

RESEARCH ARTICLE

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Killing out percentage for finishing pigs in AlbaniaLUAN HAJNO^{1*} FEHMI XHEMO² KUJTIM GJONI³¹Centre for Agricultural Transfer Technology²Department of Biochemistry & Agro-nutrition "F.S.N. University, Korça, Albania³Regional Agriculture and Rural Development Directorate of Elbasan

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Abstract

The study was carried out in collaboration with the Regional Agriculture and Rural Development Directorate specialists of Elbasani within the 2012-2013 periods. The objective of the study was: the assessment of the carcass yield of different pigs' breeds and crossbreds: Great White (Yorkshire), Pietren and crossbreds of Pietren X Great White (Yorkshire) (♂ X ♀). The experiment's animals consisted at a total of 136 effective leaders respectively: 50 heads of Yorkshire, 27 heads of Pietren and 59 heads of crossbreds' have been: live weight of pigs before slaughtering, hot slaughtering weight. Live weight of pigs was estimated as the difference 12 hours weighing between meals which means when the body was empty with food. Cold Yield was estimated by the ratio: (cold carcasses weight/live weight) x100. Cold weight was rated as a hot carcass weight discount 2.5-3% presenting the carcass with or without blood. The database was processed statistically using ANOVA. Results of the study are as follows: the genetic type of Great White (Yorkshire) represented by 50 heads, has had an average of the cold yield 74.9% (STDEV., 3.086); the genetic type of Pietren represented by 45 heads of 74.2% (STDEV 1.932) and the genetic type of crossbreds Pietren Great white (Yorkshire) (♂ x ♀) resulted 75.4% (STDEV., 3.043).

Keywords: carcass, crossbreds, genetic type, slaughtering, genetic type

1. Introduction

The competition of European market is an inevitable challenge for the development of pork industry in our country. The growth of human population and the income are basic factors affecting the increase of market demands and consumption of pig meat from peoples. In general, Large and White, Duroc, Landrace, Pietren breeds are managed in Albania. Today, in our country, pork production is based on breeding animals provided by Breeding Pig Centers such as: ALBIDEA- Xhafzotaj, Durrës, etc. and the imported one. There are few foreign companies such as "ALMAKO" which imports Austrian Genetics according to demands of Albanian pig farmers. In addition to serious companies (ABIDEA, ALMAKO), a lot of pig farmers import animals, which serve as reproducers (gilt, boar) in their farms, from fattening pig farms of neighboring countries (Greece, Macedonia and Montenegro). These animals, which are managed in commercial pig farms of neighboring countries, are destined to slaughtering and using them as reproducers is not rentable. Market swine is done in two forms, as live weight and carcass weight. Evaluation of animal

carcasses is carried out just before the 90's and combine meat realization in Tirana by specialists technologist. Lack of these assessments and studies has led to a real appreciation in the development of a trade in animal markets open. In many cases is applied to pigs figures 75% (radius of all head meat) and 68% figures (without head meat radius). Using a flat technological efficiency enables technical performance comparisons between farms or between a farm and a reference. Marketing developments for all our local species circumstances have undergone spontaneous open markets with some rules that time has established. To the marketing of pigs carried out in two circumstances. On the one hand farmers breed pigs, are associated with various merchants, with whom in order to achieve sales price lek / kg / live weight. The last ten years in the pork market, carcasses have been an increase in weight (3.5kg offer) This has come as the evolution of genetic types that operate in our country. Genetic Structure of sows and boars that have done to us and there has been a tendency towards genetic types that express their genetic potential well enough features to increase the share hereditary muscular and trunk length, and due to increased technological radius of carcass. So we can

say that today as feminine line is very widespread Great White race Provide 61-62 % of the population of reproductive sows and male lines operating at a significant % Landrasi races (with its type) and race Pietren 20 and 3 % respectively. Today the world are making efforts in studying and using the genotype more adaptable to the production of a carcass of which can produce proshut. Comparing breeds carcasses Dyroc, Landras and Great White show that weight 100kg race dyrock are fat than other two races. [1]. It has been also noticed a growing content of intramuscular lipids in carcasses Dyrock race, already confirmed by other authors compared the carcasses of large breeds and Landras White. [2, 3,4]. Tape also confirmed that the housing is that Flow from the Great White intersections X PR and Great White, presented with a technological performance, weight loss during the transformation respectively 30.4 %, 30.9 and 31.3% [5,6]. The carcass of pork is constructed essentially of three tissues, muscles, fat and bone. Content of bone is a stable attitude., 12-13 % (9-10 % to headless carcasses). consequently the amount of muscle and fat is roughly equal to a constant for a given weight. An average carcass weight is 80 kg composite head, muscular 52.4 %, and 24.8 % with reference fats 1986 Table 1.) Fat content is a different element in value relative to the chassis ; Coefficient of various factors of technological changes that affect the quality of meat as well. Genetic factors are the most important source of variation in technological qualities. And genetics improvement programs must adapt to different market requirements. It is also proven that pigs have non-castrated with the inferior carcass yield. [7,8]. Has undertaken studies on evaluation of carcass, making the difference according to the state. Factors associated with the production conditions have an impact on the quality of carcass. The results, in many countries to develop meat production activity, show that ' diet, may play a role in modifying the lipid composition. Other factors affecting the carcass linked with the preparation of pigs before loading, unloading, transport and slaughter. They have a huge impact and can explain up to 50 % of variations of certain criteria of quality meat. Of elements and other factors that affect the quality of the carcass can be linked to diet before slaughter time, conditions of storage, loading and unloading.

2. Material and method

Search was developed, based mainly pig farm Cërrik-Elbasan, which breeds a population heads of 25 sows, with a closed cycle production system. This farm realized in 2011 a calving fertility of 2.2 per year, with a number of piglets grabbing 9 heads/ sows / year, produced 495 total disconnect and pigs heads with a score of 420 kV live weight meat. From this farm because even small operational capacity of the slaughterhouse and the real possibility of selling the pigs were evaluated for meat radiance of 35 (10 heads and 25 heads race Pietren big white race) heads stemming from the expanded reproduction herd. At the same time assessing the radius caved meat in pigs market areas of the city and the city Mamurras Fush - Kruja. In total the study were 131 heads (live weight / carcass weight, carcass),. Of which., Great White race 50 head., Race and intersections of race 30 heads Pietren Great White X 51 heads / see. tab nr 1) Initially took evaluation by phenotypic and morphological attributes and farm cases relied on documentation database. Highlights of slaughterhouses supplied with pigs from the same farm. Farms composition was assessed by mating racially and committed, on the basis of which were evaluated for seed origin. Farms that were included in the study. It was originally Realize herd recording and matriculation, this being recorded continuously in the respective tables. Before the start of the study were recommended by tables of food Schauman company, according to the physiological sows and meat pigs weaned and fattening foods used during different periods of breeding (piglet age 2, and adult guinea pig end fattening) are consisted of corn, wheat, soybean and corn spring. Peas in the ration formula, varies from 45 % (piglets) to 66 % (adult pigs) and 70 % (end fattening pigs). Reports of soluble lysine / Net Energy Required respectively are given upon request 4.9gr (piglets), 3.7gr (adult pigs), and 3.1 (end fattening) g / Mcal. En weaned, meals are distributed as desired. In fattening the same energy rationing plan, based on the live weight of pigs is applied with a maximum allocation of 60 kg/ body weight for males (EN 6100 kcal / day) and 80 kg for women (EN 6730 kcal / day). Yield was calculated from the ratio cold ; (Weight cold / live weight) x10. Weight cool is it that its was hot early, and by weight at slaughter 3.0dhe/ose applying a 2.5 % discount by presenting the carcass (with or without blood). They analyzed data below. For each pig were analyzed in the study received the following signs : Sex, live

weight before slaughter, slaughter weight hot (in the case of sex, there have been differences because both men and women, on farms is applied ovarioectomy females and males castration) and live weight pig carcasses were last assessed between meals, rest and weighing (body took when animals were empty by the food, the evolution of the weight of tissue). Before the start of the study was defined a standardized protocol for weighing ; (live weight corresponded to the weight carried eight hours after the last meal and the hot carcass weight of slaughtered was rated 24 after the last meal., Taking into consideration our conditions, not industrialized in this direction was applied difference (+ - 3 %) For the evaluation and processing of the data collected was used " ANOVA, the computer program EXCEL (Mean, DS. CVs., Etc.)

Results and discussion

As seen from the results tab no. 1 lead in the range of scores of individuals have meat derived from intersections, highlighting intersections with very different genetic types with each other as they are in this case Great White race to race are Pietren. These two races have greater genetic distance between them and in this case heterozyt phenomenon finds its expression realizing satisfactory add weight and a reward in technological efficiency (75.4 % in our case). If parent will refer to the references for this purpose, for this type of junction, resulting offspring with a technological efficiency 73-78 % [9]. Having analyzed the situation of our farm, with a breeding incomplete, our results are kënaqëshme.Në case of realizing efficiency Great white race, we see a stable value. faced it with references to this end result 73-76 % and 74,676 % in our case.

Table 1. Carcasses yield by genetic type

<i>Indicators</i>	<i>Genetic type</i>			<i>Total</i>
	Bardha e Madhe	Pietren	PR X Bardha Madhe	
The average number of heads	50	27	59	136
Live weight before slaughter (kg)	87.84	86.96	88.69	
Cold carcass weight (kg)	65.766	64.518	66.89	X
Performance pigs carcass%	74.870	74.192	75.44	X
STDEV	3.08	1.93	3.04	X

This is explained by the fact that this race to us is very familiar and know my farmer breeding technology of thanks. In the estimated 50 heads, in our study the technological yield results in 74 676 % possession. Pietren Race is a race that appeared good enough mishatake its qualities, as when mnaxhoet race as cigars and many more when managed intersection of race, as the male line. stands for quality and nbjë mishatake muscle volume, numerous studies conducted have resulted in an average yield technological + 74 % - 76 as race cigars and up to 78 % at intersections. in our case were obtained in 27 head race studium resulted cigars and 74,192 % carcass yield, good result in our conditions. Based on the results gathered from the survey conducted in 136 breeds of pigs, Great White., Pietren and their intersections arijmë the conclusion that; -In our country despite the difficulties ahead, carcass yield resulted respectively., 74.870%., 74.192%., 75.44%., These satisfactory results by prominent yield intersections., We think that it is necessary to be reared by food norms by growth stages to get the best supplements for weight gain and simultaneously meat

pigs that have the genetic potential to be used for race intersections with major genetic differences;

3. References

4. Steane D E: **Comparison of five types of pig crosses. II. fresh meat quality and sensory characteristics of dry cured ham** Res. Develop. Agric. 1986, 79: (3): 153-157
5. Bout J, Girard J.P, Sellier P, Runavot J.P: **Pork of low technological quality with a normal rate of muscle pH fall in the immediate post-mortem period. The case of the Hampshire breed.** Journées Rech. Porcine en France. 1990, 22: 29-34
6. Hovenier R, Kanis E, Van Asseldonk T, Westerink N G : **Genetic parameters for carcass composition and pork quality estimated in a commercial production chain.** Livest. Prod. Sci. 1992, 32: 309-321.
7. de Vries A.G, Hovenier R, Brascamp E W, Merks J W M: **M uscle development of livestock la animals.** 44 th Ann. eet.EAAP, Aarhus. Denmark
8. Buscailhon S, Monin G: **Chemical and fatty acid composition of “Lacón gallego” (dry- cured**

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- pork foreleg) differences between external and internal muscles.** VPC, 1994, 15: 23-48.
9. Edwards S A, Wood J D, Moncrieff C B, Porter S J: **Effects of breed and slaughter weight on longissimus –HAL** Anim. Prod. 1992, 54: 289-297.
10. Quiniou N, Courboulay V, Salaün Y, Chevillon P: **Conséquences de la non castration des porcs mâles sur les performances de croissance et le comportement comparaison avec les mâles castrés et les femelles.** Journées Rech. Porcine. 2010, 42: 113-118
11. Chevillon P, Dubois A: **Vautier A Impact de la durée de mise à jeun, du mode d'alimentation et d'élevage sur la qualité technologique des jambons cuits.** TechniPorc. 2006, 29: (2): 29-38
12. Garcia-Marcias J A, Gispert M, Oliver M A, Diestre A, Alonso P, Munoz- Luna A, Siggens K, Cuthbert –Heavens D : **Comparaison des produits issus de trois types génétiques de porcs charcutiers.** Journal of Animal Science. 1996, 63: 487-496.