BIOLOGICAL PROPERTIES OF CUCUMBERS AND NEW VERIETIES

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БИОЛОГИЧЕСКИЕ СВОЙСТВА ОГУРЦОВ И НОВЫЕ СОРТА

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Annotation: Cucumbers first appeared in the Himalayas more than 3,000 years ago. Cucumbers came to Russia from Byzantium. Its Russian name is derived from the Greek word for "uncooked, uncooked". And all because the taste of fresh young cucumbers is better than ripe.

Аннотация: Впервые огурцы появились в Гималаях более 3000 лет назад. Огурцы попали на Русь из Византии. Его русское название происходит от греческого слова «сырое, сырое». А все потому, что свежие молодые огурцы по вкусу лучше спелых.

Key words: Cucumber leaf, fertilizer, care, cucumber flower.

Ключевые слова: лист огурца, удобрение, уход, цветок огурца.

Introduction. Cucumbers are said to have been cultivated 3,000 years ago. It is native to tropical and subtropical regions of India and still grows naturally on the slopes of the Himalayas. It spread from India to Greece and Italy, and later to China. It was brought to other parts of Europe by the Romans. Cucumbers entered France in the 9th century, England in the 14th century, and North America in the mid-16th century. Cucumbers are believed to have entered Russia from East Asia in the 16th century (recollections of German Ambassador

Herberstein's visits to Persia and Moscow), but some historians believe that cucumbers were also known in Russia in the 9th century.

The stems are earthy, the stems are simple, the stems are simple. When the plant has 4-5 leaves, it lies on the ground, spreads its stalks, or clings to the surrounding objects with its help. Stems branched, rounded, rounded or angular, covered with hairs. The main stem is formed from the leaf axils of the first and second order branches. Cucumbers are weak, moderately and strongly branched, depending on the navigation, feeding area and temperature. Depending on the type of branching, cucumber varieties are divided into single-stemmed, strong- (more than 8 side branches), medium- (up to 5-8 side branches) and weak- (1-4 side branches) branched stem varieties. The length of the stem depends on the variety and growing conditions: in the open field the main stem grows 1-1.5 meters, in favorable conditions up to 3 meters, in greenhouses up to 5 meters. The stems can be thin (less than 0.5 cm in diameter) and thick (more than 0.5 cm). Short-stemmed cucumber varieties are usually fast-ripening, the fruit is relatively short, characterized by a short growing season. Depending on the navigator, cucumbers are divided into weak, medium and strong leafy species.

The leaves are arranged alternately on the stem. The leaf blade is entire, the surface is flat or wrinkled, and the leaf edge is also usually flat. The shape can be claw-shaped or oval-clawed, depending on the navigation.

The root system is sterile, strongly branched. It consists of a main root growing up to 1 meter and a large number of additional roots. Physiological functions, such as the absorption of nutrient solutions from the soil, are performed by small sucking roots covered with hairs. The main part of the root system develops in a layer of 20-25 cm of soil, the root spreads to the side and the growth radius can be up to 1.5 meters. In high humidity, additional roots may form if the main and side branches touch the soil.

Most varieties of cucumber are bisexual, with male and female flowers on the same plant. Male flowers are usually 5-7 on the stem, forming a ball, and in single-stemmed cucumber varieties, the number of male flowers is often higher than that of female flowers. Female flowers are located on the stem 1 or in pairs, in some cases in groups of 3. Cucumber varieties that produce mainly female flowers are planted

together with varieties that produce enough male flowers to pollinate. The petals are bright yellow, the male flowers have 5 pollen grains, 4 of which are in pairs and one is solitary.

Cucumber flowers do not live long: the male flowers die after 1-2 days, and the female flowers die after 3-4 days after flowering. Only pollinated female flowers bear fruit, and non-pollinated females shed. Cucumber is a pollinating plant. In parthenocarpic varieties, the flowers do not need pollination, but such flowers bear fruit but do not have seeds.

Cucumbers are fake berries that form 3-5 seed chambers. Shape, color, size and weight vary depending on the variety. Unripe cucumbers are eaten. Depending on the navigation, the surface can be flat, uneven or rough. Fruits are 5-70 cm long, can be green or dark green in color, and when ripe, the fruit is enlarged, pale yellow, orange or brown. When the fruits ripen biologically, they are called seeds. Up to 100-400 seeds are formed in one fruit. The seeds are elongated-oval, white to pale yellow, weighing 16-35 grams per 1000. Retains memory for 6-8 years. 2-3 year old seeds give good yields.

The diversity of cucumber varieties leads to confusion and persistence: which variety to choose when all growers promise easy care and abundant harvest? It's hard not to get lost in the success of the breeders. To choose without much hesitation, you need to rely on the characteristics of cultivation: greenhouse or open field, climatic conditions, the desired taste characteristics and purpose of the fruit. Based on many years of experience, experienced gardeners have already drawn conclusions and selected a number of varieties for planting in 2019.

Features include resistance to low temperatures, humidity, drought and other weather conditions. The choice of variety for open ground depends directly on the characteristics of the region. For the southern and central zones, all cucumbers do not take root and bear fruit in Siberia and the Urals, and vice versa.

Shrub specimens are preferred for cultivation in the garden, they do not need a garter for the fence, they form a lush green bush. Typically, the seeds of shrub species are sown directly into the ground.

Hybrids

The best option for the greenhouse is a parthenocarpic hybrid cucumber. Their advantages: insect pollination is not required, more precisely pollination is not required at all. In such bushes female flowers are formed, the ovaries are formed by themselves. Hybrid cucumbers are poorly developed, they do not require frequent pinching. But the thickening of seedlings is contraindicated for greenhouse cucumbers: the plants need to get enough light to ripen a large amount of fruit.

The best hybrid cucumber varieties for greenhouses:

- 1. Herman F1. Early, fertile sorghum-type cucumbers. Up to 9 kg of fruit can be obtained from one plant in the greenhouse. Up to 7-8 fruits are formed in one group. Cucumbers are bitter, universal. The hybrid is resistant to viral and fungal diseases. A small amount of fine seeds has no effect on taste.
- 2. Masha F1. Super early variety, fruiting begins on the 37th day. From one bush is obtained very effective parthenocarpic, 10 and more kilograms of cucumbers. Fruit length does not exceed 11 cm Purpose salad and pickling.
- 3. Courage F1. Popular greenhouse cucumbers. Yields are good up to 8 kg per bush. The average season 45–50 days. The fruits are large, up to 15 cm, with a thin rind and a crunchy pulp. Good for early pickling. Ideal for salads.
- 4. Director F1. Another contender to grow a greenhouse. Early ripening varieties with a long fruiting period, pickles, size up to 9-10 cm. Taste qualities are excellent, the dough is juicy, not bitter. The species has additional advantages tolerance to shade and resistance to powdery mildew.

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