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PROSPECTS OF PRODUCTION OF ESSENTIAL OIL GRAIN CROPS IN UKRAINE

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Abstract: The article considers the current state of production of essential oilseeds of plants in terms of economic feasibility. Essential oil crops are those from which essential oils are extracted and can be used in many areas. The data of sown areas of essential oil crops and volumes of their production are given. The obtained results can be considered as a basis for further research on the strategic development of essential oil production.

Key words: essential oilseeds, sown areas, grain production.

Introduction. In the CIS countries there are more than 1000 species of essential oil plants and only 10 of them are used in industrial production. The range of domestic essential oils does not fully meet the needs of the perfume and cosmetics industry, in connection with which up to 30 types of essential oils of various perfume directions are imported. However, many plants whose oils are imported from abroad can be grown in our country. Essential oil crops include a number of plants that are grown in order to later produce essential oils from them. Significant volumes of production of essential oil crops can be explained by the fact that essential oils made from them have a wide range of applications. In particular, the areas of application of

essential oils today are the food industry (mainly they are used as food flavors); alcoholic beverage industry; tobacco industry (flavorings and essences are used to flavor tobacco products, which may include essential oils of peppermint, coriander, valerian, vanilla, etc.); soap industry; pharmaceuticals (used as medicines and medicines); veterinary medicine; perfumery and cosmetology (used as components of perfumes and cosmetics); aromatherapy; household chemicals; paint and varnish industry (used as solvents); production of rubber and plastics [1].

The aim of the work **is** to study and analyze the current state of production of grain essential oil crops in Ukraine

Materials and methods. The research was conducted on the basis of data from the State Statistics Service of Ukraine.

Results and discussion. The most efficient level of development of essential oil production in the last century was characterized by Europe, in particular, France produced more than 60 items of high quality essential oils. Italy, Spain and Bulgaria also specialized in the production of this type of product. In today's conditions, essential oils are already included in thousands of drugs, attracting increasing attention as a powerful tool for the prevention of any disease [1]. It is no coincidence that world production of essential oils is constantly increasing, reaching 250 thousand tons per year. In general, experts note that in today's conditions there are about 300 different essential oil niche plants, the cultivation of which can be quite profitable. The significant socio-economic significance of essential oil crops is generally evidenced by WHO data that only phytopreparations based on plant raw materials currently create a market of 60 billion dollars. They are widely used in Germany, France, USA, Italy, India. Experts note that in today's conditions the market of essential oil crops is very unstable: the demand for relevant raw materials is constantly changing, it depends not only on the demand of purchasing companies, but also on the shelf life of raw materials. The fact is that the method of using essential oil crops depends on the characteristics of biologically active substances contained in plants. The content of biologically active substances in plants and in their various organs is not constant, it depends on the conditions of the place of cultivation, time of

day, weather conditions and a number of other factors that are no less important. In addition, it should be borne in mind that most biologically active substances are very easily destroyed. Many active substances of plants are very volatile, because they evaporate quickly, decompose at elevated temperatures and under the action of sunlight and precipitation, even in small quantities. Failure to take into account any factor can lead to a deterioration in the quality of seeds, which will be reflected in the sale, so you need to carefully follow the rules of harvesting to eliminate the possibility of these losses [2]. Regarding the direct production of essential oils, it should be noted that after the events of 2014, Ukraine lost the largest producers of essential oils, located in the Crimea. The results of this situation had a negative impact on the dynamics of essential oil production. The current constant demand stimulates the operators of Western and Central Ukraine to increase the volume of harvesting of essential oil crops. The vast majority of farms that grow essential oilseeds are private enterprises and farms. In 2017, the area of essential oil crops was 8.6 thousand hectares, in 2018 - 4.9 thousand hectares, in 2019 - 3.9. thousand hectares [3]. Analysis of the current state of production of essential oil plants showed that, firstly, given that this market segment is considered narrow. In 2017, 54.3 thousand quintals of essential oil crops were produced, in 2018 - 64.5 thousand quintals, in 2019 - 54.4 thousand quintals. Of course, the figures for Ukraine are meager if we take into account the potential of this area, but given the fact that the production of essential oils is currently under development, the available volumes indicate quite significant results. In addition, the sales of essential oils in particular are indicative, amounting to UAH 53.3 million in value terms. Experts note that the desire to grow essential oil crops now arises in many farmers and harvesters.

The main problems that stop the increase in the production of essential oils:

-the need to invest in quality seeds;

-the need for special equipment and premises for drying and storage;

-complex technology of collection and post-harvest processing of seeds;

To compensate for the insufficient number of essential oil crops, domestic companies import it (almost 60%), although it mostly has low quality indicators [4].

Thus, in today's conditions there is a need to develop ways to effectively develop the production of essential oils.

Conclusions. The range of cultivated essential oilseeds should be expanded by introducing into the culture of new essential oilseeds of natural flora of both Ukraine and the flora of other countries with temperate climates. This is primarily due to the rapid growth of the production of cosmetic products and the development of such areas in cosmetics as age, medicine, etc.; changing the smells of perfumes and colognes; extensive use of biologically active substances in perfumery and cosmetics; expanding the scope of fragrant substances (for flavoring synthetic materials, cardboard, paper, detergents and hygiene products, etc.) and replacing expensive imported products with domestic ones [5]. In general, the obtained results can be considered as a basis for further research on the strategic development of essential oil cultivation.

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