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Characteristics of Lactation of Simmental Cows q.x.f.f.d

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Abstract: The research examined the lactation characteristics of Simmental cows used in various production scenarios. The lactation of cows was consistent across all production types, and the largest monthly milk output was seen in the third lactation month in cows from group I, in the second lactation month in groups II and III, and remained high until the sixth month before gradually declining.

Introduction

The smoothness of a cow's lactation has an impact on how much milk she produces. The consistency of the lactation period, the coefficient of continuity, and the change in the index of the monthly milk quantity decline are other factors that affect how smoothly lactation proceeds. Because of this, understanding the features of cow lactation throughout the months is crucial for enhancing the yield of their milk.

Purpose of the topic is to examine and assess the characteristics of the lactation of Simmekntal cows that produce in various ways throughout the months.

Methodology. Research in the Samarkand region's Pastdargom area. It took place at the "K Eldor" farm's cattle breeding farm. Simmental cows of the III lactation that were imported from Ukraine were used as the research subject in our country. Based on the expectations for similarity, three groups of 12 cows in lactation III were chosen for the research. All groups had the same feeding and care requirements for their cows. By using techniques that are commonly used in zootechnics, the features of milk production and lactation of cows were investigated.

Result. Table 1 shows the indicators of the lactation of Simmental sires of different production types over the course of months.

Table 1 Changes in the monthly milk volume, milking period constancy coefficient, and milk volume decline index during the III lactation of cows

Month	Groups								
	I			II			III		
	Monthly amount of milk, kg	Coefficient of constancy of the milking period	Index of decrease in milk quantity	Monthly amount of milk, kg	Coefficient of constancy of the milking period	Index of decrease in milk quantity	Monthly amount of milk, kg	Coefficient of constancy of the milking period	Index of decrease in milk quantity
I	396	100,0	66,5	385	100,0	78,2	363	100,0	75,6
II	518	130,8	87,0	492	127,8	-	480	132,2	-
III	595	144,9	-	463	94,1	73,6	442	92,1	92,1
IV	502	84,4	84,4	430	92,9	87,4	395	89,4	82,3
V	475	94,6	79,8	388,5	90,3	79,0	346	87,6	72,1
VI	394	82,9	66,2	323	83,1	65,6	291	84,1	60,6
VII	365	92,6	61,3	288	89,2	58,5	245,5	84,4	51,1

VIII	324	88,8	54,4	236	81,9	48,0	200	81,5	41,7
IX	288	-	48,4	222	-	45,1	184	-	38,3
X	220	-	37,0	177	-	36,0	172	-	35,8
Average	4077,0	102,3	-	3404,5	94,9	-	3118,5	93,9	-

As seen in the table, the highest monthly amount of milk in group I cows was found in the third lactation; this indicator was equal to 14.59% of the amount of milk in lactation; in group II, the highest monthly amount of milk was found in the second lactation; it was equal to 14.45% of the amount of milk in lactation; and in group III, this indicator was also found in the second lactation; it was equal to 15.39% of the total amount. Figure 1 provides more evidence supporting this knowledge. This figure's data analysis reveals that cows' milk content is maintained at the same level in each group. This information is further supported by what is shown in Figure 1. In all groups, the milk content of the cows is kept at a good level up until the sixth month of the milking period, at which point it starts to gradually diminish, according to analysis of the data in this figure.

We studied milk yield indicators in the III lactation of cows of different production types (table 2).

Table 2 Indicators of milk productivity in the III lactation of cows of different types

Indicators	Groups					
	I		II		III	
	$\overline{X} \pm S_{\overline{x}}$	C_v,%	$\overline{X} \pm S_{\overline{x}}$	C_v,%	$\overline{X} \pm S_{\overline{x}}$	C_v,%
Amount of milk, kg	4077,0±71,9	5,86	3404,5±66,6	6,40	3118,5±75,9	8,07
fat in milk,. %	3,98±0,053	4,46	4,17±0,045	3,62	4,26±0,048	3,79
Milk fat yield, kg	162,2±0,37	5,30	142,0±1,72	4,03	132,8±1,96	4,90
Amount of milk in 4%, kg	4056,6±35,5	2,91	3549,2±43,1	4,03	3321,2±49,1	4,91
Coefficient of milk production, kg	817,5±9,83	3,98	652,3±8,53	4,34	588,8±10,2	5,77
Live weight, kg	498,7±7,97	5,30	521,9±6,36	4,04	529,6±7,15	4,48

According to the data in the table, cows in group I produced 672.5 kg more milk during lactation than cows in group II and 958.5 kg more milk than cows in group III, milk fat output was 20.2 and 29.4 kg, respectively ($P > 0.999$), and the amount of 4% milk was 507.4 ($P > 0.999$) and 735.4 ($P > 0.999$) kg. The milk production coefficient was 165.2 kg ($R > 0.999$), and 228.7

The milk production of the cows in group I was 377 kg (10.2%), the milk fat content was 0.18%, and the milk fat output was 22.2 kg greater than the Simmental breed's minimum needs.

The dynamics of milk volume, milk fat output, and 4% milk content for Simmental cows in experimental groups of various production styles are shown in Figures 3, 4, and 5.

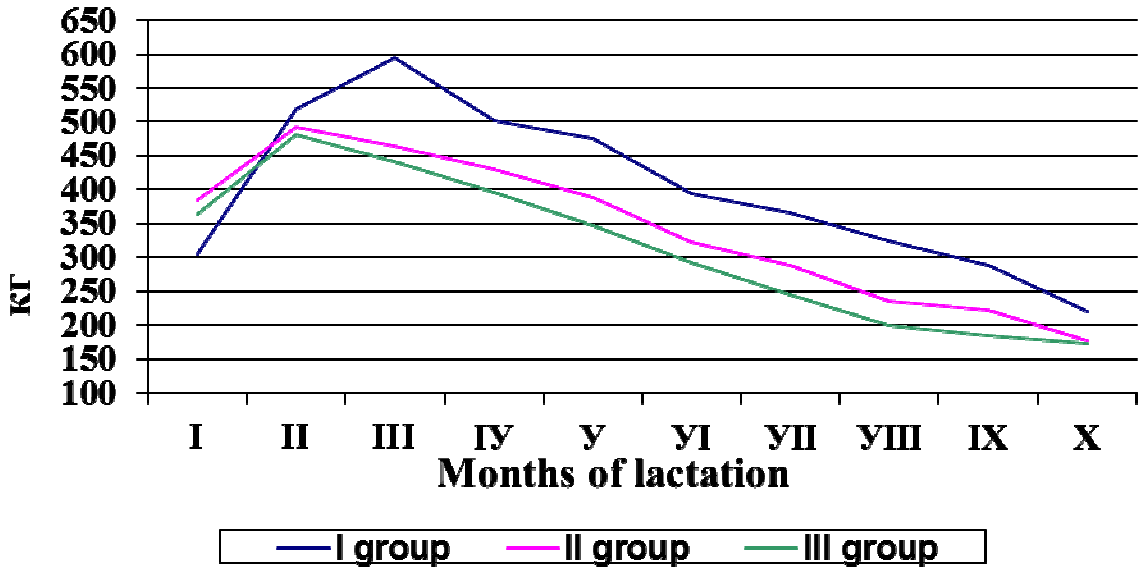

Figure 1 Changes in the lactation curve of cows

Therefore, independent of the body's production kinds, investigations have demonstrated that imported Simmental cows lactate at a level that meets standards in our republic.

Conclusion

1. The results of the research revealed that the milking period of Simmental cows in all groups, regardless of the production type, was the same, and they produced a good level of milk productivity.

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