently enough demonstrated by the indices of yield for one day of the economic and productive use. After a previous analogy the best result of these traits are educed for cows which originate from bulls of Starbak 352790 line, which accordingly presented 13,9 and 23,1 kg of milk and exceeded daughter's descendants of other lines with a difference 2,0-5,0 and 2,2-5,9 kg.

Practical experience of breeding of milk cattle by lines, showed that the prospect of their existence is based on successive, from a generation to generation, satiation of genealogies by high-quality progeny the intensive use of which assists an increase consolidation of descendants of concrete line.

Analysis of that indices, which characterize milk and lifelong productivity of cows from separate bulls showed that in the inspected herd on these indices the advantage after daughters of Korsonet 5375693 and Leopold 401498.

Conclusions and prospect of further researches. Inherited influence of lines and bulls on the of milk productivity trait, duration of the productive use and life length productivity of their progeny, convincingly testifies to perspective expediency of realization in pedigree herds from milk cattle breeding of careful selection and mating of animals taking into account these economic important indices.

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Khmel'nichiy L.M., Vecherka V.V. Estimation of posterity of lines and stud bulls of Holstein breed of the Canadian selection on the signs of the lifelong productivity

On results researches of herd of Holstein breed of the Canadian selection the reliable inherited influence of lines and stud bulls is set on duration of the economic and productive use of cows, on the signs of the milk productivity, from data of the first and higher lactations, and on indexes which characterize the lifelong productivity.

Key words: Holstein breed, yield of milk, line, stud bulls, lifelong productivity.

By researches of herd of Holstein breed of the Canadian selection of pedigree factory of «Zolotoniske» Zolotonoskiy district of the Cherkasy region reliable influence of lines and stud bulls is set on duration of the productive use of cows and on indexes which characterize the lifelong productivity. Posterity of line of Starbak 352790 appeared the best, which exceeded the persons of the same the age of other lines on duration of the productive use on 256-480 days ($P<0,05$-$0,01$), on the amount of calves and coefficient of the economic use of cows – accordingly, on 1,3 and 1,7 calve ($P<0,01$) and on 4,6 and 6,3 conditional unit ($P<0,01$).

Posterity of line of Starbak 352790 passed ahead also the cows of other probed lines on the lifelong yield of milk with advantage from 8808 to 15524 kg ($P<0,01$-$0,001$) of milk. However, the most expressive advantage of descendants of line of

Starbak 352790 as evaluated by the indexes of the lifelong milk productivity was observed on the sign of general output of milk fat. At the mean value of index of this sign for daughter's descendants of bulls of this line at the level of 1371,8 kg reliable superiority by comparison to other estimated lines made from 327,2 to 515,8 kg ($P<0,01$-$0,001$).

Practical experience of the linear breeding of milk cattle testifies that the prospect of their existence is based on successive, from a generation in a generation, satiation of genealogies highly productive continuers the intensive use of which is instrumental in an increase and consolidation for the descendants of concrete line only by him inherent economic-useful signs.

Results of estimation of stud bulls, continuers of the estimated lines, on duration of the economic use of daughters showed that not always a high estimation on the yield of the taken into account lactations guarantees the proper indexes of the lifelong productivity.

Set inherited influence of lines and stud bulls on the signs of the milk productivity, duration of the productive use and lifelong productivity of their posterity, convincingly testifies to perspective expedience of lead through of careful selection and selection of animals taking into account these economic important index.