STUDIES OF BIOLOGICAL AND FARMING TRAITS OF LITHUANIAN NATIVE COARSEWOOLED SHEEP

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INTRODUCTION

In 1995, a flock of almost extinct native coarsewooled sheep was formed at the Institute of Animal Science of LVA. The flock was started with two ewes and one ram. At present, the number of sheep amounts to 100. The flock is kept with the aim of conservation of the genofond of the local sheep and studies of their biological and farming qualities. The population of coarsewooled sheep numbers over 1000 animals, yet the number of recorded and of known pedigree animals is about 200 breeding ewes and 15 breeding rams.

OBJECTIVE

The aim of the study was to investigated biological and farming qualities of Lithuanian Native Coarsewooled sheep.

MATERIAL AND METHODS

In 1995-1996 and 2002-2007 ewes were mated once a year and in 1997-2001 every 6 to 8 months. The fertility of the ewes was determined by the number of lambs born. Milk production of sheep was determined by the lamb weight at 20 days, and sheep were milked on lactation Day 7. Horn presence was determined by groping and tape measuring every animal individually at weaning, one year of age.

RESULTS

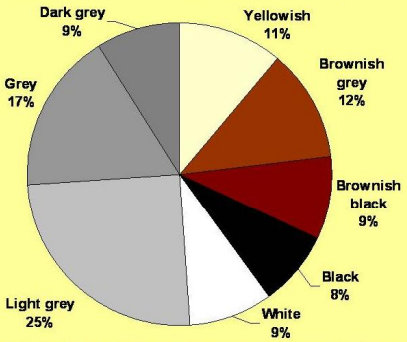
The studies carried out in 1997-2007 have indicated that native coarsewooled ewes can exhibit estrus at any time of the year and lamb even twice a year (average fertility 1.6-2.3 lambs). In a 20-day lactation period, ewes produced about 16-25 kg of milk containing 6-9.5% fat, 3-5.5% protein and 3.5-6% sugar.

The average weight of newborn lambs was 1.8-4.2 kg, at 20 days 4.5-9.7 kg, at 2 months 11-16 kg, at 4 months (at weaning) 15-23 kg and at 12 months of age 32-44 kg. The weight of adult ewes was about 40-56 kg and that of breeding rams 46-67.

The body conformation data for yearling female and male lambs indicated that local sheep are rather high (58-71 cm), have wide (16-20 cm) and deep (25-30 cm) chest, long head (16-21 cm) and tail (22-34 cm), and horns various length (3-65 cm). Meanwhile, there were on the average 22.5 and 86.6% horned females and males, respectively.

Control slaughter data indicated that the dressing percentage of fattening rams slaughtered at 6 to 7 months of age was 44%, and that of the rams that were not fattened and slaughtered at 10 to 11 and 16 to 23 months of age, respectively, 41 and 42.5%.

Each year the average wool clip per sheep was 2-4 kg of semicoarse white, grey, brown or black wool 22-34 cm long. Aboriginal sheep kept at the conservation flock of the Institute of Animal Science of LVA are distinguished by multicoloured wool, but the dominating wool colour is grey of different chades (aprox. 50%).

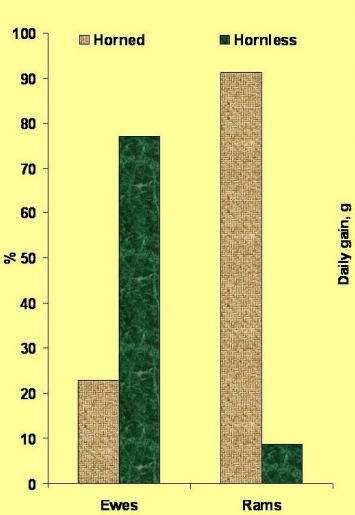


Wool colour variety of Lithuanian Native Coarsewooled sheep

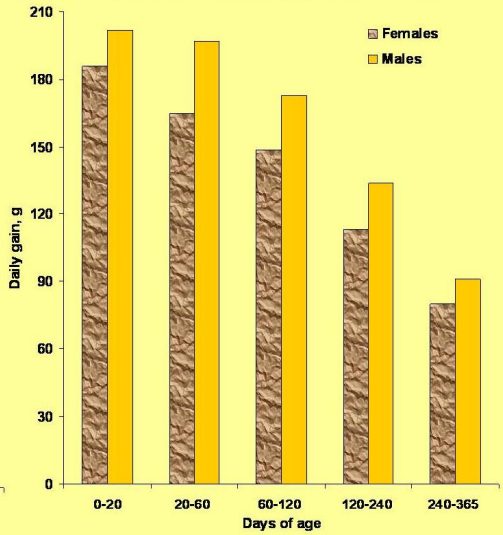
CONCLUSIONS

Lithuanian native coarsewooled sheep are distinguished by non-seasonal estrus and lamb twice a year (average fertility 1.6-2.3 lambs); presence of horns (22.5% horned females and 86.6% - males); multicoloured wool (average wool clip per sheep was 2-4 kg of 22-34 cm long); hardiness and disease resistance; dressing percentage of rams were from 41-44%. The sheep are very suitable for landscape enlivening.

Horn presence in Lithuanian Native Coarsewooled sheep



Daily gain (g) of Lithuanian Native coarsewooled lambs



Test slaughtering data of Lithuanian Native Coarsewooled male lambs

Item		Slaughtered at 6 to 7 mo.	Slaughtered at 10 to 11 mo.	Slaughtered at 16 to 23 mo.
Preslaughter weight, kg		29.28	38.42	42.88
Carcass weight, kg		12.90	15.98	18.27
Dressing percentage		44.21	41.39	42.53
Area of *M. longissimus dorsi*, cm^2		14.34	14.90	14.54
Left half cold carcass weight, kg		6.52	8.40	8.82
Muscles and fat, %		70.01	69.25	69.27
Bones, %		26.98	27.23	27.21
Cartilages and tendons	%	3.01	3.51	3.51
	Muscling score	2.34	2.26	2.25
Chemical composition of ground meat, %	Dry matter	31.07	29.91	28.52
	Protein	19.09	18.27	18.19
	Fat	10.02	9.09	9.47
	Ash	0.83	0.85	0.86