

The biotechnological potential of tomato torch, growing in Dagestan

© Saida S. Saidova

Dagestan State Technical University. Imam Shamil Ave., 70A.
Makhachkala, 367026. Republic of Dagestan. Russia.

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Abstract

The article explores the biotechnological potential of growing Torch tomatoes in the territory of Dagestan; The characteristics of the hybrid varieties of tomatoes Torch are given. The comparative characteristic of yield indicators of tomato varieties Torch with other varieties cultivated in the southern part of Russia is presented; as part of the field experiment, five universal soil fertilizer schemes and their application regimes for growing tomatoes were tested; the most optimal ratios of the application of nitrogen, phosphorus and potassium for fertilizing soils and fertilizing plants, as an alternative to natural organic nitrogen fertilizers; it is proved that with the introduction of mineral fertilizers against the background of the aftereffect of manure in the soil, the content of nitrates, mobile phosphorus and exchange potassium increases; the influence of the timing of the use of fertilizers on the accumulation of dry matter and the area of the assimilation surface of tomatoes of the Torch variety during the growing season was studied; the dependence of the yield of commodity fruits of the Torch tomato on the doses and timing of the use of fertilizers was established; the effect of fertilizers on individual biometric indicators of Torch tomato plants on the period of mass ripening of fruits is shown; individual indicators of the quality of the Torch tomato fruit in full ripeness are determined depending on fertilizers; it has been shown that the application of fertilizers ensures the yield of fruits of sown tomatoes of the Torch cultivar at the level of 480-500 centner, and also that the tomato plants of the Torch cultivar form the maximum assimilation surface during the period of mass fruit formation; It is shown that the amount of nitrates in the fruits, regardless of the background of cultivation, does not exceed their maximum permissible concentration; in practice, the high yield of tomatoes Torch cultivar in the climatic conditions of Dagestan has been proved.

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