



Bioecological And Physiological Characteristics of Some Species of Stachys

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ABSTRACT: This article provides an overview of the Stachys species. More information about the bioecological and physiological properties of plants belonging to the "Stachys" family is given. This article provides more information about Stachys species, their habitats, ecological variables, physiological characteristics, and their ecological roles. The article contains important knowledge about Stachys plants, research and the latest news regarding their unique characteristics.

KEY WORDS: growth, development, flowering biology, seed productivity, breeding methods.

Stachys represents a group of species belonging to the family Lamiaceae, which includes several species. It may depend on the type of bioecological and physiological characteristics of the plant. In general, Stachys species prefer sheltered areas with moist soil and sun or partial frost. Some species grow wild in their habitats, while others are established in many ecosystems.

Physiologically, Stachys plants are usually annuals or perennials, and their roots are depressed and may spread beneath some tissue. The leaves of some species may be pinnate or fruiting in nature, and their inflorescences are usually defined by their sepals and four-parted outer bracts.

These plants can be important to the native flora in some ecosystems, such as providing nectar and pollen sources for wasps. Additionally, some species are known to have been used in traditional medicine. Stachys may be several species belonging to the Lamiaceae family, and their bioecological and physiological characteristics may vary depending on the species. In general, Stachys plants tend to grow in areas with moist soil and large nutrient soils. Their plant models can be strictly annual or perennial, and their textures and leaves vary depending on the type. Stachys species can grow in specific niches in ecosystems, and some species may have mutually important properties for native animals. There are plant species associated with their practice in traditional medicine.

Some of the Stachys species allow transitions between plant species, as well as depending on the climate and soils. Some of them are well integrated with water effects and require related water, while other parts are well absorbed into the soil. Habitat and ecological conditions affect the extent and limitation of their distribution.

Physiologically, Stachys plants can have a low light and strong heat tolerance, which allows them to grow in areas with varying rainfall and rainfall. And their soft appearance can help protect against the cold in winter. On the other hand, Stachys species, as herbivores, their tissues adapt to high salinity and dryness, which allows them to be successfully distributed in several arbitrary ecosystems.

There are 10-12 thousand types of medicinal plants on earth, including more than 1,000 types of plants. Long-term intake of synthetic drugs whose chemical, pharmacological and medicinal properties have been tested causes various unpleasant conditions in the human body. Although natural preparations made from natural raw materials of medicinal plants have a slow effect on the body, negative consequences are almost not observed. Despite the progress in the creation of synthetic drugs, the use of medicinal forms obtained on the basis of natural raw materials is increasing in medical practice. In the modern list of medicines, preparations obtained from medicinal plants make up about 40 percent. About 80% of medicines used in certain diseases are obtained from raw plant materials (medicines for the treatment of heart and blood vessel diseases).

According to experts, their share is expected to increase in the coming years. The reason for this is that they have a mild effect, are well absorbed by the body and can be taken for a long time. Studying the bioecological characteristics of endemic and introduced medicinal plants and developing



agrotechnics for mass reproduction are one of the urgent problems of the present day in the current period of rapid development. The characteristics of some species of the *Stachys* family found in Central Asia and Uzbekistan under the conditions of introduction I.V. Belolipov, studied by Their bioecological and physiological properties in different environmental conditions are little studied in the soil and climate conditions of our republic, Eshmuradov R.A. by 2012 The mountain sedum (*Stachys betoniciflora* Rupr.) plant was studied for the first time in our republic.

According to the results of a two-year experiment, the actual seed productivity coefficient of *S. byzantina* was found to be much higher (up to 17%) than the actual seed productivity of *Stachys betonicaeflora*. The quality indicators of the seeds were good and no damage by insects was observed.

Thus, it was observed that the influence of temperature on the germination of the studied seeds of the *Staxis* family was different. These differences are probably related to the biological characteristics of the studied species, since *Stachys betonicaeflora* naturally grows on mountain slopes. According to the results of phenological observations, it was found that the morphological sizes of plants grown in two different ecological conditions are different.

In conclusion, experiments were conducted at different temperatures (+15, +20, +25°C) in order to determine the temperature suitable for germination of seeds in laboratory conditions. As a result of laboratory experiments, it was found that the temperature favorable for seed germination is +15°C for *S. betonicaeflora*.

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