

## QUALITY OF ROMANIAN PIG MEAT DEPENDING ON CHEMICAL COMPOSITION OF CARCASSES CLASSIFIED ACCORDING TO EUROPEAN UNION MARKET REQUIREMENTS

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**Abstract:** In last years, Romania has made important progress regarding quality of pig carcasses. Those progress were based on imports of genetic material from other countries. In Romania, qualitative classification of pig carcasses in slaughterhouses began on 01 March 2006, with national scale in 2009. In last years this scale was supplemented with a new class "S". Classification is done by objective methods for assessing the lean meat content in carcass, evaluating the chemical composition of carcasses. Currently, Romanian pig carcass quality is increasing, as is apparent from the analysis of 2006 to 2014, from the beginning and up to now.

**Key words:** pig meat, quality, chemical composition, EUROP System, carasses, market, national classification

### INTRODUCTION

In Romania the important thing that has improved in the pig meat sector in recent years has been and still is meat quality. In recent years, in pig meat sector have been a number of economic situations that have affected its development needs in the context of a major Romanian economy. Pork producers in Romania have made all necessary steps to significantly improve the quality of meat in our country, due to implementation of EUROP System and payment default by the quality of pork. Implementation of EUROP System was conducted by the Romanian National Grading Commission of Carcasses of Pigs, Cattle and Sheep, assisted by experts from the European Commission. Classification of pig carcasses in slaughterhouses in Romania began on 01 March 2006. This is done by objective methods for evaluating the content of lean meat in the carcass, evaluating the chemical composition of carcasses. The methods used have been approved by a national experiment dissection, according to the EU how the fixing of reference lean meat. Classification is the operation for assessing the quality of the carcasses, depending on chemical composition of carcasses, on the ratio of the three major components of meat, fat and bone.

### MATERIALS AND METHODS

**Activity sampling.** We analyzed data on all activities on swine carcasses classification of Romania, from all year since the EUROP System was implemented in Romania, from the beginning (2006) to the present (2014 – last year completed). These data were collected by the Romanian National Grading Commission of Carcasses of Pigs, Cattle and Sheep – Pork Committee - weekly data were communicated higher authorities on European Commission. Comparing the evolution of carcasses classified in Romania quantitative and qualitative comparing their evolution can have a very real picture of the development of this sector in Romania.

**The tools of the trade:** In this analysis we used, besides total number of carcasses classified, and the amount of carcasses classified as higher categories, namely category "E" and category "U", and in the last two years the category "S" which is superior to category "E". Category "S" is the newest category in Romania, corresponding to percentage higher than 60 %.

**The main objectives** of this work are highlighting qualitative developments and identifying prospects pork quality in Romania, because Romania have a great history in pig production and the latest requirements of European Union are good opportunity for famers to increase the quality of their animals.

## RESEARCH RESULTS

EU countries category "U" is not a highly valued category, we considered it appropriate that, in the particular case of Romania, to analyze the amount of these categories. This is motivated by issues related to low quality of pork before the implementing the system EUROP when large classification of carcasses in Romania were placed in lower categories, or "R", "O" and "P" and the superior categories "E" and "S" were almost absent.

For this reason we considered relevant to analyze and carcasses to be "U" because it is, in our opinion, a category of qualifications satisfactory, especially if we consider that the low level of system implementation started when Romania Europe.

It is noted that the overall percentage of carcasses in "U" decreased each year, compared with the percentage of carcasses of category "E" increased significantly. Revealed that the percentage of carcasses in category "E" increased from 58% to 89%, then increased by about 31%, while percentage carcasses in category "U" greatly decreased by 29%, from 38 % to 9%, and in 2014 to only 6.51%.

**Table 1**

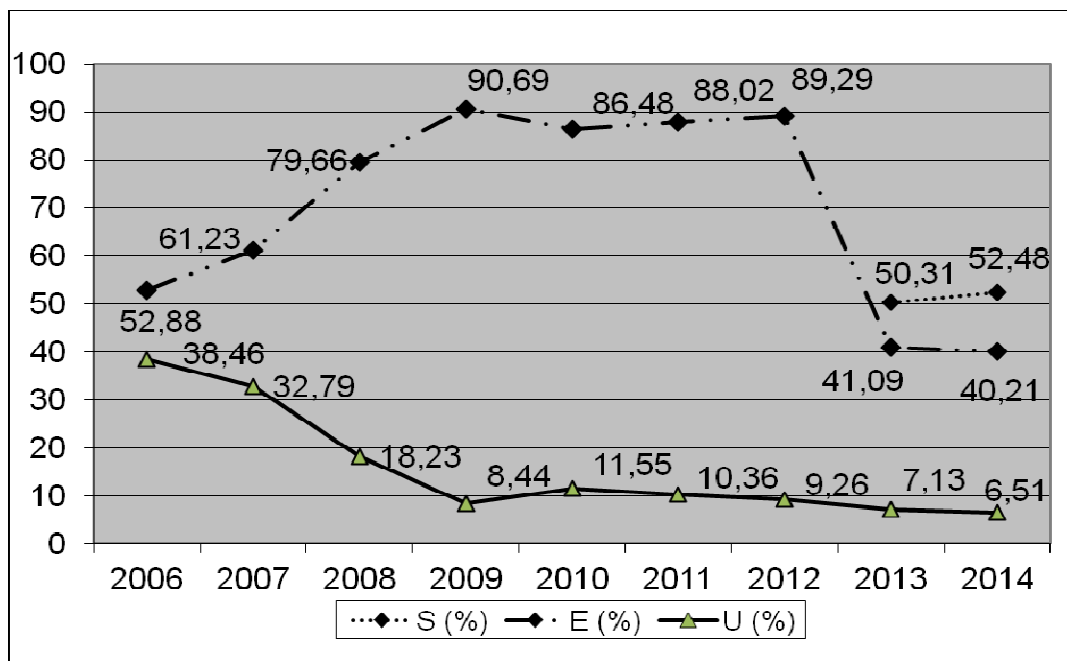
**Romanian pig carcasses classification from the beginning until the present**

SPECIFICATION	2006	2007	2008	2009	2010	2011	2012	2013	2014
S (%)	-	-	-	-	-	-	-	50,31	52,48
E (%)	52.88	61.23	79.66	90.69	86.48	88.02	89.29	41,09	40,21
U (%)	38.46	32.79	18.23	8,44	11,55	10,36	9,26	7,13	6,51
<b>Total % carcasses higher class S+E+U</b>	91.34	94.02	97.89	99.13	98.03	98.38	98.55	98,53	99,20
<b>Total carcasses classified (heads)</b>	895820	1988791	2428409	2853362	2713020	3077107	3358135	3077107	3920767

*Source: National Commission for Classification of Carcasses EUROP – Romania*

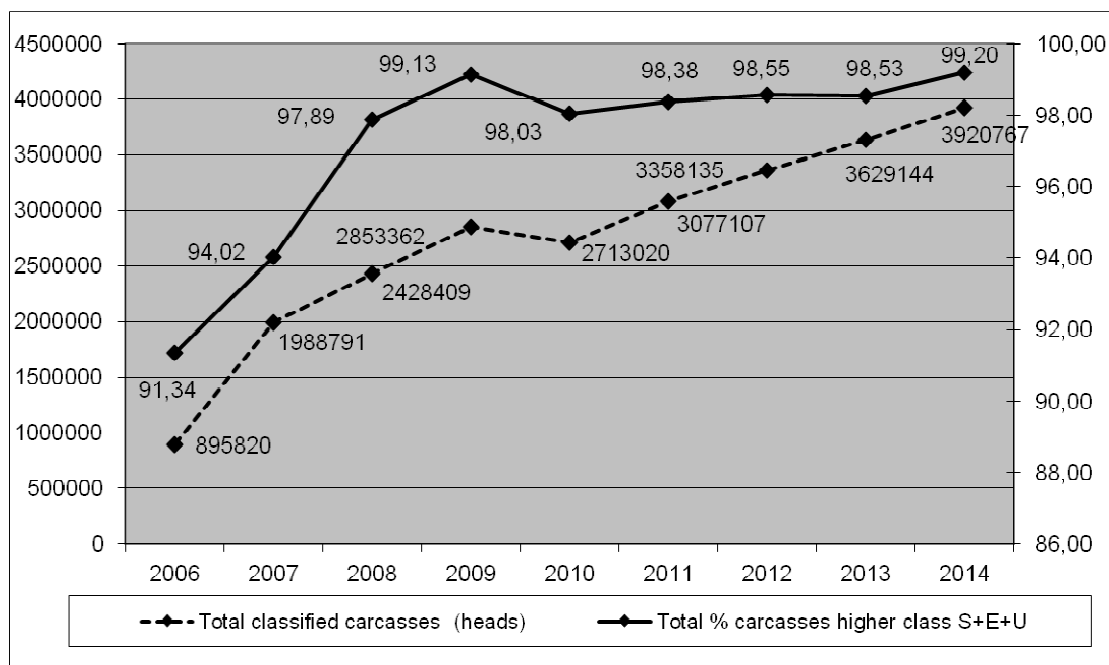
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**Fig. 1 Annual percentages of carcasses from “E” and “U” category in 2006 – 2014 and “S” category in 2013-2014**

Regarding the dynamics of higher classes percentage carcass quality compared with the evolution of the total number of carcasses classified reveals the fact that they have a dynamic parallel with insignificant deviations.



**Fig. 2 Dynamics of carcasses percentages of higher quality classes compared to the evolution of the total number of classified carcasses**

It is noted that as of 2009 carcasses upper classes totaling over 98% of total carcasses in 2009 reaching record even a percentage over 99% for the first time and in 2014 for the second time.

The authors found no relevant presentation rates and lower average carcass quality because as it stands, they have an insignificant proportion, less than 2% in recent years. These percentages can still occur resulting from low genetic variation, but still persist in Romania.

## CONCLUSIONS

Even if the number of carcasses classified in Romania has varied sensitive one year to another, their quality steadily increased from year to year, reaching a record in 2014. Entering class "S" in the classification scale in Romania aimed at stimulating this growth, which was fully realized. Romania introduced a new class "S" considering that it is not mandatory in all EU countries, is optional but for many of them. In this context, the prospects for the pigmeat market in Romania can be considered as positive, but the sector still requires state support.

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