

New Bulgarian tomato variety

Author(s): Растителна защита
Date: 25.02.2016 *Issue:* 2/2016



At the Sixth National Exhibition “Inventions, Transfer, Innovations - 2015”, held from 12 to 14 November 2015 in Sofia, the tomato variety Pink Heart won first place in the category “New Varieties” and was awarded a Gold Plaque.

The Pink Heart variety was developed at the Maritsa Vegetable Crops Research Institute, Plovdiv, by a scientific team led by the breeder Assoc. Prof. Daniela Ganeva – author, and co-authors, specialists in the fields of vegetable production, phytopathology, entomology and chemistry: Prof. Galina Pevicharova, Prof. Stoyka Masheva, Assoc. Prof. Dimitrina Kostova, Assoc. Prof. Venelina Yankova, Senior Expert Ivanka Nikolova. It was created through repeated individual selection in a local tomato population known in the Plovdiv region as Momino Särtse (Maiden’s Heart). The variety is the result of targeted breeding activities aimed at developing new tomato varieties with increased productivity, improved chemical-technological and taste qualities of the fruits, and

resistance to abiotic and biotic factors. After repeated selection, the yield has been increased, the number of fruits per inflorescence has been raised without reducing the average fruit weight, and disease resistance has also been improved.

The Pink Heart variety successfully passed a two-year (2013–2014) DUS (Distinctness, Uniformity and Stability) testing at the Executive Agency for Variety Testing, Approbation and Seed Control (IASAS) and was approved as a new variety by the Expert Commission at the same agency in 2015. It is protected by Certificate No. 11076 of 30.10.2015, issued by the Patent Office. It has been included in the variety maintenance and seed production schemes of VCRI “Maritsa”, Plovdiv.

The Pink Heart variety is suitable for cultivation both in protected structures and in the open field – under field conditions for early and medium-early production. The vegetation period (from emergence to ripening) is 105–108 days, which classifies it as medium-early.

The plants are indeterminate (tall-growing). The stem is of medium thickness, with medium-long to long internodes. The leaves are light, bipinnate, semi-drooping, with smaller leaflets, slightly twisted towards the tip. The inflorescences are simple, positioned every three leaves, forming 2–4 fruits. The unripe fruits have a green shoulder, which disappears at botanical maturity. The ripe fruits are intensely pink, heart-shaped, very large (with an average weight of 300–550 g), multi-loculed, crack-resistant, fleshy, without cellulose, with a delicate skin and texture, with optimal firmness and storability. The seed cavities are small and peripheral, and the seeds are small and few in number.

The soluble dry matter content is 5.2%. The high and well-balanced content of total sugars and titratable organic acids determines the pleasant sweet-sour taste. The good taste qualities are further enhanced by the typical tomato aroma, the delicate skin and texture.

The Pink Heart variety is resistant to Verticillium wilt.

Under field conditions, average yields range between 4,800–6,500 kg/da. Under greenhouse conditions, much higher yields can be obtained – 8,000–9,000 kg/da.

Pink Heart is grown on a high trellis system, in single rows, at a spacing of 70–80/30–35 cm, trained to a single stem with 6–8 inflorescences. The variety does not require special soils; warm, deep, well-aerated, moisture-retentive and fertile soils are preferable. It requires regular irrigation, fertilization and appropriate plant protection.

Seeds of the Pink Heart variety are offered at VCRI “Maritsa” and in the country’s commercial network.