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Ladyka V.,
Academician of the National Academy of Sciences of Ukraine, doctor of agricultural sciences Sumy National Agrarian University

Development of population of brown cattle of the Western Europe

The purpose. To analyze real state and development trends or brown cattle in the Europe. Methods. Researches are based on abstract-logic method and complex systems approach. Results. The genetic trend of milkiness is shown and priorities in selection through components or breeding value, which are oriented on milk productivity, are opened. The question genome selection of brown cattle is widely considered. Conclusions. Genome selection and the newest selection models promote slable enrichment or genetic potential of the breed.

Key words: brown cattle, breeding value, genome selection, industrial crossing, productivity..

The gradual development of the domestic agroindustrial complex calls for the change of the profiles of production activities in agriculture and the diversification of agricultural products markets. The purpose of the research is to analyze the actual state of the population of brown cattle in the countries of the European Union and, along with the productive features, to disclose the genetic trend of breast milk and the priorities in breeding through the components of breeding value (HRC), focused on milk productivity. Research methods. The research is based on the abstract-logical method and the complex system approach. Research results. Boer livestock in Western Europe plays a dominant role in the Alpine and Palepy regions with a significant share of pastures. The number of cows under the control of productivity at the beginning of 2014 amounted to 515 thousand goals. From 545 thousand goals. Tribal (not all under control). Of these, 16 thousand are the original brown animals (without inclining the heredity of VE - American Shvites). The largest share of brown cows - in Switzerland - 34%, in Romania - 21, in Italy - 20, in Bulgaria - 15, in Austria - 13, in Germany - 4% [1]. In all European populations, borax is produced as a dairy breed. In the overall assessment, the Center's hopes are: in France - 40%, in Romania - 65, on average - 50%. The component of meat productivity is significantly different from 0% in France, Italy, Switzerland and up to 25% in Romania. In most countries, health indicators are measured: from 32% - Italy to 47% - Germany, Austria. Estimation of the exterior - within 0 - 15% depending on the economic, political, structural factors of a particular state. In countries where there is a significant breeder competition in dairy cattle breeding, especially in Germany, milk production traditionally plays a major role. In 2013, Germany, the United Kingdom, France, Italy, Austria and Switzerland put together a total of 195 repair bug, which in 98% of cases had genomic evaluation. At the same time, all bulls from the European countries, valued by IplegIli, have stable tribal progress, which is almost 10 points higher than the American population. Germany and Italy have the best performance. In all countries, brown cattle is associated with milk. The highest milk productivity of cows for standard lactation in France is 7401 kg of milk, 4.18% fat and 3.61% protein. In all countries, in full-strength cows, protein content is 3.38-3.61%, butter and milk fat is 3.65-4.22%. In the traditional breeding of brown cattle in the countries (Germany, Austria, Switzerland) for the lifespan of cows - 25,000-27,000 kg of milk with an average age of 76-82 months. The inter-city period as a playback indicator is 408-440 days. Boer cattle belongs to middle-aged breeds. The age of the first calving, which is affected by the summer grazing of heifers in the Alps, fluctuates from 29.5 (Romania) to 32 months. (Switzerland, Italy). Regarding industrial crossing, it should be noted that all its countries are used to receive fattening calves, the share of breeding stock for this purpose is: from 2% in Bulgaria - to 39% in Switzerland. The main parent breeds are Belgian blue pigeon, light Aquitaine, Limousine, Aberdeen-Angus. It is important to use the genomic farm of brown cattle in different countries. The first publications about genomic PCs of cows and bulls appeared in the CLUA in 2009, in 2010 - information was received from Switzerland, 2011 - Germany, Austria, Italy, Canada, 2012 - France and Slovenia All countries are currently translating the indicators of genomic PCBs into Interbull three times a year. Switzerland, Germany, Italy, Austria, the United States and Canada publish monthly new genomic assessments on the

Internet. Switzerland, the USA and Canada are exploring the US (Geneseek inc.). Germany and Austria co-operate with Genecontrol in Munich, France and Italy with domestic laboratories. Normally, the study takes place within 5-7 weeks, although in France this process lasts 2-5 months. [3]. The goal was to analyze breeding programs for genomic selection. It should be noted that the coefficient of selection of repair bulls in Germany is within the range of 1:30 typed young bulls bought from RBW (selection center of the Baden-Württemberg) and 1:14 in Bavaria (AHG). In France, the ratio is 1:12, Switzerland, Italy, Austria - 1:10, Slovenia - 1: 4, USA - from 1: 4 to 1:10. The role of international co-operation through the "Ipiyegdepotiss" project is increasingly being enhanced, which primarily involves the exchange of information and joint assessment.

In all countries, it is believed that genomic selection improves the genetic progress of the main traits (hopes, constituents of milk), but more and more new features are used (health, reproduction). Genomic breeding is a chance for further development of the brown population. Thanks to the genomic simulation of repair heifers, it is possible to pick up the best animals for reproduction. The greatest chance of using genomic selection is in significant genetic progress, especially taking into account new features - health, fertility, the fight against hereditary diseases, etc. As risk it is necessary to recognize the growth of inbreeding due to the intensification of the commercial sale of sperm by competitive firms without taking into account the "farmer's programs" of local breeding centers [4, 5, 8]. The implementation of the Austrian Beetroot Genomic Program enabled the official use of the results of the genomic evaluation in the selection of brown cattle and recorded a significant portion of the population. As a goal, it is anticipated that 50% of pedigree cows and 75% of mothers of pedigree boars should be allowed to fall asleep with genomic pedigrees (Fig. 1). From August 2013, in the brown bear population of Austria and Germany, the assessment of the PTS is based on health and is included in the overall assessment of PTS (C2 / L). Assess the health of tvaryns by calculating the fertility index (BIUU) and the health of the udder (EU / A /). New index Fig. 1. The genomic program of the Austrian beef cattle [12], fertility, is a combination of the cow fertility index to be used with indicators of delayed reproducible function. The economic share of the indicator in the total PC is equal to the cow reproduction index [12]. The assessment of resistance to mastitis, which is integrated with the somatic cell count in milk, is included in the new EO / A / (health assessment of dandruff). The economic share in the total PC is equivalent to the level of somatic cells. The relative distribution of the economic share in the total CP (Table 1) is determined. In view of the changes in the assessment of PCs from 2013, a computer program of 2RII-AI [11] was modeled. In order to determine the effect of the introduced noreptic parameters (PP / L / EJUU) in the general PC, the calculation was made in two variants: 032012 - the genomic program "Hoof cattle of Austria 2012" with indicators of reproductive capacity of the cow and the number of somatic cells And O8-OMOM2013 - the actual genomic estimation with the new PP \ Л / and EO / Л / instead of the above. In addition, the possible increase in the economic share of the new estimate is simulated by 10%, + 50% and doubling (100%). A comparison of all three variants indicates a significant increase in the economic share of the studied indicators, which will accordingly contribute to the genetic progress of these indicators. Without an appropriate increase in the eco nomic share of RICH / L / EO / L / it is difficult to make selection on the basis of health and reproduction. Since the main areas of breeding buffalo in Western Europe are foothills and mountainous regions, the traditional method of the maintenance of heifers of the summer is still alive, and now there are depleted alpine pastures. At the same time, it should be noted that the farmer has a choice as to the use of this method of retention. There are data on 32,442 brownfields grazed in the Alps, compared to 157,587, which are grown exclusively on the farm. It was established that the age of the first calving of alfalfa heifers was greater than 2 months. Compared with others, and amounted to 33.5 months. Of the number of heifers grazed on pastures, 11% were sold as pedigrees, whereas only 5.5% were from the control group. The period of production use was greater for 106 days in the taverlin of the control group [6, 7, 9].

1. Economic share and monetary evaluation of selection marks,% [11]

2. Difference in the indices of the causes of death among the animals grazed and not grazed in the Alps,% [6]

The analysis of the causes of the abandonment (Table 2) indicates the positive effect of decayed pastures on general health indicators during the life of brown cows, improved metabolism, milk yields, longer productive lives, and higher productivity. Even if the age of the cattle is increased, rabies grazing generally has a positive

effect on animal health, productive features, and hence the economy of the branch. Now in France there are about 18 thousand goals. Brown cows are under control, with 1600 herds having one brown cow, and 143 herds - more than 90%, 1300 herds - about 50% of brown cows. The complexity of the management of Holstein cows prompts farmers to cross-breed with monbellyards, brown, jersey bulls. Particularly relevant is cross-breeding with brown puppets, since milk from such cows in the market is more expensive by 10-15%. Based on economic interests, namely the low prices for fattening and dairy Bug, more expensive milk from the WB, French farmers began to use more sexually transmitted sperm to produce calves for herding herds (73% more used in 2013 than in 2012 .) [2]. In the Netherlands, farmers in the early 80's of XX century. Used a brown drunk to cross the scheme: IR? X WB ^ = = B-i? XCHN ^, because the received cows from B-i had an insufficient velocity of silage extrusion [10]. Now, when the WB is retired to high hopes with the preservation of milk constituents and a strong constitution, farmers re-use WB. In many herds where cross-breeding has been used, the average blood count BS is 80%. This allowed to increase the level of lifetime support to 40,000 kg of cow and optimize the inter-agency period to 359 days for breeding and 9000 kg of milk with a fat content of 4,37%. An example of the effective functioning of brown cattle enterprises is the company A. Wagner [13]. This classic family farm includes 92 milk cows, which since 1972 are under the control of milk production, since 1977 crossed with BS. In the turn of the race - 110 heifers, of which each year are implemented as a tribal near ZO goal. Also, on the farm about 60 bogies are fattened from their own reproduction and the same amount is bought in the livestock market [13]. The peculiarity of the enterprise is that one (or several) of the family members cares for each direction: the dairy herd is the owner and his wife, the rearing heifers - the daughter, the fattening - the son-in-law. We will analyze the first direction of activity - the flock. The size of the herd at the beginning of 2014 was 92 cows, the productivity level - "9000 kg of milk, which is very good for the small-scale structure of Austrian agriculture (Table 3). Cows are seen in the milking hall ("Yalynka" 2x5) and served by two people. The development of dairy productivity of animals as a business is considered to be the cultivation of valuable in the productive relation of animals. The best genetics (bulls) from the herd is in the brown bear population of Lower Austria. At the enterprise, the preference in breeding is given to animals with high rates ofliving productivity. The farm produces a cow Sesa (Egon x Zelad) for 10 lactations with a liveliness of 131,352 kg of milk. The second production line is the cultivation of repair young animals. Taking into account the size of the enterprise, especially the limited area, is forced to specialization, which provides for the allocation of raising young animals in a separate subdivision. Intensive rearing and a high conservation factor, as well as a good genetic potential, make it possible every year from 110 goals. Close to the AO to sell at auctions of breeding animals, and even to sell them directly from the farm to export, especially to Algeria and Turkey. Regarding the growth of the Bugites, besides the Bugay people received at the enterprise, about 60 calves are bought annually at the age of 2 months. For a price of 2 € per 1 kg of live weight. Calyx and bulls are kept together during the milking period in individual houses. After 10 weeks the animals are transported to a substitute for milk and hay, from the age of 6 months - to hold on a dense floor. Each year, they plan to sell 80-85 full-fattening cows both on large meat plants and in small private private mills with their own processing (fig. 2).

Fig. 2. Structure of sales of bulls by age, months: N - 15; Sh - 16; 0 to 17; □ - 18; II - 19; And - 20; 3 - 21; And - 22; H - 23; □ - 24; Sh - 28 [13]

Conclusions

The breeding goal for brown cattle is to get dairy cows with a bias in milk production, with the preservation of the strength of the constitution and healthy vomit. An important economic aspect is the tribal sale of non-citizens, Bugites for reducing the cost of human labor in general by the enterprise. The genetic selection and the latest se-lecture models contribute to the continuous improvement of the genetic potential of the breed.

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