

P-4 (53)**EXAMINATION OF NEW NECTARINE CULTIVARS FOR GROWING IN THE CRIMEA**

Dr. Sergei Tsiupka, Crimea, Yalta, Russian Federation; tsupkanbg@mail.ru (Presenting author)

Dr. Iuliia Ivashchenko, Nikita, Nikitsky Spusk, 52, 298648 Yalta, Russian Federation; yulia-ivash@mail.ru

Prof. Dr. Evgeny Shoferistov, Nikita, Nikitsky Spusk, 52, 298648 Yalta, Russian Federation; fruit_culture@mail.ru

As a result of years of hybridization of introduced nectarine cultivars, the new domestic cultivars were created in the Nikita Botanical Gardens. The paper presents the main biological properties of 5 nectarine cultivars: 'Rubinovyiy4', 'Rubinovyiy7', 'Suvenir Nikitskiy', 'Evpatoriyskiy', and 'Ishunskiy'. The researches were being conducted in 2004-2016 in Nikita Botanical Gardens, Yalta, Russian Federation. All trees were at the same age and received the same standard cultural practices. We used open vase peach system (open vase pruning). As a control cultivar Stark Sunglo was chosen. The study object was phenological, pomological characteristics and fruit chemical composition of 5 new cultivars, bred in Nikita Botanical Gardens. The phenological observations were: start and end of flowering, date of fruit maturity and ripening. Pomological observations were performed on 10 fruits randomly harvested at maturity: weight, fruit size, fruit shape, skin adherence, skin color (ground color, blush and blush type), flesh color, texture, presence of anthocyanic color in the flesh, under the skin and around the stone, and stone characteristics (size, shape, adherence). In this research dry matter, monosaccharids, total sugars, ascorbic acid, titratable acids, leucoanthocyanins, anthocyanins, water soluble pectin, protopectin were also determined. 'Ishunskiy' was allocated by the highest content of dry matter (18.8%), total sugars (14.2%), leucoanthocyanins (250 mg / 100 g) and amount of pectin substances (1.44%). 'Evpatoriyskiy' had the highest content of ascorbic acid (19.7 mg / 100 g). The best taste qualities were observed in 'Ishunskiy' and 'Evpatoriyskiy'. The largest average weight and latest flowering period was observed in 'Rubinovyiy4'. As a result of our breeding Program the new nectarine cultivars ('Rubinovyiy4', 'Rubinovyiy7', 'Suvenir Nikitskiy', 'Evpatoriyskiy', 'Ishunskiy') were handed for state registration.

Keywords: Nectarine, cultivar evaluation, chemical composition, sugar, acid