

Section 4. General biology

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CORNELIAN CHERRY (CORNUS MAS L.) HISTORY OF INTRODUCTION TO CULTURE

Abstract. Cornelian cherry or male — *Cornus mas* L. is a deciduous shrub or small tree from the family of dogwood (Cornaceae) with a height of 3–5 (up to 10) m. The article presents data on the results of studies of cornelian cherry (*Cornus mas* L.). This fruit plant is very ancient, valuable food, medicinal, soil-protective and decorative, undemanding to growing conditions, almost not damaged by pests and not affected by diseases.

Key words: Families, fruit, flower, reproduction, fever, active substances, medicine.

The stem of old trees reach a diameter of 25, in rare cases even 45 cm, covered with gray cracked cortex. The lateral shoots extending from the main stem are directed upwards almost vertically. The leaves are opposite, ovate or elliptical, up to 10 cm long, with an elongated and pointed tip, with arcuate lateral veins, whole-cut, with petioles. The leaves on both sides are covered with pressed bristles, which easily break off and get on human skin, cause unpleasant itching.

The flowers are bright yellow, collected in 5–9, in umbellate inflorescences with a diameter of about 1 cm, surrounded by wrappers of 4 filmy leaflets. Inflorescences are located on shortened shoots. The flowers are regular, 4-membered, bisexual, but in some flowers the stamens are sterile. The calyx is grayish. Corolla with lanceolate-triangular petals 2–2.5 mm long. A pistil with a lower ovary and a green column. The flowers are pollinated by bees and other insects.

Fruits are large cylindrical or pear-shaped, rarely almost spherical drupes up to 3.5 cm long and up

to 2 cm in diameter, with juicy pulp of sweet and sour, slightly astringent taste. When fully ripe and after frosts, the astringency decreases. The color of fruits in different individuals (as well as their shape and size) varies greatly, it can be pink, red or dark red in different shades. Each drupe contains 1–2 oblong bones (seeds). The red color of the fruits gave the basis to the name of the plant (“dogwood” in Turkic “red”) [1, 2]. Blooms early in spring — in March-April, before the leaves bloom. The fruits ripen in August-September. Individuals live up to 250 years. Wild dogwood species are common in the mountains of the Caucasus, Asia Minor, and Southern Europe. It grows in the undergrowth of deciduous forests, on their edges and clearings in the lower and middle belts. It is also found on the territory of the Russian regions of the North Caucasus. The extent to which it is widespread there can be judged by the size of fruit preparations — in the 50s. in the last century, up to 3 thousand were

harvested in Dagestan alone. tons of this product annually [2,3].

Cornelian cherry has long been grown near houses and in gardens, even varieties that differ in large fruitfulness have been bred. In Uzbekistan, the cornelian culture as a “Conservation and development of Biodiversity” in Republic online scientific and practical conference fruit plant has not been widely distributed. In many places in Russia, the Caucasus and the Astrakhan region, you can find its planting. It is also planted in protective forest strips in the Rostov region, Krasnodar and Stavropol territories. Up to the Eagle, you can find individual cornelian plants in plantings. Propagated by seeds that germinate unfriendly, and young seedlings grow very slowly, which makes it difficult to breed cornelian [4].

Cornelian cherry is a well-known food plant. Its fruits contain up to 10% sugars (mainly glucose and fructose), 2–3.5% acids (mainly malic), pectin, tannins and coloring substances, essential oil, vitamins C (up to 120 mg) and R. In terms of ascorbic acid content, dogwood fruits surpass such well-known vitamin-bearing fruits as citrus fruits. There is a lot of fatty oil in the seeds [2].

Cornelian fruits are eaten fresh and boiled, jam, jam and compote are prepared from them, processed into pastilles, marmalade, syrup, alcoholic and soft drinks. Fresh and dry fruits are used as a seasoning for meat dishes, marinades and sauces are prepared from them. Caucasian peoples make pita bread from dogwood fruits — cakes made from dried fruit pulp, as well as turshu — boiled juice.

Cornelian juice is popular in Georgia. He was loved by Sergei Yesenin, who wrote, addressing the Caucasus: “You teach my Russian verse to flow with cornelian juice.” Fruits are raw materials for the confectionery and canning industry. For home use, they can be stored for several months in a cool place, sprinkled with granulated sugar. The seeds of the fruit serve as a good substitute for coffee [3]. Cornelian has not only food use. It is decorative, used to create hedges. It is valued as an early spring non-

ey plant that gives nectar and pollen. The bark and leaves were used for tanning and coloring the skin. Cornelian wood is very strong and heavy, has a beautiful pattern, so it is appreciated for artistic crafts. Previously, weaving shuttles, buttons and even watch wheels were made of it. And in Dagestan there were masters who made a name for themselves by making wonderful dogwood canes. Branches are used as handles of various tools and agricultural implements. Note in passing that the Latin name *Cornus*, which means “horn”, dogwood received precisely for hard wood with thin annual rings, really remotely similar to horn [5]. In ancient medicine, dogwood fruits and the bark of the aboveground part of the shrub were used as a wound healing and antidote. At the Republican online Scientific and Practical Conference “Conservation and development of Biodiversity”, burnt bark or crushed dogwood fruits were applied to the surface of the wounds. According to Avicenna, the squeezed juice was applied inside or in the form of a medicinal dressing applied to the bite site of poisonous snakes (vipers). Cornelian was known in ancient Greece, and it was salted like olives. In ancient times, even before Galen, dogwood was used as an astringent. Later this property was confirmed by the Salerno School. In the folk medicine of Armenia, dogwood seeds, powdered and boiled in water, as well as a drink made from roasted seeds, like coffee, are given for diarrhea. In the Caucasus, juice from fresh leaves is used as eye drops. From a decoction of dogwood leaves and barley flour, a plaster mask is prepared for the treatment of abscesses. A thick decoction of fruits is spread on wet gauze and put on the forehead for headaches. In Karachay-Cherkessia, a decoction of dogwood roots is taken orally for rheumatism, and a decoction of fruit seeds for diarrhea.

Chinese traditional medicine recommends fruits as a restorative and tonic for tuberculosis, pain in the lumbar region, frequent urination, tinnitus [6]. In America, the roots and bark of dogwood branches are used as a substitute for quinine as an antimalarial

agent. Juice, jam and fruit compote in folk medicine are recommended for anemia, liver diseases, gout, diabetes mellitus, as a concoction, choleric and diuretic. Water extracts from fruits and leaves are used as an antipyretic and diuretic. For the treatment of the same diseases, you can use a decoction and an infusion of dogwood. Water extracts from dogwood bark are a good tonic and stimulant.

For medicinal purposes, dogwood fruits, leaves, shoots, bark, roots are used. According to research, the fruits have an anti-scurvy, antidiabetic, antipyretic, anti-inflammatory, bactericidal, antimalarial, bile and diuretic, tonic effect. They treat gastrointestinal diseases, dysentery, typhus, anemia. They help with measles, flu, scarlet fever, rickets, sore throat, diarrhea, tuberculosis, cirrhosis of the liver and other diseases.

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