

**RESEARCH OF MILK PRODUCTION FROM BĂLȚATA ROMÂNEASCĂ COWS ON
THE NUCET FARM – DAMBOVITA COUNTY**

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Abstract

The Bălțata Românească race is considered the "golden" race of romanian animal husbandry, therefore the paper presents the maintenance and feeding process and also the milk and fat production obtained in the Nucet farm. The Bălțata Românească race, with mixed features production, meat-milk, was the main breed of cattle in the country, both by numerical weight as well as good characteristics for both productions. Cattle in this race is expected in the future be better targeted towards the production of meat, but maintaining the general skills of productive mixed type. They remain the main supplier of beef and cattle country - and together with other races involved in the coverage requirements of milk and milk products.

Keywords: cattle, Bălțata Românească race, milk production, fat percentage.

1. INTRODUCTION

Nucet livestock farm is located in the county of Dambovita, DN 71 to 20 km and 60 km from Bucharest, Targoviste, in the area Nucet. The farm, being modernized with EU funds (SAPARD), totaling approximately 1.7 million lei is placed over an area of 4.2 ha, the land on which they stand: the administrative building, room milking, animal shelter, separate categories age, storage of agricultural machinery, feed storage, paddock. The total capacity of the farm is 140 heads, of which 60 milk cows heads, 10 heifers, female and male youth.

Existing cattle breeds: Romanian Spotted 50% (Bălțata Românească), Romanian Black Spotted 50% (Bălțata cu Negru Românească). The farm is recorded in basic agriculture and register official documents derived from them (certified - cheap property, health certificate - Veterinary transport, etc.), with serial number encoded along with key information about the owner, age, sex, performance, production, health, etc.

Was used for animal identification by ear tag distinguishes them, an operation that involves the application of cattle ear on plastic plates containing insert registration number.

2. MATERIAL AND METHOD

In this paper the biological material studied is Romanian Spotted 10 heads. Romanian Spotted is a local race improved, resulting from absorption of

cattle crossings Steppe Grey (Sura de stepa) var. Transylvanian and the Simmental breed.

The first Simmental cattle imports were made in 1860 from Austria and Switzerland, but was massive importation after 1882. Over time, the action of "simmentalization" led the Sura de stepa race absorbing zone extension, eventually giving birth to new breed Romanian, which has some similar features Simmental breed, which, however, differs in own characteristics.

Bălțata Românească being increased and exploited in geo - climate similar conditions that the country of origin, having morphological characteristics of productive enterprises (milk and meat), has expanded relatively rapidly in Transylvania, Banat and Bucovina, superior performance both for production and for his skills for some agricultural work.

Cores were made strong race in the south, are preferred for milk production by dairy farmers supplying the capital in particular (Dobroiești, Slobozia and others).

Conformation and racial constitution is characterized by pleasant appearance and format rectangular body (119% 124% cows and bulls). The head is of medium size, long torso, wide and deep, with straight and level top line and legs long and robust, sometimes with aplomb defects.

Color "coat" is mottled yellow, pigmented areas with a wide range of shades from yellow to yellow - or red copper, always head, limbs and tail are white tuft whole body is balanced and properly complied with, but with some defects inherited from the local breed and can be removed through a continuous and directed selection.

Constitution is generally robust, moderately lively temperament, gentle and submissive behavior, and mixed type specific conformation of meat – milk production.

Race semi-early, make full maturity at 4 to 4 ½ years and use for breeding to 18 to 22 months. Along with the good qualities of milk production, race is leading in the direction of commendable qualities of meat.

Depending on the applied fattening, average daily gains youth made between from 0.9 to 1.2 kg. The specific consumption between 5.2 to 6.54 U.N. / kg gain. At the age of 14 to 15 months can get a weight exceeding 540 kg.

Under normal conditions, young females for breeding easily accomplished at the age of 6 months body weight of 170-180 kg, 290-310 kg at the age of 12 months and 420 - 430 kg in 18 months, 500-530 kg at 24 months.

Depending on the degree of fattening, slaughter yield is 52-54% for adult cows and 54-57% in well fattening young.

Compared favorable morphological-productive characteristics, race presents some flaws, which have generally been inherited from the Grey Steppe and relate to the following main problems:

- general physical development is still not on track parameters, sometimes narrow and little rump dressed in muscle, tail and sacrum caught up very developed;
- production capacity varies due to different degree of consolidation of distribution of populations in areas of race;
- suitability for mechanical milking is low, as illustrated by the "udder score" of 3.65, the rate of milk yield averaged 1.09 liters per minute and breast index of 43.9%.

3. RESULTS AND DISCUSSIONS

Maintenance system of the cattle in this farm is chosen depending on time of year (summer, winter) as follows:

- Summer: maintenance of cows in stalls
- Winter: maintenance of the shelters closed unbound cows.

Maintenance cows indoors

In this variant maintenance is feeding dairy cows with green fodder (crop harvested specifically set up) managed to stall, in the house or paddock.

Unbound maintenance of the cows in closed shelters

Cattle housing is provided with four walls, is divided and has wide doors, sliding, communicating with the paddock.

The cows access in the paddock is free, except during the bad weather. The house is furnished three functional areas: rest area, feeding area and the area of motion (movement).

Dairy cows feed is largely assured from 212 ha produced farm on which it holds by lease from local owners (land divided into 73 plots), and brewers grains obtained from the alcohol factory in Targoviste.

Forage ration per head/day for dairy category with an output of 18 to 20 l milk / head/day, is composed of: sowing 14 kg, 6 kg brewers grains, beet chips 4 kg, 7.2 kg middlings.

The ingredients used in middlings obtaining are: maize 3 kg, 1 kg wheat, 0.5 kg wheat bran, 0.5 kg sunflower meal, oats 2 kg, premix-64 0.2 kg.

The day middlings administration is as follows: allowance after the morning milking - 10 kg silage, beet chips 4 kg, 3 kg alfalfa hay, middlings 4 kg; allowance at noon - 4 kg silage, 6 kg beer grains, middlings, 3.2 kg; allowance after the evening milking - 2 kg alfalfa hay, straw 2 kg.

Table 1. Middlings requirements for 7 days

Ingredient	Kg
Maize	1295
Weat	432
Wheat bran	216
Sunflower meal	216
Oats	864
Premix k – 64	86
Total	3 109

Table 2. Middlings management mode for a day

Allowance after the morning milking		Allowance at noon		Allowance after the evening milking	
Ingred.	Cant. (kg)	Ingred.	Cant. (kg)	Ingred.	Cant. (kg)
silage	10	silage	4	alfalfa hay	2
beet chips	4	beer grains	6	straw	2
alfalfa hay	3	middlings	3,2	-	-
middlings	4	-	-	-	-

The milk from Romanian Spotted cows obtained from milking cows with milking facility is stored in the storage tank and cooling of milk. The amount of milk produced is an average of 3500 l / year with an

average of 4% fat and is sold at S.C. Natura Targoviste and S.C. Danone S.A.

The data presented in the following table, note that yields are obtained in 2008 about 35% higher than in 2009 because at that time (September) cattle diets containing green mass which helps to obtain large quantities milk and dairy should not consume the maintenance of the energy accumulated.

Table 3. The amount of milk produced in different years from a herd of 10 cows

Year 2008 *			
No.	Morning	Evening	Total
1	10,1	9,6	19,7
2	12,0	11,5	23,5
3	10,2	10	20,2
4	11,2	10,7	21,9
5	9,6	9,9	19,5
6	9,5	9,5	19
7	9,7	9,4	19,1
8	10,8	10,5	21,3
9	11,1	10,7	21,8
10	10,1	9,7	19,8
Total	104,3	101,5	205,8

Year 2009 **			
No.	Morning	Evening	Total
1	7,1	6,8	13,9
2	9,1	8,5	17,6
3	7,4	7,0	14,4
4	8	7,6	15,6
5	8,1	7,5	15,6
6	7,2	6,8	14
7	7,1	6,5	13,6
8	7,9	7,4	15,3
9	8,4	7,9	16,3
10	7,5	7,1	14,6
Total	77,8	73,1	150,9

* september ** march

In this graphic are highlighted milk yields obtained from the 10 cows studied during September 2008.

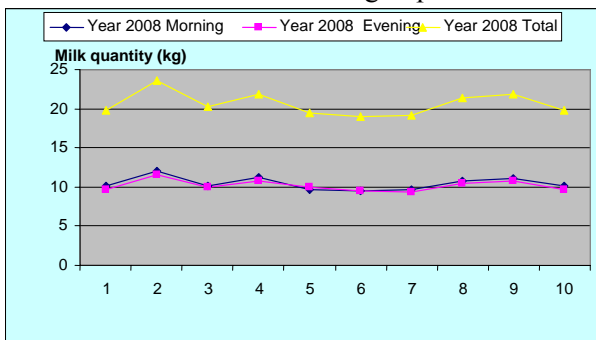


Figure 1. Milk productions in 2008

In the following chart are highlighted milk yields obtained from the 10 cows studied during March 2009.

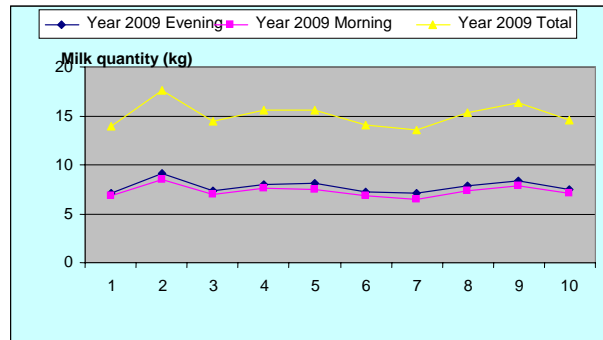


Figure 2. Milk productions in 2009

In Figure 3 are highlighted milk yields obtained from the 10 cows studied in 2008 and 2009.

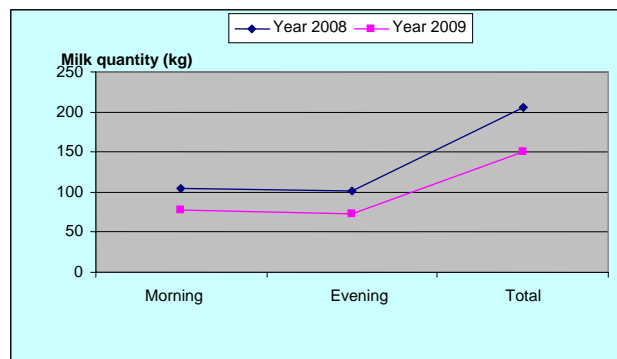


Figure 3. Milk productions in 2008 and 2009

In this graph are shown the percentages of milk fat obtained from the 10 cows studied in 2008 and 2009.

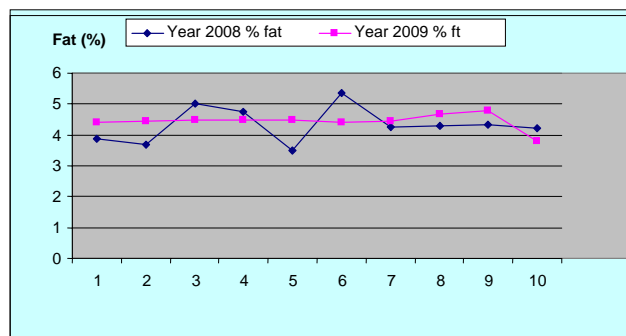


Figure 4. The percentages of milk fat

Figure 5 showed the total percentage of milk fat obtained from the 10 cows studied in 2008 and 2009.

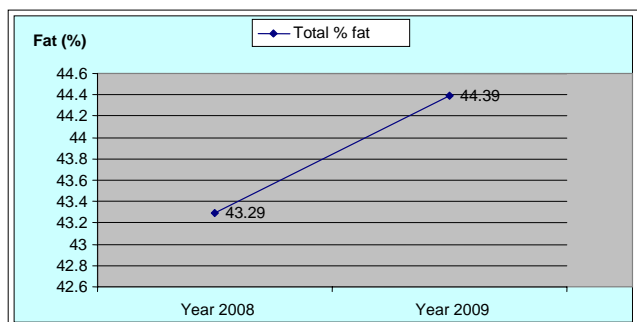


Figure 5. Total% fat in 2008 and 2009

4. CONCLUSIONS

Increase race Romanian Spotted, brings a number of advantages both farmers and the national economy:

- can be used for breeding at 18 to 22 months;
- economic life of 8-9 lactations, or more;
- ensure milk production with an average of 3500l /year;
- percentage of fat by an average of 4%.
- if well-maintained race Romanian Spotted give good milk production (3500-4000 l milk, 3.8% fat);
- return to slaughter varies between 52-57% in young than fat.

5. REFERENCES

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