



PRODUCTIVITY CHARACTERISTICS OF HOLSTEIN COWS IN BREEDING GROUPS

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Abstract

In recent years, heifers of cattle with high genetic potential for milk production have been imported from different countries to different regions of the country. In our study, we studied the milk yield of Holstein cows imported from Poland. They produced high milk yields in various lactations after birth, using which experimental farms were used to create dairy herds for use in selection work and productivity indicators were studied.

Keywords: breed, Holstein, cow, productivity, lactation, service period, selection

Introduction

In the genetic improvement of cattle breeds, the establishment of selection groups of high-yielding cows in breeding herds, obtaining from them many offspring with high breeding value, prolonging the duration of use in cows, improving the milk yield of herds plays an important practical role. With this in mind, we studied the productivity of the “breeding core” and “bull breeding group” cows formed during our experiments.





2. Methods of Research

In this work methods of research generally accepted in zootechnics were used.

3. Results and Discussion

Scientific and experimental work was carried out at the farm "Ornak nasl chorva/Urnak breed cattle" in Ellikkala district of the Republic of Karakalpakstan on Holstein cows imported from Poland. In this experimental herd, we formed breeding groups of "breeding core" and "bull breeding group" of productive Holstein cows, the milk yield of which is given in Table 1.

Table-1 Milk yield and live weight of cows of the "breeding core" and "bull breeding group"

Indicators	Breeding Group			
	"generation core"		"bull breeding group"	
	X±S _x	Cv, %	X±S _x	Cv, %
Number	83		5	
Lactation of milk, kg	5962,8±57,5	8,77	6858,0±45,7	1,33
Fat in milk, %	3,98±0,020	4,42	4,10±0,068	3,53
Milk fat consumption, kg	237,3±5,01	6,1	281,0±7,61	5,94
4% milk, kg	5932,1±71,4	7,0	6675,6±129,2	3,87
Milk protein, %	3,45±0,019	4,58	3,45±0,040	4,00
Milk protein consumption, kg	205,7±4,66	7,2	237,3±5,10	7,6
Milk yield coefficient, kg	1030,9±6,8	8,1	1159,2±12,4	5,2
Weight, kg	578,4±3,92	6,17	591,6±7,41	4,33

As there is received from the table, cows in breeding groups have a genetic potential for productivity. The milk yield of cows in the "bull breeding group" was 895.2 kg (15.0%) ($R > 0.999$), the consumption of milk fat was 43.7 kg ($R > 0.999$), and the consumption of milk protein was 31.6. kg ($R > 0.999$), the milk yield was found to be 128.3 kg ($R > 0.999$), and the live weight was 13.2 kg (2.28%) higher. These data showed that groups of cows with high productivity potential were created to obtain bulls that would complement the herd with high breeding value in the future.

We studied the milk yield of cows in breeding groups by comparing the milk yield of cows in lactations III and above in the experimental herd, the dynamics of which can be seen in Figure 1.

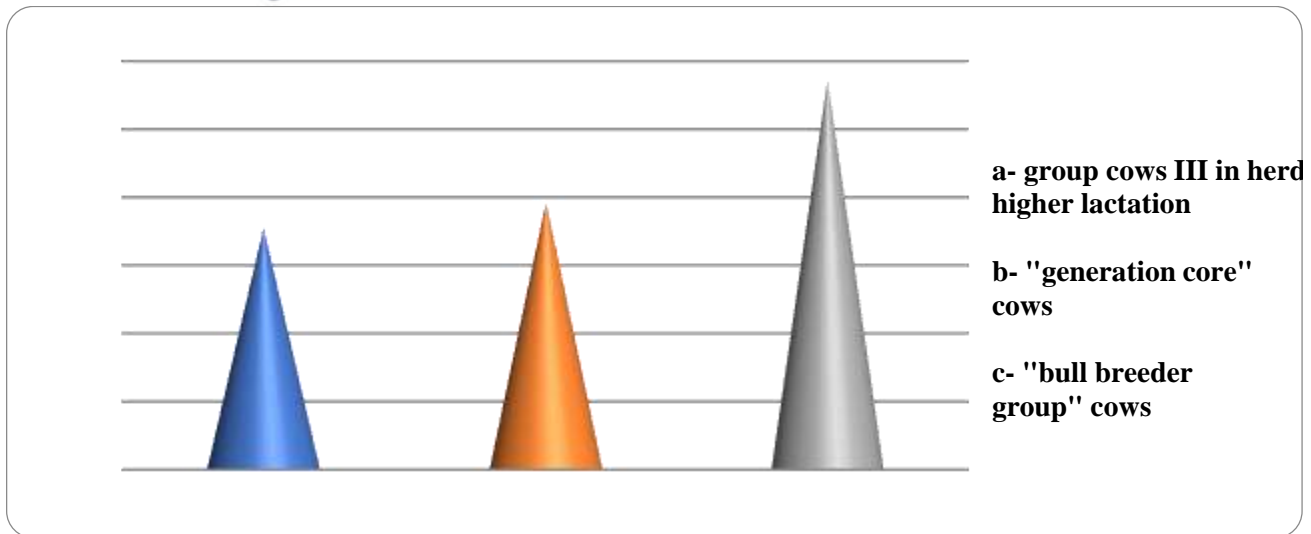


Figure 1. Changes in the amount of milk of cows in breeding groups

In order to increase the efficiency of milk production, artificial insemination of cows in dairy herds at optimal times after calving is important, as it allows to get 1 calf per year from cows with optimal service life, which in turn expands milk and meat production. We studied the milk yield in the highest lactation of cows in the experimental herd in relation to the service period (Table 2).

Table 2 The milk yield of cows in the experimental herd at the highest lactation dependence on service-period periods

Service periods, days	Numbers	Milk, kg	Milk fat, %	Milk fat consumption, kg	4% milk, kg	Weight, kg
60 days	1	55030	4,11	206,7	5168,3	500
61-70	7	5883,7±148,9	4,06±0,09	238,9±5,30	5971,9±130,5	579,3±8,40
71-80	22	5873,2±126,7	3,99±0,040	234,3±4,91	5858,5±109,3	580,5±5,90
81-90	31	6052,9±107,6	3,93±0,033	237,9±5,03	5946,9±91,5	576,2±8,01
91-100	20	5823,0±117,6	3,95±0,044	230,0±4,88	5750,2±102,2	581,47,79

Analysis of the table data showed that imported Holstein cows showed high milk yield at peak lactation when they had a service period of 81-90 days. The milk yield of cows with this period is 1022.9 kg from cows with a service period of up to 60 days, 169.2 kg from cows with a service period of 61-70 days, 179.7 kg from cows with a service period of 71-80 days, 229 kg from cows with a service period of 91-100 days, it was found to be 9 kg higher

In general, in our study, cows in all groups showed high milk productivity, regardless of service-life periods, and no significant difference was observed in all indicators.



These data indicate that cows imported from Europe produced good germination rates in our hot climate.

Conclusions

Cows in the “Breeding Core” and “Bull Breeding Group” have a high genetic potential in terms of milk production dynamics. It is recommended to use them in the breeding and breeding of bulls that complement the high-value herd.

Holstein cows produced the highest milk yield with a service life of 81-90 days. In dairy herds, using these indicators, it is advisable to take artificial insemination measures during these periods after calving cows.

References

1. Попов Н.А., Иванов В.А., Федотова Е.Г. Работа с семействами в молочном скотоводстве повышает эффективность селекции. Ж. «Молочное и мясное скотоводство», №1, 2017, стр. 6-10.
2. Селинова М.И., Ковалева Г.П. Сравнительная оценка быков-производителей основных молочных пород по продуктивности дочерей. Ж. «Зоотехния», №1, 2015, стр. 8-10.
3. Хаертдинов Р.А., Закиров И.Р., Зарипов Ф.Р., Хартдинов Р.Р. Новые подходы к разведению голштиinizированного скота по линиям в Татарстане. Ж. «Молочное и мясное скотоводство», №6, 2016, стр. 5-8.
4. Мырзин В.С., Ряпосова М.В. Становление, развитие и современное состояние искусственного осеменения крупного рогатого скота в Уральском регионе. Ж. «Молочное и мясное скотоводство», №2, 2017, стр.7-11.
5. Кибкало Л., Ткачева Н., Гончарова Н. Эффективность производства молока от коров голландской и немецкой селекций. Ж. «Молочное и мясное скотоводство», №5, 2010, стр. 18-20.
6. Дунин И.М., Амерханов Х.А. Селекционно-технологические аспекты развития молочного скотоводства в России. Ж. «Зоотехния», №6, 2017, стр. 2-8.
7. Аширов М.Э. Сутдор қорамоллар селекцияси, Наврўз нашириёти., Т., 2017, 380 б.
8. Ashirov M.I., Ibadullaeva A.S. Productive qualities of imported cows of Holstein breed of selection in Uzbekistan. International Journal of Science and Research (IJSR), (ISSN (Online): 2319-7064. www.ijsr.net Volume 7 Issue 2018. -P-1599-1601. Index Copernicus Value (2016): 79.57 | Impact Factor (2017): 7.296).

