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THE ROLE OF THE CIRCASSIAN PLANT IN NATURE, IN NATURE AND UNDER THE INFLUENCE OF ABIOTIC FACTORS

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Abstract
This article discusses the medicinal plant Circassian. Information about the structure and life cycle of the Circassian plant is provided.

Keywords: Circassian, medicinal, antimicrobial, nosebleeds, inflammation, capsella bursa-pastoris.

Introduction

Ceratophyllum demersum is a unique aquatic plant known for its many natural and medicinal properties. It grows in rivers, lakes and other bodies of water, and its role in its unique ecosystem and its use in medicine are interesting studies. It is an annual or biennial plant belonging to the family of coarse-leaved grasses. This plant is widespread throughout the world, especially in temperate regions. It often grows on roadsides, in gardens, fields and other open areas.

- Leaves: The leaves of the Ceratophyllum plant are oblong, with serrated edges and are arranged in a rosette. The leaves on the stem are smaller and lanceolate.
- Flowers: It has small white or light pink flowers. The flowers are small and have 4 petals.
- Fruits: The fruits are heart-shaped and contain small seeds. The seeds are dispersed by rain and wind.
- Height: Usually reaches a height of 20-50 cm.

The Circassian plant has been used in traditional medicine as a hemostatic agent. It is known for its ability to stop bleeding, heal wounds, and have anti-inflammatory effects. It also has diuretic and blood pressure-lowering properties.

In some countries, the young leaves of the Circassian plant are eaten as a salad or soup. It is rich in vitamins and minerals, especially vitamins A, C, and K, as well as minerals such as iron and calcium.[1]

The Circassian plant helps to loosen the soil and increase its fertility. It is also useful in protecting the soil from erosion. Although this plant is useful in many ways, it is also considered a weed in some places because it can invade and inhibit the growth of crops. The Circassian plant is found throughout the world, including Europe, Asia, North and South America, Africa, and Australia. It can grow in temperate regions, as well as in subtropical and

tropical regions. This plant is adaptable to a variety of soil types, but grows best in moist and fertile soils. It is found in open areas, roadsides, gardens, croplands, and even in cities.

Life cycle: The Circassian plant is an annual or biennial herb. Annual species complete their life cycle in one season, while biennial species grow for two years.

Reproduction: Reproduces by seeds. Each plant can produce hundreds of seeds, which are dispersed by rain, wind, or by humans and animals.

Adaptability: The Circassian plant has the ability to adapt to a variety of climatic conditions. It is drought and cold tolerant.

Soil loosening: The roots of the Circassian plant help loosen the soil, which creates favorable conditions for other plants.

Soil protection: It plays an important role in protecting the soil from erosion. [2]
Plant competition: In some cases, it can grow as a weed in cultivated fields and be harmful to crops. The young leaves and stems of the Circassian plant are eaten as food. They are added to salads, soups and other dishes. The leaves are rich in vitamins (A, C, K) and minerals (iron, calcium, magnesium), therefore they are considered beneficial for health. The seeds have the ability to persist in the soil for a long time, even retaining their fertility for several years. The Circassian plant is rich in various biologically active substances, which determine its medicinal properties. It contains the following substances:
- Flavonoids: Anti-inflammatory and antioxidant properties.
- Alkaloids: Some alkaloids have medicinal properties.
- Phenolic acids: Helps reduce inflammation and boost immunity.
- Saponins: Diuretic and antiseptic properties.
- Vitamins: Vitamins A, C, K, as well as B vitamins.
- Minerals: Iron, calcium, magnesium, potassium, and phosphorus.[3]

The Circassian plant has been widely used in folk medicine since ancient times. The Circassian plant has been used in traditional medicine as a hemostatic agent. It is known for its hemostatic, wound healing, and anti-inflammatory effects. It also has diuretic and blood pressure-lowering properties. Its main medicinal properties are:
1. Hemostatic: Used to stop bleeding. For example, in nosebleeds, wounds, and other minor bleeding.
2. Anti-inflammatory: Used to reduce inflammation.
3. Diuretic: Used for kidney and urinary tract diseases due to its diuretic properties.
4. Blood pressure lowering: Helps reduce high blood pressure.
5. Antimicrobial properties: Has an effect against some microorganisms.
6. Urinary tract diseases: Used as a diuretic for kidney and urinary tract infections.
7. Digestive: Helps with digestive problems, such as gastritis and ulcers.
8. Skin treatment: Used for skin diseases, including eczema and dermatitis.

9. Women's health: Used to relieve menstrual problems in women.[4]

In conclusion, Ceratophyllum demersum is a medicinal plant that is widely used in folk medicine around the world. Its main properties include its hemostatic, antiseptic, anti-inflammatory, and diuretic effects. In folk medicine, Circassian is used to treat various types of bleeding (for example, nosebleeds, uterine bleeding), to speed up the healing of wounds, and to eliminate urinary tract infections. The plant contains beneficial substances such as flavonoids, alkaloids, vitamins, and minerals, which help improve the general condition of the body. In modern medicine, Circassian extracts and decoctions are used in dermatology, gynecology, and gastroenterology. It is also used in traditional medicine as a blood purifier and immune booster.

Circassian plants are very sensitive to abiotic factors, and climate, soil salinity, water, temperature, and light play an important role in their growth and development. Circassian cultivation contributes to the effective production of Circassian plants and the preservation of the ecological environment. By improving the conditions necessary for the growth and development of Circassian plants in their natural environment, we can preserve their biodiversity and pass them on to future generations.

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