Фермерским хозяйствам предоставлен особый режим налогообложения. Они в течение 3 лет со дня государственной регистрации освобождаются от уплаты всех видов налогов, кроме налога на лохолы ОТ деятельности. не связанной с сельскохозяйственным производством [2].

Фермерские хозяйства необходимо рассматривать как потенциальных участников в системе государственной поддержки субъектов агропромышленного комплекса, способных обеспечить эффективное использование вкладываемых средств и высокую их окупаемость.

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# THE INFLUENCE OF CORN-SAPROPEL FEED OF DIETS OF DAIRY COWS ON THE SANITARY AND HYGIENIC CHARACTERISTICS OF MILK FOR THE PRODUCTION OF DRY MILK MIXTURES

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The state of health of the nursing mother determines the usefulness of the physical and mental development of the child in his subsequent life. Natural feeding is an evolutionarily predetermined ideal form of human nutrition, since the content of all necessary nutrients, enzymes, hormones, immunity factors and other components that contribute to the adaptation of a newborn to conditions of extrauterine existence, the effects of numerous environmental factors of the body are finely balanced in human milk affecting the health status of women of reproductive age, lead to the development of hypo and agalactia, which suggests AET artificial feeding infants. The raw material for the production of dry milk mixtures is cow's milk, and its sanitary and hygienic characteristics determine the quality of dry milk mixtures, which subsequently curl the formation and development of microbiocinosis in the digestive system in early life and determines the health or latent sluggish dysbacteriosis [2]. From by-products of processing corn into starch, are intended for use as a component of animal feed rations. In the scientific literature there have been reports of the use of feed additives prepared from corn waste in the diets of dairy cows to increase their productivity. Less studied are the by-products of corn starch production such as raw and dry corn feed mixed with apropel in terms of additional sources of proteins, fats and carbohydrates, as well as minerals for feeding dairy cows. For research, pilot batches were made with different ratios of raw corn feed and sapropel. Sapropel in the amount of 15% and 20% by weight of raw corn feed (CCM) was introduced to increase the shelf life and duration of its use, as well as to enrich the complex of nutrients and biologically active substances contained in it. The purpose of the study to determine the effectiveness of the use of corn-sapropel feed different recipes in the diets of dairy cows for the sanitary and hygienic characteristics of milk for the production of dry milk mixtures [1, 3].

The objects of research were dairy cows, corn and sapropel feed of various recipes, the quality of cow's milk (protein, fat, SOMO, density, etc.) according to STB 1598-2006; the content of urea and ketone bodies in milk; – the content of somatic cells in milk (according to GOST 23453) and microbial contamination (according to GOST 30519);

When studying the quality of milk in cows of the control and experimental groups, organoleptic indicators showed that the milk of experimental cows did not differ and corresponded to normative milk (STB 1598-2006). In appearance and consistency, the milk samples were a homogeneous white liquid with a slightly creamy tint, without sediment and flakes, there were no extraneous odors.

The dry matter content was 0,8% higher compared to milk obtained from animals of the control group. Protein content, the amount of which is another major indicator for assessing milk quality, was 0,03% higher. The inclusion of corn-sapropel feed in the diet of dairy cows was accompanied by an increase in milk fat content by 0,03%. Evaluation of milk quality according to GOST did not reveal inhibitory substances, and according to the degree of frequency, all milk samples were assigned to the first group, and the number of somatic cells in 1 cm<sup>3</sup> did not exceed 396000-401000, and microbial seeding 273060-273080 CFU / cm<sup>3</sup>.

Studies have shown that the inclusion of corn-sapropel feed in the diet of dairy cows can be economically justified, since it increases milk productivity and improves the quality of milk in terms of fat and protein. The use of corn-sapropel feed in the diets of dairy cows did not impair the quality of milk. According to organoleptic indicators (color, smell, texture), it corresponded to normative milk (STB 1598-2006).

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## ESTIMATION OF THE PRODUCTIVITY OF CORN HYBRID FOR THE PRODUCTION OF QUALITY FEED

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The role of corn in modern feed production is difficult to overestimate. Manufacturers like it for its high productivity, stability, adaptability, good energy content of feed [2]. This crop occupies a leading position in terms of productivity among other grain and forage crops, which prompted agricultural producers to expand its crops to 1 million ha. On average for 2016-2018. the grain yield of corn in our country amounted to 6 t/ha, silage -7.4 thousand units from 1 ha [3].

Thanks to climate warming and the cultivation of more early-growing hybrids, corn is now being harvested with a higher dry matter content in plants and, consequently, energy. For this reason, the nutritional value of green mass increased from 0,2 ced/kg in 1986-1990. up to 0,3 units/kg in 2016-2018 and their collection increased from 61,3 to 76,4 kg/ha or from 5,48 million tons to 6,42 million tons. This had a positive effect on milk yield. The correlation between the production of corn and milk in the country is high (r=0,95 for green mass and 0,93 for feed units) [1, 4].

The purpose of this study was a comparative assessment of maize hybrids by production and economic characteristics in the conditions of the central part of Belarus.

The studies were conducted in 2017-2019. in the conditions of the central part of Belarus at the experimental site of the RUE «Scientific and Practical Center of the NAS of Belarus for Agriculture». The object of the research was maize hybrids of various origin cultivated for grain and silage: Polessky 212CB, Porumben 176MB, Dneprovsky 181CB, DN Pivikha,