

QUALITY, POTENTIAL AND LEVEL OF BUFFALOS PRODUCTION IN ROMANIA

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Abstract: *Buffalos have common ancestry with other forms of cattle. Buffalos importance result from their economic value and reported at the formation, spreading, the possibilities of expansion and recovery of territories in which other cattle can not adapt and can not ensure proper productions. Buffalos represents about 10% of the world cattle herd. In the important buffalos breeding countries, buffalos make an substantial economic contribution, in conditions where other species of cattle are not adaptable or achieved production levels much lower. Buffalos in Romania can be bred for the production of milk and meat, both as organic and as a traditional product.*

Key words: *buffalos, milk, meat, quality, production level*

INTRODUCTION

Buffalos represents about 10% of the world cattle herd. In the important buffalos breeding countries, buffalos make an substantial economic contribution, in conditions where other species of cattle are not adaptable or achieved production levels much lower. The most important buffalos breeding countries are: India, Pakistan, Vietnam, Egypt, Nepal.

Buffalos have common ancestry with other forms of cattle. Buffalos importance result from their economic value and reported at the formation, spreading, the possibilities of expansion and recovery of territories in which other cattle can not adapt and can not ensure proper productions.

Buffalos breeding in Romania is a traditional activity. Buffalos had entered in the Carpathian-Danubian space, with migration of Huns and Avars, through the south of Bulgaria. Buffalos in Romania can be bred for the production of milk and meat, both as organic and as a traditional product.

MATERIALS AND METHODS

We used statistical analysis methods, with retrospective studies, with multivariable secondary data, provide by Romanian Ministry of Agriculture and Rural Development.

All the data analized are provided by this institution and represents the values achieved in July 2016.

RESEARCH RESULTS

The Romanian buffalo breed originates from the Mediterranean type of water buffalo. Introgression has been made since 1960 from Murrah buffalo stock from Bulgaria. Herdbook was established in 1987. In the Romanian population there exist three different buffalo types: Carpathian type, Danubian buffalo and the one improved through the Indian Murrah. The most numerous Romanian buffalos are the Carpathian type, with valuable gene resource, well adapted to the cold climate for buffalo.

Table 1

Buffalo livestock in Romania* (heads)

Nr. Crt.	Category	TOTAL	TOTAL State sector	TOTAL Private sector	from which	
					Private associations	Family farms
1	Buffalos TOTAL	18.369	457	17.912	1.416	16.496
from which						
2	Buffalo cows	12.421	165	12.256	986	11.270
3	Youth pregnant buffalos	1.051	5	1.046	171	875

*Source: Romanian Ministry of Agriculture and Rural Development
* July 2016*

The largest herds of buffalos are found in the counties of Salaj, Cluj, Maramures, Bihor, Brasov, Satu Mare. In the counties of Sibiu, Brasov, Cluj for the main exploitation is production of milk and Salaj and Bihor counties for meat and milk.

Table 2

Geographic areas distribution of buffalos in Romania* (heads)

Nr. Crt	REGION	TOTAL SECTORS	from which:			
			STATE SECTOR	PRIVAT SECTOR		
				TOTAL	Private associations	Family farms
1	BUCURESTI - ILFOV	0	0	0	0	0
2	CENTER	4.783	457	4.326	707	3.619
3	NORTH EAST	65	0	65	27	38
4	NORTH WEST	10.776	0	10.776	0	10.776
5	SOUTH EAST	12	0	12	0	12
6	SOUTH MUNTENIA	1.474	0	1.474	510	964
7	SOUTH WEST	415	0	415	60	355
8	WEST	844	0	844	112	732
TOTAL		18.369	457	17.912	1.416	16.496

*Source: Romanian Ministry of Agriculture and Rural Development
* July 2016*

Buffalos milk production in Romania is around 1,700 liters per lactation, with 132 kg pure fat and fat percentage of 7.49%.

Buffalo milk has a complex composition and is characterized by a high share in dry substances and fats, milk produced by high share all other species of farm animals. It also has a high content of vitamins and mineral compounds. Nutrient quality is much higher than in other species.

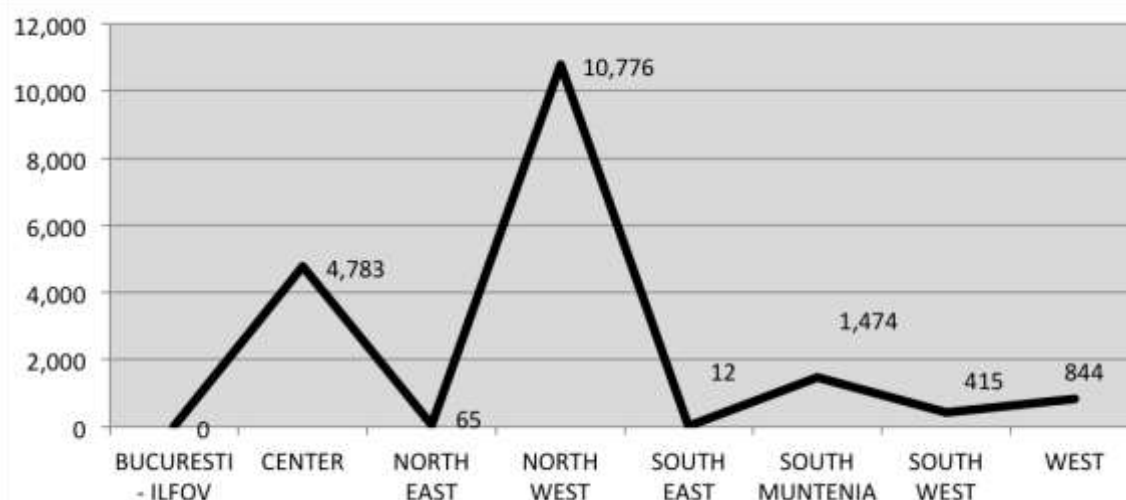


Figure 2 Buffalos distribution in Romania* (heads)

*July 2016

Thus, representative values of the principal components of the milk of buffalo are (in g / 100 g milk):

- total dry substances - 17.4;
- fat - 7.4;
- protein - 4.1;
- casein - 3.4;
- albumin - 0.6;
- lactose - 4.8;
- subst. Minerals - 0.7;
- calcium - 185 mg / 100 g milk;
- phosphorus - 137 mg / 100 g milk.

Table 3

Buffalos milk production in Romania* (in hl)

Nr. crt.	Sectors productions	TOTAL	Technological consumption	Family consumption	Trading on the market	from which:	
						direct	to companies
1	State sector	580	60	0	520	0	520
2	Private sector	130.767	22.126	46.421	62.220	46.435	15.785

Source: Romanian Ministry of Agriculture and Rural Development

* July 2016

CONCLUSIONS

Over time, the area of spreading and the herds of buffalos suffered numerous changes, now over 90% of it can be found in Transylvania.

Buffalos represents approximately 11% of the total number of cattle and 97% of the increase is effective on the Asian continent. Used also for housework, the main priority for exploitation for food productions character differs from one area to another.

In Sibiu, Brasov and Cluj the main exploitation is milk and in Salaj and Bihor counties for meat and milk. In fact, it reveals an overall increasing trend in the country to produce more milk because the buffalos are generally slaughtered at early ages and low body mass.

The live stock of buffalos in our country varied appreciably over time. From entering of buffalo in the country to the middle of the last decade, populations of buffalos increased a total reproductive isolation, which caused a pronounced consolidation genetic

fixation of morphoproductive features their own, different from other populations in neighboring countries or countries of origin.

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