

## CENTRAL ASIAN JOURNAL OF THEORETICAL AND APPLIED SCIENCES

Volume: 02 Issue: 12 | Dec 2021 ISSN: 2660-5317

# **Morphological and Biological Properties of Raspberry**

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Received 27th Oct 2021, Accepted 29th Nov 2021, Online 22th Dec 2021

**Abstract:** The scientific article provides brief information on the morphological and agrobiological characteristics of raspberry plants. The scientifically substantiated data on the phases of growth and development of underground and aboveground vegetative organs of raspberry plants, as well as high yields from them, are described in detail.

KeyWords: raspberry, berry, sprig, bud, leaf, root system, rhizome, flower, fruit, moisture, temperature, soil.

**Introduction.** In accordance with the Decree of the President of the Republic of Uzbekistan "On measures for the efficient use of land and water resources in agriculture" DP-5742 dated June 17, 2019, as well as the restoration of local varieties of agricultural crops with unique features and characteristics and the Resolution of the Cabinet Ministers No. 504 of August 24, 2020 on the organization of original seeds of promising varieties production.

Further development of the agricultural sector in the country, reform of the fruit industry, including rare berries; Focusing on growing raspberries, expanding research, using advanced and modern resource-saving technologies, leads for the cultivation of high-quality industrial and export-oriented raspberries.

**RASPBERRY**- (Rosaceae) is a perennial semi-shrub of the genus Rubus, consisting of rhizomes and adventitious roots, the underground part is perennial, the aboveground part is biennial, i.e. the aboveground part grows in the first year, and bears fruit in the second year, and the upper part will die that year. The main cultivars of raspberries come from two wild species: the red raspberry (Rubus idaeus) and the black raspberry (Rubus occidentalis).

Raspberry rhizome is an underground part of the stem and is capable of producing growing buds on the surface. On the rhizome of raspberries, up to several buds are formed in the first year of life. The raspberry root system consists of additional lateral roots.

Raspberries are propagated mainly by vegetative organs, rhizomes and branches. The main lateral roots of raspberries are located lower on light soils and deeper on heavier soils. Its rhizomes are capable of forming superficial buds and root suckers. As a result of the combination of root, the first growing branches of the root stem emerge from its layers. The tumor that appears on the surface of the root is white. But when it starts to grow, it grows upward. When the twigs come to the surface, the young shoots turn green. These young, newly emerged twigs develop by feeding on the roots of mother plant for some time. In some cases, branches may form their main roots at the same time as they grow on the surface. Later, the supply of nutrients to young seedlings is completed, even if the root system connecting young

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seedlings to the mother plant is not destroyed. One of the unique characteristics of raspberries is that they have the ability to leave an endless number of offspring, young shoots are quickly formed from mother plants and ensure longevity of raspberry plantations. But it should be noted that not all raspberry varieties have the ability to reproduce.

The surface of the raspberry consists of one- and two-year-old buds. In the first year, young shoots develop rapidly, branches grow and thicken. Ripening of branches goes from bottom to upwards. Often three quarters of the branches are immature. As they grow, young raspberry buds appear green or brown. Once ripe, the branches turn gray, brown, or purple. Many sprigs of raspberries are covered with small thorns. These are altered hair, the cells of which are lignified. The spines are close together or sparse, long or short, reddish, purple or green, covering all or part of the buds on the stem.

Raspberry leaves are a complex leaf, consisting of three or five leaf blades with one petiole. Raspberry leaf formation occurs simultaneously with the growth and development of branches. In young seedlings of the first year, fruit buds are located in the leaf axils. Each leaf axil usually contains one or two buds. One of them is the main one and the other is the spare. In spring, only one, the strongest, bud blooms. The spare buds generally open only when the main buds die off. Raspberry twigs do not grow and thicken in the second year. Raspberries bloom a little late. For this reason, the spring frost ends at the time of flowering. When the first flowers turn into berries, the next ones bloom. But when leaves are formed, flowers and berries are formed from the fruit buds. As soon as the fruits are ripe, the twigs dry up.

Almost all varieties of raspberries are self-pollinated. Raspberries ripen one month after flowering. The ripening of the crop lasts the same as the flowering. That is, the fruits ripen continuously for one and a half months. Harvesting is not done simultaneously. Harvesting is done every 2-3 days. Raspberry is a very edible, medicinal fruit. The fruit is consumed mostly fresh. However, drying and conserving the fruit gives a positive result.



#### CONCLUSIONS

- Accelerated cultivation of raspberries in the Republic will satisfy the population's need for berries. Raspberries contain many trace elements necessary for human health.
- Creation of raspberry plantations is a key factor in increasing the range of berries.
- Raspberries are used fresh, dried and canned. Raspberry products can be exported to the world and domestic markets as a unique product.

### LITERATURE

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