

RESEARCH ON MORPHOLOGICAL AND YIELDING TRAITS IN SIBIU ȚURCANĂ SHEEP BREED

I. Roșu, C. Șonea, D. Colceri

A.N.A.R.Z., București
e-mail: ionrosuam@yahoo.com

Abstract

The present study proposed to analyse the present stage of genetical improvement in some morphological and yielding traits in Țurcana sheep breed within Sibiu county area. On this purpose, researches have been conducted within two flocks, including 500 and respectively 470 females. A number of 200 females from each flock were designed for pure-breeding, while the other ones were cross-breed by German Black Head rams, for lamb producing. Measurements included all rams and 15 % of purebreed ewes.

As average milk yield ranged very closed (65.79- 66.12 kg), a high uniformity intra and interherd occurs for this trait.

Ewes height (65.79-66.12 cm) also expressed high uniformity. Average weight (44.78–46.50 kg in ewes and 75.61-77.24 in rams) is obviously higher than data mentioned in the literature, as a result of sustained and systematic labor towards genetic improvement.

High reproductive indicators (fecundity 92-94%, birth rate 107-108 %, is also an expression of an efficient breeding activity attended by an appropriate exploitation

Key words: Țurcană, morphological and yielding traits

FOREWORD

This paper aims to highlight the current state of improved morpho characters to Turcana breed sheep population reared in Sibiu.

MATERIALS AND METHODS

Research was conducted in two farms breed of sheep Turcana. The two farms have a herd of 500 heads in first and 470 heads in the second. Each annual increase farm is operated and relieved by 200 purebred females and no difference of the total number is used to produce lambs for meat, by crossing with rams of the breed German black head. Of that number increases in pure breed somatometric measurements were performed on the entire herd of rams and young male sheep and 15% in the flock of sheep and sheep.

RESULTS AND DISCUSSION

Values obtained as a result of weight determination characterized the flock as a massive flock of high weight (Table 1).

Table 1 .Weight Turcana breed sheep farm 1(kg)

Categories of sheep	Statistics		
	X	sx	CV%
Rams	5,61	±1,12	3,62
Sheeps	44,78	±0,72	7,74
Young male sheep	6,15	±1,45	3,65
Young female sheep	36,53	±0,68	5,88

Weight values found in rams are high compared with some literature data and relatively close to other more recent data of this nature.

Thus [2] C. Stefanescu, based on surveys conducted shows that white variety breed rams have Turcana average body weight of 58, 9 kg.O value close by 58.08 kilograms, determined and V. Tafta [3].

He team of researchers from ICDCOC Palas, found in 2008 to breed rams belonging Turcana following data: 77.61 kg in male belonging to black variety of the breed Turcana, 77, 13 kg rams belonging to the breed variety silvery Turcana and 81, 3 kg, white variety breed rams belonging Turcana.In a recent study on grassland farms in the area of the country [1], Pascal C., added weight of 61.035 kg for rams.

Table 2. The main dimensions Turcana sheep farm 1 (cm)

Size determined	X	sx	CV%
waist	66,12	± 0,60	4,41
Trunk height	66,67	±0,59	4,30
Rump length	68,67	±1,07	7,49
Chest width	19,51	± 0,20	5,12
Rump width	18,40	±0,20	5,32
Chest depth	39,15	±0,36	4,41
Chest area	82,98	±0,34	2,00
Perimeter whistle	8,23	±0,07	4,37

Data in Table 2 shows the mean error of the mean and coefficient of variation for females (adult sheep) breed Turcana, resulting from statistical analysis of the determinations. We can say, following the above data have shown that a well developed actually very evenly with slightly higher average parameters can be improved breed and sheep belonging to Turcana race.

Table 3. Body weight Turcana breed of sheep farm 2 (kg)

Categories of sheep	Statistics		
	X	sx	CV%
Rams	7,24	±1,21	3,52
Sheeps	46,50	±0,68	7,09
Young male sheep	9,33	±2,25	6,57
Young female sheep	37,87	±0,72	6,07

Table 4. Main body size in sheep Turcana farm 2 (cm)

Size determined	X	sx	CV%
waist	65,79	± 0,59	4,30
Trunk height	68,10	±0,58	4,00
Rump length	67,01	±0,96	6,91
Chest width	18,01	± 0,22	6,10
Rump width	18,13	±0,20	5,35
Chest depth	38,29	±0,39	4,94
Chest area	82,00	±0,40	2,39
Perimeter whistle	7,91	±0,09	5,56

Table 4 presents the number determined on sheep body size (females only) of farm number 2. In a careful study we can say that there are significant differences between lengths and widths of the main dimensions studied at two farms.

Table 5 Indicators of breeding technology for the years 2009 and 2010

Year	Turcana x Turcana		Turcana x German black head		
	F %	P%	F%	P%	
FARM 1	2009	92	105	88	125
	2010	94	108	92	128
FARM 2	2009	93	104	86	117
	2010	94	107	90	121

From studying the data presented in Table 5 we can say that breeding activity is very good and well tracked and monitored. Values of 92 and 94 of fecundity and prolificacy values of 107-108, are not easily achieved Turcana breed and can not be achieved only by experienced breeders and enthusiasts. It is remarkable but increasing prolificacy Turcana females were fitted with rams of the breed German Black Cap, value approaching 130% and that bring an increased number of lambs.

OPINION

Selection and improvement works carried out have led to increased yields, weight and the conformation change Turcana sheep.

Data analysis statistical parameters calculated from the actual number of studies have highlighted that match the breed standard, effective mass, which shows a harmonious conformation, herds of animals which have a coefficient of variability, very good for all characters studied. Indicators of breeding technology in the two farms studied shows a very good race Turcana values, which denotes the ability and interest in breeding for the work they perform.

BIBLIOGRAPHY

- [1] Pascal C. Sheep meat production. Ionescu de la Brad Publishing House, Iasi, 2004
- [2] Stefanescu C., Dermengi B., Breeding sheep, Editura Agrosilvica, 1965
- [3] Tafta V., Vintila I., Zamfirescu St., Production, sheep breeding and reproduction, Ceres Publishing House, 1997

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