

GENETICS - SOURCE FOR IMPROVING THE QUALITY OF BEEF IN ROMANIA

IOANA MIHAELA BALAN¹, SIMONA CRISTINA CONSTANTINESCU¹, IOAN CSOSZ¹,
CARMEN CLAUDIA DURAU¹, RAMONA MARIANA CIOLAC¹, OANA MARIA SICOE¹

¹ *Banat University of Agricultural Sciences and Veterinary Medicine "King Michael I of Romania" from Timisoara,
e-mail: ioanambalan@yahoo.com*

Abstract: *In the past 25 years the livestock in Romania have dropped dramatically, which affected the entire Romanian economy. One of the most affected sectors of the Romanian livestock sector was cattle sector. Beef quality decreased exponentially in those years. Currently, in Romania are applies measures to redress the beef quality and quantity, by exploiting recognized breeds of cattle for meat.*

Key words: *beef, quality, bovine genetics, breeds for meat production*

INTRODUCTION

In the last years the Romanian agriculture has been in a decline that affected the whole national economy. Animal husbandry as part consistency Romanian agriculture has suffered through a drastic reduction in livestock.

One of the most important species fished in Romania was bovine, but it was one of the species most affected by the new conditions of Romanian agriculture. One of intervention measures adopted in the whole country to redress these deficiencies is to improve bovine genetics.

MATERIALS AND METHODS

During the research we followed the evolution of bovine population structure in Romania, but we analyzed the structure of cattle breed higher for meat production.

These herds of cattle were imported in recent years, and the data presented are referring to the years 2013 and 2014.

We analyzed cattle herds on different age groups, namely:

- Cattle under 1 year old;
- Cattle from 1 to 2 years old;
- Cattle of 2 and over 2 years old.

Also, we considered it appropriate to analyze the buffalo herds, because in Romania there was a great tradition in this regard. Although their number is reduced, yet there is still interest, even on a small scale, in raising this animal.

We considered it appropriate to analyze the differences between the two years, on 01.06, the cost for short-term evolution of these livestock.

Referring breeds of cattle, we analyzed the performance flocks breeds that were imported in Romania for bovine genetic improvement fund, such as:

- Aberdeen Angus
- Limousine
- Charolaise
- Romagnola
- Galloway
- Highland
- Aubrac

RESEARCH RESULTS

The herds increased in all categories: cattle under 1 year old with 1.291 heads, cattle from 1 to 2 years old with 304 heads, cattle of 2 and over 2 years old with 13.656 heads and buffaloes with 25 heads. (Table 1)

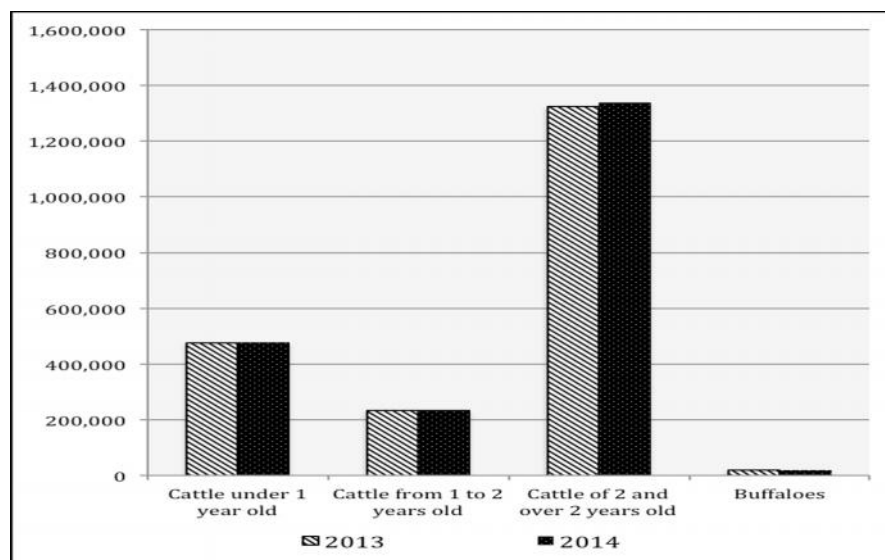


Figure 1. The structure of bovine population in Romania in 2013 and 2014

Table 1

The differences between cattle herds in 2013 and 2014

Nr.crt.	Year		01.06.2013	01.06.2014	+/- 2014/2013
	Category				
1	Cattle under 1 year old		475.422	476.713	1.291
2	Cattle from 1 to 2 years old		234.094	234.398	304
3	Cattle of 2 and over 2 years old		1.325.035	1.338.691	13.656
4	Buffaloes		19.401	19.426	25
	TOTAL BOVINE		2.053.952	2.069.228	15.276

Source: www.industriacarnii.ro

Also, by analyzing purebred herds, we found it necessary to analyze the half-breeds (metis) of these breeds. The importance of these half-breeds (metis) is well known, being important for the contribution that they bring quality indigenous populations. (Fig. 2).

These bovine herds are registered in Romania's national studbook.

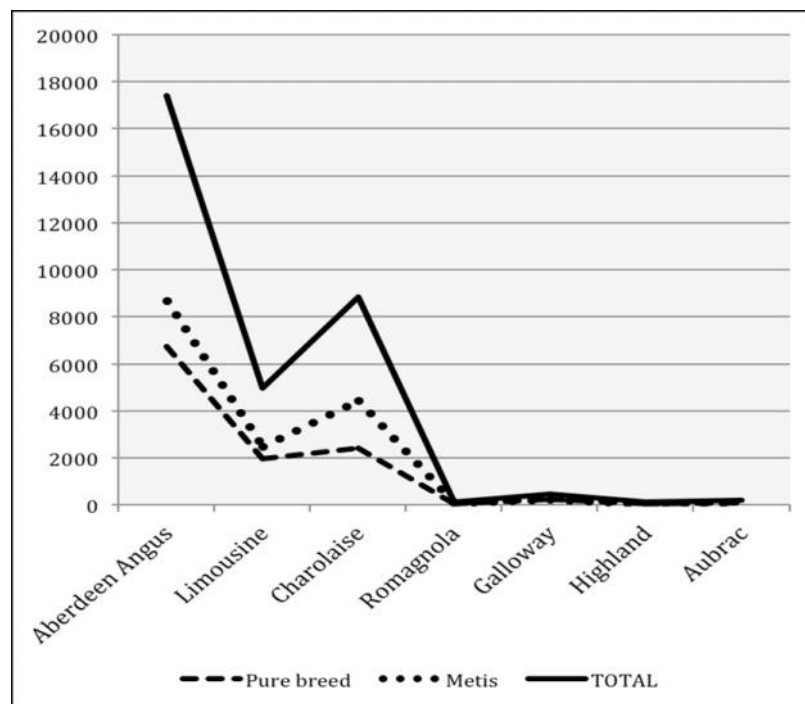


Figure 2. Comparison of purebred cattle herds and metis in Romania in 2014

Table 2
Distribution by purebreds and metis herds cattle for meat production in Romania 2014

NR. CRT.	BREED	Pure breed	Metis	TOTAL
1	Aberdeen Angus	6750	1960	8710
2	Limousine	1969	528	2497
3	Charolaise	2446	1982	4428
4	Romagnola	79	-	79
5	Galloway	248	-	248
6	Highland	67	-	67
7	Aubrac	104	-	104
TOTAL		11663	4470	16133

Source: www.industriacarnii.ro

Studbook of Romania issued in the years 2013 and 2014, a total of 1,095 certificates of origin, with an increase in their number with 789 in 2014 compared to 2013. (Table 3)

Table 3
Breed distribution of the number of certificates of origin issued in Romania

	BREED	No.of certificate 2013	No.of certificate 2014	+/-
1	Aberden Angus	24	663	639
2	Limousine	32	51	19
3	Charolaise	97	177	80
4	Galloway	0	51	51
TOTAL		153	942	789

Source: www.industriacarnii.ro

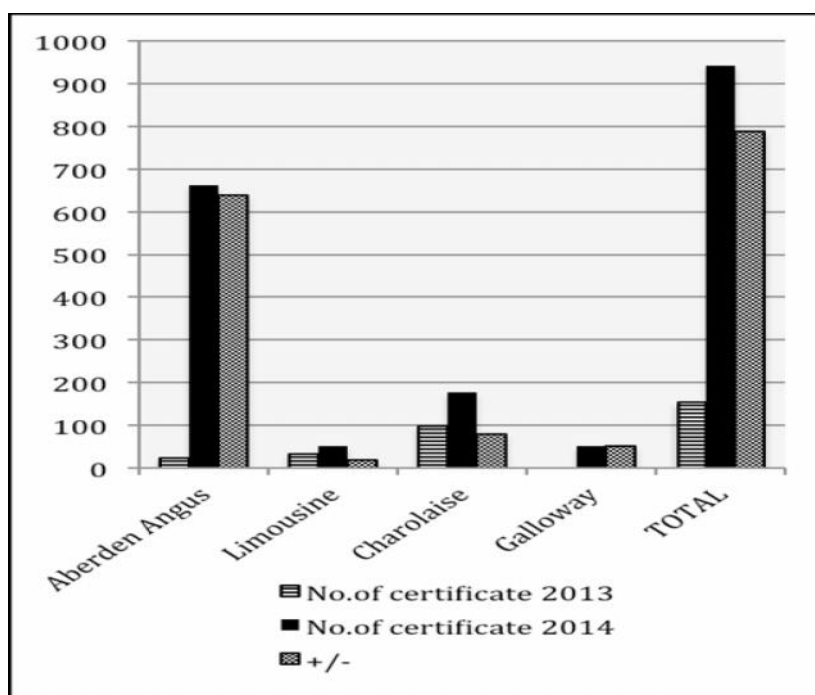


Figure 3. Numer of certificate of origin issued in Romania (2013 and 2014)

CONCLUSIONS

Quality of beef has declined dramatically in Romania, but the acquisition by farmers of genetic valuable animal, the quality of beef in Romania will be much improved. The herds of the best breeds of beef cattle in the world is growing in Romania. Also, Romania began issuing certificates of origin for animals of these breeds and herds half-breeds of these breeds are growing, which confirms that the quality of beef in Romania will be much improved in the coming years.

REFERENCES

1. **BALAN, IOANA, PETROMAN, CORNELIA, PETROMAN, I., MARIN, DIANA,** Beef carcasses quality in Romania according to EUROP System - International scientific symposium "Management of durable rural development", Lucrari tiintifice, Seria I Vol XI(4), Facultatea de Management Agricol Timi oara, ISSN 1453-1410
2. **MUMMED, YESIHAK, YUSUF, WEBB** Edward Cottington- Carcass quality audit - A strategy to improve beef sector in Ethiopia – African Journal of Agricultural Research, Vol. 10(28), pp. 2731- 2737, 9 July, 2015 DOI:10.5897/AJAR2015.9524 Article Number: 986882153974 ISSN 1991-637X
3. *** - www.industriacarnii.ro
4. *** - <http://rma.ro/>