

# Growth And Development of *Eriobotrya Japonica* (Thunb.) Lindl. In The Conditions of Surkhandarya Region

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**Abstract:** Great attention is paid in our country to the issues of full provision of the population with food products, full satisfaction of consumer demand at the expense of fruits and grapes grown in the country, as well as increasing the export potential.

The southern regions of the Republic of Uzbekistan have all the conditions for the development of horticulture, where it is possible to grow almost all types of fruit crops [1].

The geographical location of our republic has a strong impact on the climate. The distribution of solar radiation, air temperature and humidity, and precipitation varies by region, which has a strong impact on plant growth and development. Especially since fruit crops are perennials, they are constantly affected by external conditions not only during the growing season, but also throughout the year.

The average temperature in Surkhandarya region does not fall below 0 degrees in winter. The average absolute minimum temperature is -12-15°, and the probability of damage to fruit crops in winter is very low. Summers are characterized by high temperatures (above 50°C) and low humidity. Under these conditions, heat and drought resistance are the most important biological properties. Adequate light and heat factors, as well as the length of the growing season, allow the fruit crop to grow and develop rapidly and produce high yields. The availability of varieties that ripen at different times allows to provide the population with fresh fruits throughout the year [2].

**Key Words:** Japanese moths, *Eriobotrya japonica*, Japanese Mushmula, erion, botrys

## Introduction:

**Botanical description of the Japanese moth:** Japanese moth - (*Eriobotrya japonica* (Thunb.) Lindl) is a perennial evergreen subtropical tree or shrub belonging to the family Rosacea Juss. The Japanese moth is 3-6 meters tall (9 meters) the leaves are evergreen, linear, up to 25 cm long, 7-8 cm wide. Inflorescence-complex. The fruit ripens in March-April (in the greenhouse). The shape and size of the fruit is similar to that of a wild apple. The peach is thicker than the peel. The taste is slightly sour-sweet.

Varieties that grow in the open field ripen in May and June and berries are grown at home as a fruit. The diameter of the fruit is 3 cm. up to 10 cm, cultivated varieties will be up to one fruit weighs up to 30 grams (cultivars up to 100 grams).

Mushmula is derived from the Greek word "erion" - wool and "botrys" - hair. The Mushmula series includes 30 species. Mushmula fruit can contain up to 2-3 (5) seeds.

**The spread of the Japanese Mushmula:** In the wild, Japanese moths are found in western China and northern India. Cultivated in China, Japan, USA, Taiwan, Brazil, Australia, Cyprus, France, Israel, Palestine, Italy, Lebanon, Malta, Spain, Syria, Turkey, New Zealand, Pakistan, Portugal and Iran. It grows in the former Soviet Union - around the Black Sea, in the Caucasus, on the southern coast of Crimea, in Armenia, Georgia, Abkhazia and parts of Central Asia.

It grows naturally in China from 915 to 2100 meters above sea level, in India from 1500 meters above sea level, and in Guatemala from 900 to 1200 meters above sea level. The Japanese muskrat tree can withstand temperatures as low as 11 degrees Celsius. In Japan, it can withstand temperatures of up to +7 degrees Celsius during flowering and up to 3 degrees Celsius during flowering.

Seeds can also die at -4 levels. Mushmula seeds do not lose their properties for up to 6 months if stored at a temperature of 5 degrees and high humidity. The origin of the Japanese mussel is from Southeast

China and Japan. It was cultured in Japan 100 years ago. In 1690, botanist Kaempfer was the first to introduce the mussel to the world. In 1712, Thunberg saw this plant in Japan and gave a detailed account of the plant. Brought from China to the National Park in Paris in 1784. In 1787 it began to grow in the Royal Botanic Gardens of England. Later, in Malta, France, North Africa (Algeria) and the Middle East, the fruit of the Japanese mushroom appeared in local markets. From 1818 it began to grow in greenhouses in England and later in the open fields in England. Japanese mussels began to be cultivated in India, Southeast Asia, Australia, New Zealand and South Africa. By the 19th century, it had appeared in South America, Central America, Mexico, and California. It was also grown in 1867 in South Florida, North Carolinas and North Jacksonville. It began to appear in California in the 1870s. In the 1960s, cultivated varieties were also planted in the State of Israel. In the northern part of the United States and in greenhouses in European countries began to be planted as an ornamental tree. The fruit of the Japanese mussel yields 17,000 tons annually in Japan. In the Brazilian state of Sao Paulo, there are about 150,000 trees. By the 19th and 20th centuries, cultivation began in Georgia, Abkhazia, Crimea and elsewhere.

In the territory of Uzbekistan in 1955 only in the city of Samarkand began to grow Japanese mussels [3]. The study was conducted in Denav district of Surkhandarya region.

In the study, the 4-year-old tree began to bloom in mid-October and lasted until the end of December, with fruit ripening observed in May-June. Thus, in Surkhandarya region, there are opportunities to provide the population with medicinal vitamins, to grow promising fruit trees and shrubs, as well as favorable climatic conditions.

### References

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