P-128 (11) FRUIT QUALITY OF THE APRICOT CULTIVARS INTRODUCED AND BRED IN NIKITA BOTANICAL GARDEN

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Apricot fruits are a source of biologically active substances. Based on the analysis of fruit biochemical parameters parental couples are selected to create new cultivars for different ways of use. This study included seven cultivars and six promising hybrids of apricot bred in Nikita Botanical Garden (NBS-NSC) as well as two introduced cultivars. The work had been carrying out for 2 years (2015-2016) under the conditions of the southern coast of the Crimea. Released apricot cultivar Krymskij Amur was used as the control. The aim of the research was to determine pomological characteristics and chemical composition of fruits in the studied apricot cultivars and hybrids and to identify possibility of their further use in breeding. Cultivars Vnuk Partizana, Lubimets Richtera, Fiolent as well as the control Krymskij Amur had high rganoleptic evaluation of their fruits. High quantities of dry substances (above or at the same level as in the control cultivar Krymskij Amur) were identified in the cultivars bred in NBS-NSC – Ananasnyij Avgustovskij (20.50%) and Lubimets Richtera (18.55%). The fruit taste significantly depends on sugars and organic acids combination. Less acid content (values similar to the control) was noticed in the cultivars Odissej (0.66%), Vnuk Partizana (1.10%) and hybrid 84-783 (0.96%). Among the studied cultivars the highest content of ascorbic acid was found in the cultivars Kioto (6.25 mg/100 g), Ananasnyij Avgustovskij (6.78 mg/100 g) and hybrid 84-941 (6.69 mg/100 g). Phenolic compounds significantly affect the fruit taste and their technological properties. The highest amount of phenolic substances contained in the fruits of the cultivars Odissej, Ananasnyij Avgustovskij, Lubimets Richtera and hybrids 84-941, 84-783, 84-784, 89-429 and 89-437 (210-428 mg/100 g). Based on the complex of chemical features cultivar Krymskij Amur and hybrid 84-784 have been selected. These genotypes are promising for further use in breeding.

<u>Keywords:</u> apricot, pomology, chemical composition, breeding, hybrids, introduced species, cultivars, fruit quality.