

DESCRIPTION OF THE VARIETY, PLANTING AND CARE, CULTIVATION AND PEST PROTECTION OF CHANDLER BLUEBERRIES

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<https://doi.org/10.5281/zenodo.10868368>

Abstract. Gardeners started cultivating wild blueberries only 100 years ago, so we can safely say that blueberries are a young culture. This berry is attractive both as an ornamental plant and as a berry shrub, which gives a high-quality, delicious, vitamin-rich harvest. The berry is used in pharmaceuticals, as blueberries contain powerful antioxidants and a high amount of vitamins.

Keywords: blueberry, plant protection, chandler, bluecrop, bluegold, duke.

The object and methodology of the study. Chandler. The garden variety of blueberry Chandler is a perennial deciduous plant of late fruiting period. It belongs to tall varieties; the height of adult blueberries is 1.5–1.7 m. The shrub is spreading, branched, the crown diameter is 1.5 m. Chandler blueberries with a high degree of frost resistance, without damaging the stems and root system, resists temperature drops to -250 C.



Fig. 1. A bush of the Chandler blueberry variety

The flowers are lily-shaped, small. The buds are pink, and after blooming they are white, drooping. Flowering is abundant.

Fruit brushes are formed on last year's shoots, the density is from 8 to 12 berries, located on the outer part of the bush.

The high yield of the Chandler variety is ensured by late flowering, it falls in June, frosts at this time are rare even in the Northern regions. The berries ripen unevenly, the harvest continues from August to September. If they do not have time to harvest part of the crop before the first frosts, blueberries do not fall off, they completely retain their taste and shape.



Fig. 2. Flowering of blueberries of the Chandler variety

Advantages of blueberries Chandler: stable long-term fruiting, high productivity, frost resistance, suitable for the northern climate, the weight, taste and juiciness of the berry, the fruits do not fall off and do not bake in the sun, the variety is self-fertile, the agricultural machinery is simple.

The disadvantages of the Chandler blueberry variety include poor drought resistance. With a lack of moisture, vegetation slows down, the yield and taste qualities of fruits fall. A common blueberry disease affecting young shoots and leaves is the spread of the Phomopsis fungus. Infected areas of the stem dry out, the leaves turn yellow and fall off. "Topsin" is used in the fight against infection. For prevention purposes, blueberries are treated in spring with a solution of copper sulfate and potassium hydroxide. The beetle khrushch and leaf beetle parasitize on the Chandler variety, eliminate pests with "Inta-Vir" and "Spark".

Materials and methods of research. Blueberries contain many biologically active substances necessary for human health. It has been proven that regular consumption of blueberries and blueberries reduces the "fatigue" of the eyes when reading books for a long time or being at the monitor. At the same time, subjective and objective symptoms improve. Japanese scientists also emphasize the effectiveness of the plant in order to prevent and treat diseases such as retinal detachment and age-related macular degeneration.

Characteristics of the Chandler blueberry variety:

Table 1.

№	Main Features	
1	Synonyms of the name	Chandler, Chandler
2	Productivity	high
3	Average yield	6-8 kg per bush
4	Transportability	is unsuitable
5	Appointment	for fresh consumption, decorative tall for all types of processing
6	Decorative qualities	decorative
7	Type of growth	tall
8	Height of the bush, m	1.5

9	Description of the bush	erect, spreading, branched
10	Leaves	large, with a sharp tip, bright green in spring and summer, in autumn turn purple
11	Flowers	white or white-pink
12	Fruit size	large
13	The shape of the fruit	rounded, slightly compressed on both sides
14	Fruit size, mm	20 mm in diameter
15	Fruit weight, g	up to 5
16	Fruit color	blue
17	The skin	thin, covered with a light waxy coating
18	The color of the pulp	light purple
19	Taste	good, sweet and sour
20	Smell	fragrant
21	Fruit shedding	do not fall
22	Keeping quality	off for a short time
23	Self-fertility	cross-pollinated
24	Winter hardiness	hardy
25	Frost resistance, °C	to -37 ° C
26	For the Middle lane	yes
27	For the Leningrad region	yes
28	Drought resistance	stable
29	Pruning	yes
30	Soil	loose soils, with a high content of peat and sand, and acidity in the range of 3.8-4.8 units
31	The need for fertilizing	yes, mineral fertilizers
32	Watering	an adult bush requires 10 liters of water per week, which is applied twice a week, in the hot season - more often
33	Resistance to fungal diseases	illuminated
34	Maturation dates	late
35	The period from flowering to berry picking	from June to August
36	Fruiting period	August-September
37	The nature of maturation	is not simultaneous, stretched
38	Frequency of fruiting	regularly

Agricultural technology of Chandler blueberries consists of frequent watering, fertilizing, pruning. It is also important to maintain the necessary soil acidity.

Form a bush of the Chandler variety for the 3rd year of growth, shorten the stems by 1/3 in early spring. Continue pruning until the age when the bush begins to bear fruit fully. Then, in

autumn, the middle is thinned, old, twisted branches are cut off. In spring, sanitary cleaning of dry areas and frost-damaged stems is necessary.

Conclusion. Chandler blueberry is a high-yielding garden variety with a large berry. The plant is highly frost-resistant, adapted to the weather conditions of the north and the temperate climate zone. Fruits with high gastronomic characteristics, versatile in use. The crop is grown to produce berries and as an element of landscape design.

REFERENCES

1. Andersen, O.M. Anthocyanins in fruits of *Vaccinium uliginosum* L. (bog whortleberry) / O.M. Andersen. - J. Food Sci. - 1987. - № 52. -P. 665-666.
2. Darrow G. M. *Vaccinium*. Blueberry and cranberry breeding // Handbush der pflanzenzuchtung. 2. Aufl. Berlin-Hamburg, 1960. Bd. 6. Lfg. 45. S. 509-513.
3. Snakina T.I. Intraspecific Variability of *Vaccinium uliginosum* L. and Its Significance for Introduction and Breeding // Biodiversity and Dynamics Ecosystems in North Eurasia. Vol. 2. Proc. of the International Symp. Novosibirsk: IC&G, 2000. P. 221-223.
4. Род *Vaccinium* // Ботаника. Энциклопедия «Все растения мира»: Пер. с англ. - Botanica / Ред. Д. Григорьев и др. - М.: Кӧнеманн, 2006 (рус. изд.). - С.7,13 с. - ISBN 3-8331-1621-8
5. Stowik B. Wptyn sciotkowania, nawadniania i zaprawiania dleby przed sadzeniem na uszkodzenia mrsowe borowki wysokiej odmiany Bluecrop w czasie zimy 1986-1987//Pr. Inst, sadow i kwiaciar Skierniewicach. A. 1991. N. 30. P. 31-37.