

## FEATURES OF LACTATION PERIOD OF COWS OF DIFFERENT BREEDS AND CO-BREEDS

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### ABSTRACT

This article provides materials about the lactation period of the first-calf cows of different breeds and co-breeds.

**Keywords:** breeds and co-breeds, to have different economic characteristics, Productivity, milk yielding capacity ratio, Holstein breed.

### THE METHODS AND MATERIALS

The research was carried out within the planned theme and the experimental part was carried out at “SiyobShavkatOrzu” cattle-farm in Taylak district of Samarkand region. There were chosen 90 units of breeding cattle for the experiment, which belong to the same breed and co-breeds, i.e. similar in origin, the same in body weight and had the same lactation period. The group consisted of purebred Black and White Holstein breeds. The first (F1) and second (F2) groups consisted of hybrid offsprings, the fourth group included the German breeds, the V group included the cattle from Polish breeder and Holstein breeds from Holland. The number of cows in the experimental groups was 15 animal units in all groups, where the conditions of feeding and keeping the animals were the same. It is very important to study the lactation period of

cows when assessing the milk productivity and milk quality. Keeping in mind, we have analyzed these issues in terms of breeding in this article.

### RESULTS AND DISCUSSIONS

The analysis shows that the selecting of cattle depends on outer appearance and body. But these features can't help to define livestock yield. Therefore, special calculations were made to determine the milk-yields of cows. That is, there was carried out milk monitoring every 10 days 3 times a month during a year. The cows are milk made at AFIMILK, the milking department of the cattle farm to determine the amount of milk that is taken while breastfeeding. The milk lasting qualities was equal to 105.9 in the cows of the experimental group I. Proportions of cows in the experimental group II, III, IV, V and VI were as follows: 103,8; 102,6; 101,9; 100,4 and 101,4 or the difference between equivalents are: 2,1; 3,3; 4,0; 5,5 and 4,5.

It is clear that the best results were observed in Dutch cows. The milk yield index is well-proportioned to the number of cows in the experimental group: 43,3-96,6; 49,7-95,3; 57,6-96,8; 69,9-97,6; 70,8-97,7; 70,5-97,1 animal units.

Increase in milk productivity was observed in all cows in the experimental group during 3 months of lactation period. However, the cows of Holstein breed of Dutch selection of group IV were giving milk at the amount of 1117,7 kg during the 3 months of lactation period.

Table #1 The features of lactation period in cows of experimental group (n=15)

I -Lactation period	Groups																	
	I			II			III			IV			V			VI		
	Milk rate ,kg	The steadiness ratio of in-milk period	The coefficient of decreasing of milk rate in %	Milk rate ,kg	The steadiness ratio of in-milk period	The coefficient of decreasing of milk rate in %	Milk rate ,kg	The steadiness ratio of in-milk period	The coefficient of decreasing of milk rate in %	Milk rate ,kg	The steadiness ratio of in-milk period	The coefficient of decreasing of milk rate in %	Milk rate ,kg	The steadiness ratio of in-milk period	The coefficient of decreasing of milk rate in %	Milk rate ,kg	The steadiness ratio of in-milk period	The coefficient of decreasing of milk rate in %
I	269,9	100	50,3	377,3	100	57,9	466,8	100	66,7	767,8	100	73,4	788,6	100	77,1	842,1	100	75,3
II	438,7	162,3	81,7	561,6	148,8	86,3	662,7	142	94,7	982,8	128	94	984,9	124,9	96,3	1026,4	121,9	91,8
III	536,8	122,4	-	650,9	115,9	-	699,9	105,6	-	1045,8	106,4	-	1022,9	103,8	-	1117,7	108,9	-
IV	518,7	96,6	96,6	620,4	95,3	95,3	677,6	96,8	96,8	1021,1	97,6	97,6	999,7	97,7	97,7	1085,2	97,1	97,1
V	496,2	95,6	92,4	574,9	92,7	88,3	640,2	94,5	91,4	989,9	96,9	94,6	962	96,2	94	1039,7	95,8	93
VI	453	91,3	84,4	532,9	92,7	81,9	600,8	93,8	85,8	943	95,2	90,1	923	88,8	90,2	997,7	95,9	89,2
VII	413,8	91,3	77,1	503,8	94,5	77,4	572,6	95,3	81,8	908,2	96,3	86,8	894,5	96,9	87,4	968,6	97,1	86,6
VIII	362,7	87,6	67,6	455,8	90,5	70	531,9	92,9	75,9	861,6	94,9	82,4	854	95,4	83,5	920,4	95	82,3
IX	302,6	-	56,4	387,8	-	59,6	461,2	-	65,9	795,8	-	76,1	783,4	-	76,6	852,3	-	76,2
X	232,3	-	43,3	323,6	-	49,7	403,4	-	57,6	730,8	-	69,9	724,9	-	70,8	787,8	-	70,5
As per in-milk period	4025	105,9	-	4989	103,8	-	5717	102,6	-	9046,8	101,9	-	8937,9	100,4	-	9637,9	101,4	-

According to these indicators they can be compared to their herd mates. I, II, III, IV and V pilot groups respectively: 580,9 кг (P<0,001) or 51,9%, 466,8 кг (P<0,001) or 41,7%, 417,8кг (P<0,001) or 37,3%, 71,9кг (P<0,001) or 6,4% and 94,8 кг (P<0,001) or 8,4% behind.

The overbalance on milk yield during in-milk period belongs to cows of IV group of the experimental cows. The milk yield of cows of that group was equal to 9637,9 кг.

It was the highest milk rate compare to their herd mates: 5613,2 кг (P<0,001), 4648,9 (P<0,001), 3920,8кг(P<0,001), 591,1 кг (P<0,001), 700,0 кг (P<0,001).

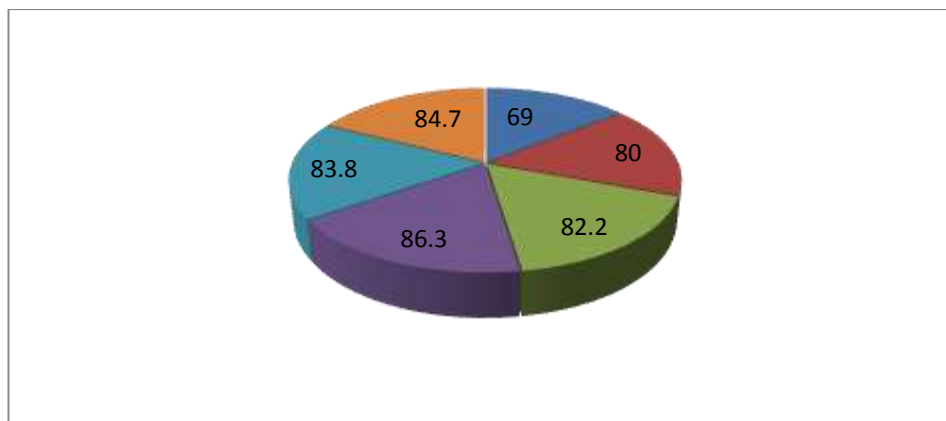


Figure #1. Steady milk productivity of milk rate of cows in experimental group %.

It is obvious that the cows, which belong to German breeding in the IV experimental group, had the highest level of steadiness (86.3%), while the lowest level of steadiness was shown by the cows, related to pure breed of black and white (69%). In our research we took into account and analyzed the maximum daily amount of milk yield of the cows in experimental groups and these data are shown in Figure #2.

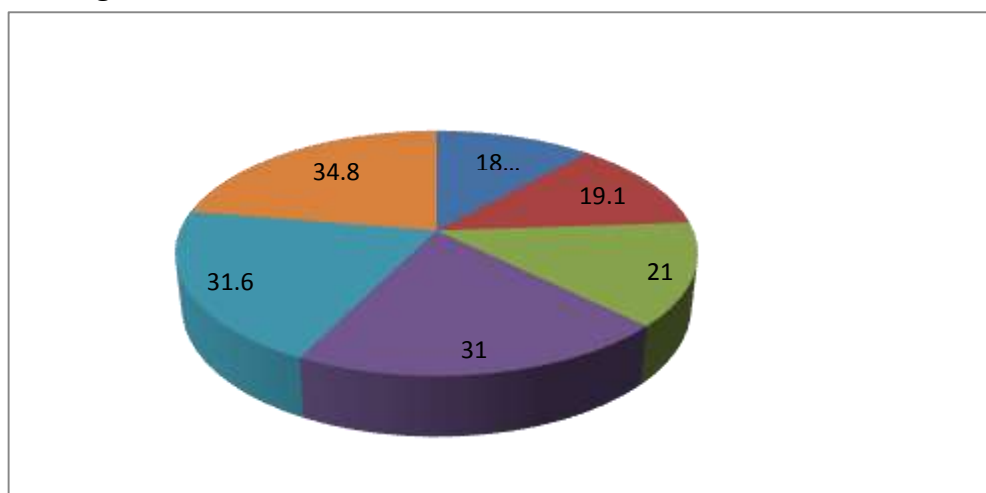


Figure #2. The highest milk yield of cows in lactation period, kg.

As it is shown in Figure #2, the highest daily milk productivity was observed in cows of group IV, which belong to Dutch breeding and it was equal to 34.8 kg. According to this rate, these cows have a higher preference than their herd mates I, II, III and V experimental groups as follows: 16,7кг(P<0,01) or 48,0%, 15,7кг(P<0,01) or 45,1 %, 13,8кг (P<0,01) or 39,6%, 0,8кг (P<0,01) or 2,2% and 3,2кг (P<0,01) accordingly or 9,1 %.

## CONCLUSION

The features of lactation period of imported Holstein breeds, which are different breeds rather than geno type species of different selections, which were obtained by crossing of black and white and Holstein breeds.

It should be noted that it is necessary to provide cross-breeding of different breeds with adequate quality diets and to ensure proper preservation, keeping and management of animals using effective energy-saving technologies.

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