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**QUALITATIVE INDICES OF THE FRUITS OF THE OLD APPLE
VARIETIES RESISTANT TO THE SCAB OF THE TRANSCARPATHIAN
REGION**

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Formulation of the problem. Organic gardening is a promising direction of development of Ukrainian agriculture. Ukraine, with its agro-climatic potential, can make progress in the production of organic apples for domestic consumption and for export sales. In Ukraine there are many lands where pesticides and agrochemical fertilizers have not been used for 20 years, since they were divided between people who did not have the desire or ability to process them. The production of organic products with competent implementation and certification is cost-effective. The basis of organic gardening is a varieties suitable for organic cultivation. Aboriginal varieties disappear and are replaced by new, popular varieties. In this regard, it is necessary to preserve the gene pool of these varieties for use in organic gardening.

Presenting of main material. Aboriginal endangered varieties are adapted to the soil and climatic conditions of the Transcarpathian region, have resistance to major diseases, do not require careful care (detailed pruning, use a lot of protective sprays, thinning of the ovary, etc.). Trees of apple varieties of local origin are adapted to local soils. They grow well on them, have a healthy appearance, and give generous yields, without biennial bearing, with long life of tree.

Before choosing of native varieties, the diversity of apple cultivars in the Transcarpathian region was first studied. From this list we have chosen varieties that grow on the territory of our region for the longest time and are less susceptible to diseases (scab and powdery mildew), have good taste qualities, are well preserved, have satisfactory caliber of fruits.

Screened the diversity of aboriginal apple varieties in Transcarpathia and identified the best with high productive indicators without the use of pesticides, their description was carried out in accordance with the methodology of the description of varieties. Due to the screening of the assortment of apple varieties in Transcarpathia, local native varieties were selected: Stetinsky red, Batul, Durnayka, Polovanya, Solivarskoe and Krasa Zakarpattya, Ferkovania. The important varietal characteristics of the selected varieties were studied. Research has proven that variety Durnayka has the largest fruit. Varieties Polovanya,

Solivarske, Batul, Krasa Zakarpattya have smaller fruit. The smallest fruit has variety Shtetin red, which is typical for this variety.

The first steps were taken to create the collection of these varieties. Cuttings for budding were prepared in order to preserve the gene pool of these varieties and their further use. We grew seedlings in a tree nursery. On November 25, 2014 standard seedlings were planted in the constant place near the town of Chop for further research. The planting distance was 6×5 m for the trees grafted on the crab. Seedlings on M9 rootstock were planted according to the scheme 3×1 m. On August 31, 2016, these varieties were grafted onto a dwarfish M9 rootstock, and in 2017 we obtained annual crowned seedlings.

In March 2017, these varieties were grafted onto the rootstocks MM 106, M9 and forest apple. It was revealed that the greatest increment was obtained for seedlings grafted on MM 106.

Conclusions. There is a certain correlation between the area of the leaf surface (the number of leaves and their size) and the size of the fruits and the strength of the tree's growth, which can be used for selection in the selection work.

The largest fruits were found in the Durnayka variety (73,5 mm high, 83,0 mm wide), smaller fruit (medium size) in the varieties Polovanaya, Ferkovnaya, Solivarske, Batul, Krasa Zakarpattya. The smallest fruits in the Shtetin red variety (42,5 mm height of the fruit, 53,0 mm width of the fruit), inherent in the variety. The average fruit size of individual varieties is explained by the fact that the fruits were harvested in old neglected gardens, indicating the prospect of obtaining organic fruits of the same grade (caliber 70+) with almost complete absence of 2 fruits (caliber 60+).

The most suitable part of the Transcarpathian region for organic gardening is the foothill subzone. Here, the soils were under the least pesticidal load.

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