

GROWING TOMATOES AND THEIR DISEASES

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Annotation

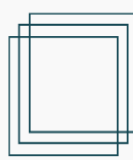
The article provides information about the methods of growing tomatoes, seedlings prepared for planting, the best predecessors of tomatoes, as well as the symptoms and pathogens of Fusarium wilt and cladosporiosis common in our country. This information is important for protecting tomatoes from diseases during the growing season and obtaining a quality crop from them.

Keywords: tomato, seedlings, predecessors, diseases, Fusarium wilt, Fusarium oxysporum f. lycopersici. cladosporiosis, Cladosporium fulvum.

The region consisted mostly of freshly harvested wild benders, which provided food to prosper in a biased and spreads her body. (Matthew 24:14; 28:19, 20) Today, vegetable crops in our country are expanding steadily. Tomatoes play an important role among vegetable crops in Uzbekistan. Scientists estimate that 120 kg [120 kg] of vegetables per capita, of which more than 25-35 kg [25 to 35 kg] of tomatoes should be consumed per capita. Tomato production per capita year-on-year now weighs 15-20 kg. This means 10-17 kg less than the recommended reasonable norm. In the Republic of Uzbekistan, there is a great deal of emphasis not only on increasing the volume of tomatoes planted but also on improving their yields.

Tomatoes are cultivated the most in the country among vegetable crops. Tomato fruits contain vitamin C, B1, B2, R, R1, K vitamins, as well as protein, carotinoids, iron, potassium, phosphorus there will be salts. Tomato seedlings occupy more than 40% of the total vegetable cultivated area in Uzbekistan. In the country, tomato crops are 75.4 thousand hectares, 37.7 tons of seeds are needed for product production and 6.19 tons of elite seeds for breeding.

In Uzbekistan, tomatoes are grown with seedlings and no add-on methods. When the planting method is used, the fruits are made early, and the period of planting is prolonged. In the morning, tomato varieties can be cultivated as repetitive crops after grain crops and tomorrow's vegetables [2]. In this way, the cost of seeds decreases dramatically. In the preparation of seedlings for one hectare of open land, tomatoes cost 200-250 grams of hybrid seeds and 300-400 grams of varietal seeds. Seedlings are grown in plated greenhouses for 50-55 days.



To increase the yield of tomato fruits: planting varieties of early- to medium, middle and mid-evening tomatoes from seedlings, as well as planting them on Dec 3 in April recommended.

Seedlings prepared for planting should be healthy, refined, the main foundation should be less than 6 mm in diameter and the plants should not be slaughtered. Dimensions: height 20-25 cm; The number of leaves must be formed from 7-9 pieces and one flower shock [2].

The best pastures for tomatoes in the conditions of our country's irrigated land are bodies, tomorrow's green and nutritious vegetables, onions, garlic onions, melon crops, cucumbers, and is cabbage. In repeated plantings, onions can be placed after wheat crops. It is not recommended to plant the tomatoes in one field more than 2 years in a row. It is desirable to plant in one field at least 3 years later. It is not recommended to plant tomatoes after pepper, pepper, potatoes. The resulting embryo was allowed to develop in nutrients and then inserted into her womb, where it implanted.

Despite a number of favorable conditions, tomatoes have many diseases that cause specific microorganisms, including fuzariosis absorption from fungal diseases, phytophotorosis We can cause cladosporiosis, root rot diseases, as well as diseases caused by bacteria and viruses.

Fuzariosis slaughter or wilt disease of tomatoes occurs in greenhouses and open fields. Damaged seeds, seedlings and young nipples are completely decayed. The disease is caused by gifomitset fungi *Fusarium oxysporum f. triggers lycopersici*.

Fuzariosis of tomatoes or wilt disease begins with the lower leaves, often yellowing on the one hand, and the plants fading. Faded leaves dry out, but without falling, they hang on the branches. Branches can also be slaughtered on one side of the plant, and then the whole plant fads. On the branches appear yellow streaks. The affected plants are weakened before slaughter and become very low in height. The resulting embryo was allowed to develop in nutrients and then inserted into her womb, where it implanted. The interling between the roots of the berd and the inserted into her womb, where it implanted (Figure 1). Fungal is a hot-tempered organism that damages plants severely when the soil temperature is 21-33°C and the optimum is 28°S [3].



Figure 1. Symptoms of fuzariosis or wilt disease of tomatoes. (<https://stroy-podskazka.ru/>)

Tomatoes are triggered by cladosporiosis disease Ni *Cladosporium fulvum* hypomiset fungi. Cladosporiosis is common all over the world, and it is one of the main diseases of tomatoes in greenhousesdir. Less common in open fields. In southern Uzbekistan, heatis the most common and dangerous disease of tomatoes. Strong epiphytoties of the disease sometimes develop even in open fields [1].

The disease begins at the end of the flowering and fruiting of the onion and mainly damages its leaves. Its first signs are yellow or light green on the lower leaves, and under the leaves there are pale, yellowish or hungry spots (2- Image). Spots under the leaf are covered with greenish-coarse or gray-coarse stains of fine mold. The disease quickly passes to the leaves of the top half. Severely damaged leaves become whipped and dry.

When the disease develops in the form of epiphytotics, flowers and fruit bands, flowers and buttons of tomatoes are also damaged, and they are later spilled out. The most exacerbated period of the disease coincides with the time of fruit ripening. On the fruits appear spots, dense, olive-colored, covered with mold [1].

On the affected tissue, fungi form millions of conidies, and the disease spreads with their help. Conidies are dispersed by air currents, water droplets and workers. Favorable conditions for the development of the disease are mainly high humidity, low or no illumination, and temperatures of 10-25⁰⁰ C.



Figure 2. Symptoms of tomatoes' cladosporiosis.
(<http://greenteplica.ru/>)

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