Global wool production is approximately 1.3 million tones per annum of which 60% goes into apparel. Unfortunately, the total percentage of wool used for textiles has shown a dramatic decline in the past decades, but this has been almost entirely due to the increasing supply of synthetic fibers and the total weight of wool produced has in fact remained fairly static. However, fortunately the demand for natural products has raised the demand for woolen garments, particularly in developed countries. Therefore, phenotypic parameters like live weight, fleece weight and staple length have been estimated for 100 yearlings’ ewes and rams from S.C. Exim Agro.Ovis MPS. SRL Fibiş.

Tsurcana yearling ewes had a medium weight of 38.06±0.165 kg, the grease fleece weight of 2.77±0.198 kg and the staple length of 28.49±0.170 cm. Yearling rams were lighter with only 37.57±0.25 kg, while the grease fleece weight was of 3.20±0.19 kg and the staple length of 19.16±0.35 cm.

**Keywords:** yearling ewes, yearling rams, fleece weight, staple length, body weight

**Introduction**

Wool a natural fiber that "breathes" and insulates the body in hot or cold weather helps conserve heating and air conditioning fuels. The differences in fleece yields result from variation within and between breeds and are affected by climate, nutrition, wool grease and foreign matter. In addition to clothing, wool has been used for carpeting, felt covers piano hammers and it is used to absorb odors and noise in heavy machinery and stereo speakers.

Ancient Greeks lined their helmets with felt and Roman legionnaires used breastplates made of wool felt. Wool seldom catches fire and, if it should flame will usually extinguish itself before much damage is done. It will not drip, melt, or reburn in other areas.
Material and Methods

Researches were made at the S.C. EXIM AGRO. OVIS MPS. SRL FIBIȘ – TIMIS COUNTY in Tsurcana breed yearlings. There were randomly selected 47 yearling ram and 100 yearling ewes. Phenotypic parameters body weight and grease fleece weight were estimate by using the weighing machine in kg, while the staple length was determined by measuring with a ruler in mm. Data obtained were statistical processed by Statistics for Windows vrs 4.5.A and Microsoft Excel vrs 2006 programs.

Results and Discussions

Aspects of greasy fleece weight and components such as body weight, fibre length that may influence fleece weight are described. The 100 herd of young ewes Tsurcana breed from Fibiș farm has a mean of the body weight of 38.06 ± 0.165 kg, with a lowest value of 35.0 kg and the highest of 41.0 kg. Wool production focuses on the characteristics of Tsurcana wool which influence its value, such as fleece weight, average fibre diameter, staple strength, staple length, colour, vegetable matter and style. Young ewes had the mean of the grease fleece weight of 2.77 ± 0.198 kg. The lowest production was 2.2 kg and the highest of 3.2 kg.

Table 1

Mean and variability indicators for body weight, raw wool production and strand length in Tsurcana yearling ewes, from S.C. Fibiș S.A.

<table>
<thead>
<tr>
<th>Parameter</th>
<th>n</th>
<th>UM</th>
<th>Mean ±S</th>
<th>Min  ±S</th>
<th>Max ±S</th>
<th>Variance ±S</th>
<th>Standard deviation ± S</th>
<th>Variability coefficient CV%</th>
<th>Standard error ±Sx</th>
</tr>
</thead>
<tbody>
<tr>
<td>Body weight</td>
<td>100</td>
<td>Kg</td>
<td>38.06</td>
<td>35.0</td>
<td>41.0</td>
<td>2.74384</td>
<td>1.656454</td>
<td>4.35</td>
<td>0.165645</td>
</tr>
<tr>
<td>Grease fleece weight</td>
<td>100</td>
<td>Kg</td>
<td>2.77</td>
<td>2.20</td>
<td>3.20</td>
<td>0.03947</td>
<td>0.19867</td>
<td>7.15</td>
<td>0.19867</td>
</tr>
<tr>
<td>Staple length</td>
<td>100</td>
<td>cm</td>
<td>28.49</td>
<td>26.0</td>
<td>31.0</td>
<td>1.710554</td>
<td>1.710554</td>
<td>6.0</td>
<td>0.171917</td>
</tr>
</tbody>
</table>

Sheep fed high levels of nutrition have higher fleece weights than sheep fed on a low plane and the increase in weight arises principally from an increase in the diameter of wool fibres and an increase in the length of fibres, rather than a change in the number of fibres growing. For the third studied parameter –the staple length- the
young ewes registered a mean of 28.49 ± 1.71 cm. The shorter staple length was of 26.0 cm and the longest of 31.0 cm.

For all three analyzed traits in the young ewes, values for the variability coefficient were low 4.35%, 7.15% and respectively 6.0%, which mean that these characters are well established and will be propagate with accuracy in the next generation.

For the 100 herd of the yearling rams, the research results for the same three phenotypic characters are rendered in table 2.

Table 2

<table>
<thead>
<tr>
<th>Parameter</th>
<th>n</th>
<th>UM</th>
<th>Mean x</th>
<th>Min</th>
<th>Max</th>
<th>Variance ±S²</th>
<th>Standard deviation ± s</th>
<th>Variability coefficient Cv%</th>
<th>Standard error ±Sx</th>
</tr>
</thead>
<tbody>
<tr>
<td>Body weight</td>
<td>47</td>
<td>kg</td>
<td>37.57447</td>
<td>35.0</td>
<td>40.0</td>
<td>2.945421</td>
<td>1.716223</td>
<td>4.56</td>
<td>0.250337</td>
</tr>
<tr>
<td>Grease fleece weight</td>
<td>47</td>
<td>kg</td>
<td>3.20213</td>
<td>3.0</td>
<td>3.4</td>
<td>0.017169</td>
<td>0.131032</td>
<td>4.06</td>
<td>0.019113</td>
</tr>
<tr>
<td>Staple length</td>
<td>47</td>
<td>cm</td>
<td>19.16304</td>
<td>15.0</td>
<td>26.0</td>
<td>5.889493</td>
<td>2.426828</td>
<td>12.66</td>
<td>0.357816</td>
</tr>
</tbody>
</table>

As table above shows, the mean body weight for the yearling rams was 37.57 ± 0.25 kg. The heavier yearling rams had 40 kg and the lightest 35-kg. The variability coefficient for this character had a little value being only of 4.56%.

The mean of the grease fleece weight in yearling rams was of 3.20 ± 0.019 kg, the lowest being of only 3 kg and the heavier of 3.4 kg. The variability coefficient for this character was of 4.06 %. For those two characters the low value of the variability coefficient indicates those are well established and will be inherited successfully by the offspring.

The staple length of wool in a 12-month grown fleece varies with the breed, strain and the genetic characteristics of the individual sheep, its age, nutritional state and reproductive activities since the last shearing.

Within a breed of sheep, the length of the inter-shearing interval largely determines staple length. As regarding the staple length of the yearling rams the mean was of 19.16 ± 0.35 cm, with the shorter staple of 15 cm and the longest of 26 cm.

The variability coefficient for the staple length was 12.66% being situated in the inferior limits of the middle values, which indicates an uniformity of this character in the population.
Conclusions

On the results obtained in the researches made, can be conclude the following:
1. The young ewes had a body weight mean of 3.045 ±0.214 kg, with the lowest weight of 30.0 kg and the highest of 37.0 kg.
2. Grease fleece weight mean in young ewes was better than the mother ewes, the mean for this parameter being 3.045 ±0.0298 kg. The minimum production was 2.7 kg and the maximum of 4.0 kg.
3. For the staple length, young ewes had a mean of 26.020 ± 0.177 cm. The shorter strand was 22 cm and the longest of 29 cm.
4. Tsurcana yearling rams from the Fibiş farm had a body weight mean of 37.57 ± 0.25 kg, in the herd being light individuals with only 35 kg and the heaviest with 40 kg.
5. The grease fleece weight of the yearling rams had a mean of 3.20 ± 0.019 kg, the lowest value being of 3 kg and the highest of 3.4 kg.
6. As regarding the staple length of the yearling rams, the mean was 19.16 cm ± 0.35 cm, the shorter staple being of 15 cm and the longest of 26 cm.
7. For the body weight and grease fleece weight the variability coefficient both in yearling ewes and rams had low value, which means that these characters will be successfully inherited by the offspring.

Bibliography

PARAMETRII FENOTIPICI LA RASA ȚURCANĂ –BERBECUȚI ȘI MIOARE, DE LA S.C. EXIM AGRO. OVIS MPS. SRL FIBIȘ – JUDEȚUL TIMIȘ

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Producția globală de lână este de aproximativ 1.3 milioane tone pe an din care 60% se folosește în industria textilă. Din păcate acest procent este în scădere în ultimele decenii, datorită mai ales folosirii pe scară largă a fibrelor sintetice producția de lână rămânând relativ constantă. Totuși cererea pentru produse naturale este din fericire în creștere pentru articolele de îmbrăcăminte, mai ales în țările dezvoltate. De aceea au fost estimați parametri fenotipici cum sunt greutatea corporală, cantitatea de lână și lungimea șuviței pentru 100 de mioare și miori de la S.C. Exim Agro.Ovis MPS. SRL Fibiș. Mioarele Țurcană au avut o greutate medie de 38.06±0.165 kg, o producție de lână de 2.77±0.198 kg și o lungime a șuviței de 28.49±0.170 cm. Miorii au avut o greutate corporală mai mică de numai 37.57±0.25 kg, în timp ce producția de lână a fost de 3.20±0.19 kg și lungimea șuviței de 19.16±0.35 cm.

Cuvinte cheie: mioare, miori, cantitate de lână, lungimea șuviței, greutate corporală