

**V. DANKIV**

Institute of Agriculture of Carpathian Region of NAAS

**PRODUCTIVE AND EXTERNAL CHARACTERISTIC  
OF SIMMENTHALER BREED COWS  
OF THE CARPATHIAN REGION OF DIFFERENT LINES**

Based on the results of previous studies a number of domestic and foreign authors it was established that Simmenthaler breed has high potential for increasing milk production; by the number of cow-recorders it occupies one of the first places among other breeds.

According to professors Ruzhevsky A. B., Ruban Y. D. (1980) Simmenthaler cattle good combines milk and meat productivity and has one of leading places in the world. Only in the European countries there were about 36 million heads, or 22 % of the total number in the world.

Wide spread of Simmenthalers contributed to their constitutional strength, ability to adapt to different natural and economic conditions. Good adaptive qualities led to intensive use of Simmenthalers in programs of creation new specialized breeds, especially Ukrainian Red-Speckled milk breed, Ukrainian meat, Polissya meat. This led to significant decrease of purebred animals. In addition, the economic downfall in the late 90th of the 20th century most of collective farms led to significant decrease the gene pool herds of simmenthal cattle that were created for many years.

Breeding base widespread in the past Combined Simmenthal's breed is much narrowed. This cattle was bred in 17 regions of Ukraine.

Today, Simmenthalers are being bred in 15 regions of Ukraine.

The largest part of their population is in Vinnytsya (53,7 %), Luhansk (29,6 %), Kharkiv (24,7 %), Cherkasy (35,5 %) and Chernihiv (64,7 %) regions.

The number of Simmenthal breed in the Carpathian region is negligible. However, the animals of this breed are characterized by high resistance to disease, adaptability to extreme living conditions, feeding and climate, productive longevity.

Simmenthal cows are characterized not only by genetic high milk productivity, but also by the quality of milk. Milk of Simmenthalers corresponds to requirements for the production of hard cheeses.

Foreign and domestic authors indicating in their work on the necessity of maintenance of local breeds.

The purpose of the work are maintenance, increase the gene pool of simmenthal cattle of the Carpathian region and creation of high productive herds of milk and combined directions of the productivity.

Purebred breeding of Simmenthal cattle is carried in the herdreproduction „Litynske” Drohobych district of Lviv region with bull-sires estimation for the quality of descendants for their effective use in the breeding process.

The selection of animals carried out in view of milk productivity and suitability to the machine milking.

For maintenance of gene pool of Simmenthal breed and further stock and breeding work with its 110 cows were selected on the farm of „Litynske”.

With the aim to improvement of genealogical structure of herd of the selected cows and heifers of coupling age were impregnated by elite purebred bulls of Imago 9727, Vikht 75771 of the German breeding and Obriy 938 of the Austrian breeding.

According to evaluation of milk production from 110 cows of farm „Litynske” 99 (90 %) of them had more than 4000 kg of yield milk. There are 12 cows in the herd with productivity more than 6000 kg of milk.

Investigations of milk productivity of the experimental cows in the section of lines and lactations were conducted. Analysis of the obtained data shows that the highest milk productivity is characterized by cows from the line of Streif (daughters of bull Obriy 938). Thus, their milk productivity during the first lactation was 4260 kg. For cows of first lactation of others comparable lines this index was less than 137 kg or 3,2 % (Redad line,  $P < 0,001$ ), 674 kg or 15,8 % (Khorror line,  $P < 0,01$ ).