

## **EFFECT OF FEEDING ASCANIAN MEAT-WOOL SHEEP ON THE EFFECTIVENESS OF SELECTION**

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*The results of 50 years of research on the impact of nutrition on the efficiency of breeding sheep with record levels of meat, milk and wool productivity and use them in different regions of Ukraine as improving the gene pool to create the first national Ascanian Meat-Wool breed with crossbred wool.*

***Intense types of sheep, unstable level of feeding, breeding performance***

Established that animal productivity combined with record annual demand for feed is 7,5-8,0 kg feed units, structural sheep containing 108-115 g of digestible protein in the rear unit. The detailed analysis of these results obtain 50 years of research shows that successful process is largely driven by powerful acting factor - the level of feeding, which was unstable and ranged from 24.5 to 100% of normal. The extent of its impact on the effectiveness of selection, which is defined by fixing the annual nutrient fed sheep feed (in% of normal) and level of performance based on our developed gradation level of feeding.

Positive selection effect was obtained for 16 years at sufficient (100% of normal) and moderate (90-99% of normal) level of feeding their share was only 32%, as well as satisfactory feeding (80-88% of normal) during 10 years (20%). The rest - 24 years (their share was 48%) in terms of feeding as follows: insufficient (70-77% of normal) - 5 years (10%), low (61-68% of normal) - 4 years (16% ), very low (52-55% of normal) - 5 years (10%) and extreme (24,5-47% of normal) - 10 years (time-TCA 20%). The sheep feed at a level below 80% efficiency to normal selection available. At each annual percentage decrease of feeding to normal decline in live weight 0,9-1,3% wool length - at 0.3-0.8% clip - 1-2%. Consequently, in determining comprehensive selection of genotypes evaluation during appraisal and after shearing

minimum requirements for the main selection traits: live weight wool clip and corrected according to their supply of fodder (in % of normal).

Targeted selection for favorable feeding conditions (92-100% of normal) provided the establishment sires with record levels of average live weight - 128,2-130,1 kg (max. 178 kg) with a length of wool 17,9-18,4 cm wool clip 8,6-8,8 kg (max. 12.8 kg).

For extreme feeding conditions (24% of normal) of live weight halved (from 130.1 to 65.8 kg), pure wool clip - 3.3 times and amounted to only 2.6 kg, out of pure fibers decreased by 16.4 abs.percent.

Rams sensitive elevated levels of nutrition. In carrying out their feeds in 2014 by 70% to normal selection of main features compared with 2003 increased significantly: live weight - 21.3 kg, or 32.4% pure wool clip - 2.3 kg, or 88.5% of net output fiber - 14.9 abs. percent, wool coefficient - 40% wool length - only 1.2 cm, or 8.6%, indicating a high dependence of breeding signs of heredity.

The highest impact on the creation of intensive breeding ewes types of accounts for 1990 and 1994 under conditions sufficient (100% of normal) and moderate (92% of normal) level of feeding. Indicators main selection traits stabilized at a high level, the live weight - 74.3 and 78.4 kg, length wool - 14.6 and 15.2 cm, pure wool clip in fiber - 5.0 and 5.3 kg in net output fiber - 66.9 and 68.5% and wool coefficient - 64 and 71 g/kg.

For extreme feeding conditions (39.7% of normal) at low feed quality live weights of ewes decreased by 33.8 kg, and 43.1% (44.6 vs. 78.4 kg), pure wool clip - 2,1 kg, or 42%, wool length – 4.5 cm, or 24.4%.

Found a natural effect of feeding ewes intensive types on their multiparous. For every percentage point increase or decrease in nutritional feed ration multiparous appropriately changed.

Ewes characterized by high milk production have an outstanding ability to bring up a well-played their lambs even in low feed costs due to nutrients accumulated during feeding. When sufficient nourishment (100% of normal) average daily gain-born lambs them for the first 37 suckling days was 465 g, maximum - 644 g live weight losses ewes in extreme conditions feeding reached 44 kg, or 47.8% (from 92

to 48 kg), indicating their ability to outstanding customized. Successful restoration innovative genetic resources due to their stress, formed for five generations under the influence of permanent stressor - extreme feeding conditions.

Using outstanding selection of genotypes Ascanian provides genetic progress Ascanian newly Meat-Wool breed, which is approved in 2000 and approved by the Ministry of Agrarian Policy in 2007, can not only restore the sheep industry in Ukraine on a new qualitative basis without importing meat breeds and types, and create export potential of domestic breeding resources world-class save foreign currency and to prevent the import of dangerous pathogens genetic diseases.

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