

THE OUTCOME OF THE CREATING A NEW VARIETY OF *MELISSA OFFICINALIS* L.

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Lemonbalm (*Melissa officinalis* L.) is a multifaceted use plant, raw and processed products which are used in perfumery and cosmetics, distillery, food and pharmaceutical industries, cooking, medicine and aromatherapy. Largely widespread lemonbalm use due to the presence of essential oil in its raw materials.

Varieties Citronella and Sobornaja characterized by an extremely low content of essential oil in the feed to an average of 0.43% on the absolutely dry weight were created in Ukraine.

The collection of the 27 samples of *Melissa officinalis* different geographical origin was analyzed and promising plants were identified in order to create a new, more productive variety in the Institute of Aromatic and Medicinal Plants in 2004-2007. The resulting promising materials have been tested in the initial stages of the breeding process.

The objective of this study was to conduct a comparative analysis of promising variety samples of lemonbalm on a complex morpho-biological and economically important traits on the stage competitive variety trials to determine better as a new variety.

In comparison with the varieties Citronella and Sobornaja 18 promising variety samples were analyzed on a complex of economically valuable traits at the step competitive variety trials. According to the results of the data sample 2c-8 was selected. It is not different from varieties Citronella and Sobornaja on grounds such as height, diameter of the bush and the yield of green mass. Plants of the variety sample forms more shoots - an average of 21.7 pc., while the average number of shoots in varieties Citronella and Sobornaja of 15.4 and 14.1 pc., respectively.

The main indicators of aromatic varieties are the essential oil content in the raw materials and the collection of essential oil per unit area. According to these indicators variety sample 2c-8 exceeds varieties Citronella and Sobornaja, respectively, the mass fraction of essential oil to 184.6 and 200.0-214.6% (crude and absolutely dry mass), and the collection of essential oil – 176.9 and 300.0%. According to the results of breeding work new variety of lemonbalm Krymchanka was applied for the registration.

Keywords: lemonbalm, mass fraction and the collection of essential oil, variety sample, competitive testing.

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Поступила в редакцию 10.11.2014 г.