

STUDY ON TECHNOLOGICAL ASPECTS RELATED TO THE GROWTH OF THE ABERDEEN ANGUS BREED IN ROMANIA

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Abstract

The study looked at the analysis of the growth and exploitation of bulls, cows and young bulls of the Aberdeen Angus - black and red - both in semi-open shelters, in paddocks, outdoors and pasture. The Aberdeen Angus breed is characterized by good adaptation power under the conditions of a proper exploitation environment, requiring good maintenance conditions and good pastures, because it performs selective pasture, has a calm temperament and a very good precocity, feed conversion is very good and shows a high cutting yield. The animals were raising in an extensive system. Therefore, the number of animals must be closely related with the areas of land available to avoid problems of erosion and excessive wearing of the vegetation and to allow the spreading of animal manure, with the aim of avoiding environmental damage. Animal production should contribute to a balance in agricultural production systems, satisfying the demands of the vegetation in terms of nutrients and enriching the soil with organic matter. In this way, it can help to establish and maintain interdependence of soil-plant, plant-animal and animal-soil.

Keywords: Abeedeen Angus, pasture, feed conversion

1. INTRODUCTION

The Aberdeen Angus breed is characterized by good adaptation power under the conditions of a proper exploitation environment, requiring good maintenance conditions and good pastures, because it performs selective pasture, has a calm temperament and a very good precocity, feed conversion is very good and shows a high cutting yield.

Originally from northern Scotland, the Angus cattle breed entered Romania vigorously in the last 4 years, at present, the present stock in Romania is about 15,000 heads.[4]

Being a resistant breed in less favorable pasture condition, the Angus breed is increasingly appreciated by Romanian farmers, because the administrative and monetary needs to support such investment are relatively low.

Providing meat appreciated in luxury restaurants, Angus calves quickly reach maturity, have a docile temperament and are easy to maintain.

Indicative values for determining a good quality carcass in young cattle:

- * meat quantity: between 65% and 68%
- * fat content: between 14% and 15%

- * bones and tendons: between 14% and 17%.

2. MATERIAL AND METHODS

Aberdeen Angus breed is characterized by:

Good adaptation power under the conditions of a proper operating environment (requires good maintenance and good pasture as it performs selective grazing).

It has very quiet temperament and good precocity (26-28 months the first calving, and at 18 months intensely fattened youth can make 500 kg).[5]

Median growth rate (1150 g / day); steers fattened over 350 kg cause a high percentage of fat.

High cutting efficiency (65-70%), depending on the age and condition of fattening record (74%).



Figure 1. Aberdeen Angus breed – black and red varieties

From an economic perspective, it is very profitable. The slaughter yield is high: 65-70%, depending on age and fattening status.

Bone meat yield is 5: 1, but the tall index is quite high. Tallow deposits also occur in young animals. The carcasses contain 70% good quality meat, tender, juicy, perspicuous, marbled and very tasty.

In fact, for those who once saw Aberdeen Angus beef, it becomes very recognizable due to its specific, darker color. Sometimes, the case can contain quite a lot of fat.

Most chefs consider this to be the most suitable beef for barbecue.

In Romania there are already professional associations of Aberdeen Angus cattle breeders.

3. RESULTS AND DISCUSSIONS

The farm where the study was conducted is a privately owned company. The agricultural area of the farm is 2500 ha distributed in agricultural land and pasture.

The livestock farm consists of bulls (4 heads) and cows (156 heads) that were purchased in 2013. Also, 140 heads of calves and calves. All the animals are of pure breed. The bulls are used for natural reproduction. To prevent inbreeding, a bull is distributed to about 35 cows.

The bulls were purchased with a *Pedigree Certificate* to be able to appreciate the breeders by the value of their ascendancy.

The young bulls obtained from the calving can also be sold for breeding, but they can also be fattened.

At the age of 20 months they have a body weight of 700-750 kg. and they are capable of mating. The sale price at this age is 3500 euros. Adult bulls can also be sold for 7,000 euros.



Figure 2. Semi-open shelters, in paddocks, outdoors and pasture

Cows (156 heads) are exploited 10 years, after which are reforming.

Heifers from farm, enter into the category of replacement heifers, so, they are considered to be "additions" to the basic herd. The heifers are either replacing the reformed cows (to be slaughtered) or used for livestock breeding.

The heifers are given the reproduction at the age of 15-16 months when they have a body weight of 350-400 kg.

The Aberdeen Angus breed being a meat breed, milk production is intended exclusively for nursing calves. Calves are allowed to suck at discretion.



Figure 3. Cows with calves

Calves and heifers are nursing for one month, after which diversification begins. They are raised on the same stable with the cows to learn as easily and gradually as feed - *the calf school*.



Figure 4. The calf school

Weaning calves takes place at age of seven months after that they are arranged in groups and distributed by destination.

Young bulls are introduced to fattening at the age of 7 months (210 days) and are fattened for 2 months until the age of 9 months (270 days).

The body weight of the bulls at the entrance to the fat is 230-250 kg, and when delivered to the slaughterhouse or for sale weighs 340 kg.

Daily average gain (smz / head = 1.5 kg.) made by fattening beef.

Another maintenance system used the farm is also free maintenance in open shelters with a covered and scraper area.[1]



Figure 5. Free maintenance in open shelters with a covered and scraper area

Passing of animals from the open shelter with free resting and covered and scraping outdoors.



Figure 6. Passing of animals from the open shelter with free resting and covered and scraping outdoors.

The grazing

On the farm the animals are kept for 5 months in shelters and 7 months on pasture. Animals are grazed from May, when are organized uniform groups of animals and make rotation pasture parcels.



Figure 7. Animals outside

This system leads to an increase in the resistance of young animals to the natural environment.



Figure 8. Half-open shelter - paddock exit

The animals are brought on the pasture in the spring, after the land has been sufficiently watered to prevent grass degradation and soil erosion, and the plants are 10-12 cm high on the mountain pastures, 12-15 cm on the pastures of the forest hills and 15-20 cm in steppe and steppe grasslands.



Figure 9. Animals grazing



Figure 10. Temporary fences - used to delimit plots

Temporary fences - used to delimit plots. These fences require a source of electricity. Fences are easy to handle, they are very lightweight and do not require consolidation.

Daily water consumption varies depending on a number of factors, such as: dry matter content of the ration, type of production, body weight and age of the animal, ambient temperature and season. A daily consumption of 45 l / 500 kg of live weight in the cool season and 90 l / 500 kg of live weight during the heat season is recommended.[2]

4. CONCLUSIONS

The study looked at analyzing the growth and exploitation of bulls, cows and young bulls in the Aberdeen Angus Black and Red breeds both in semi-open shelters, in paddocks, outdoors and pasture.

Aberdeen Angus breed that grows on farm is characterized by: very good power of adaptation under the proper operating environment, it needs good maintenance conditions, of good pasture because it performs rotational grazing.

In the studied farm, the maintenance systems specific to bovines exploited for meat, are free maintenance, with seasonal alternation of animals, in shelters with permanent litter, during stabling, and outdoors during the grazing season.

The temperament of the breed is docile, the breed has a very good precocity at the age of 26-28 months, the first calving takes place, euthotic calving, and at 18 months the intensely fattened youth can make 500 kg

The breed has a high cutting yield (60-70%), depending on age and fattening status, with a record of 74%), very good quality - tender, fine, marbled, juicy

The successful management of the calves for their use in replacing the reformulated cows begins before weaning and continues until the calves have the first calf. The heifers are given at the first reproduction at the age of 15-16 months when they have a body weight of 350-400 kg.

The young bulls obtained from the heifers are sold for breeding. At the age of 20 months they have a body weight of 700-750 kg. and they are capable of mating. The sale price at this age is 3500 euros. Adult bulls can also be sold for 7,000 euros.

Calves and heifers are nursing for one month, after which diversification begins. They are raised on the same stable with the cows to learn as easily and gradually as feed - the calf school. On the farm, the bulls are introduced to the fat at the age of 7 months and are fattened for 2 months until the age of 9 months. They make a daily average increase of 1500g.

On the farm the animals are kept for 5 months in shelters and 7 months on pasture. Animals are grazed from May, when uniform batches are organized.

5. REFERENCES

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