

## ARCTIUM TOMENTOSUM MILL. BIOMORPHOLOGICAL PROPERTIES OF

**Teshaboyev Nodirbek Ikromjonovich**

*Teacher of Fergana State University*

**Sayramov Fayzullo Baratjon o'g'li**

*Fergana State University student*

**Bozorboyeva Azimaxon Abdukamol qizi**

*Fergana State University student*

**Annotation:** *the day-to-day increase in the demand for economically important plant species in the world requires the preservation of their diversity, conservation and restoration of their reserves. In recent years, the widespread involvement of raw materials of medicinal plant species in domestic and industrial production in particular has determined the need to develop breeding measures and eliminate factors that negatively affect their reserves, having studied their biological properties. In this place, the development of recommendations for the identification of areas where promising medicinal plants are distributed, the allocation of industrial resources, the preservation of their populations on the basis of their bioecological properties is of urgent scientific and practical importance.*

**Keywords:** *medicinal plants, old age, bad soil, biomorphological feature, plantation, promising plant.*

The day-to-day increase in the demand for economically important plant species in the world is demanding the preservation of their diversity, conservation and restoration of their reserves. In recent years, the widespread involvement of raw materials of medicinal plant species in domestic and industrial production in particular has determined the need to develop breeding measures and eliminate factors that negatively affect their reserves, having studied their biological properties. In this place, the development of recommendations for the identification of areas where promising medicinal plants are distributed, the allocation of industrial resources, the preservation of their populations on the basis of their bioecological properties is of urgent scientific and practical importance.

It should be noted that the day-to-day increase in the demand for medicinal products from natural plants in recent years is causing a decrease in the reserves of promising plants. In particular, the low natural reproduction opportunities of rare medicinal species, the location of their populations in areas of strong anthropogenic pressure, and climate change are leading to the reduction of their populations. In this place, it is of scientific and practical importance to identify farm zones where the need for raw materials is strong in the pharmaceutical industry, develop modern methods for their reproduction and preservation of their populations based on the study of their biological properties, create reserves of raw materials and prepare quality raw materials.

*Arctium tomentosum* Mill.- sister coccyx Asteraceae L.a biennial medicinal herb plant of the family. Its distribution area in nature is widespread around Kazakhstan, Balkhash and the Aral Sea, in the Tyan-Shan mountain ranges (Khetmontogh, Kungey, talass olatogh, Issyk-

Kul Plains, Chotqol, Qurama and Fergana mountains), in the rivers and Plains on the Pamir-Oloy mountain ranges(Oloy, Turkestan mountains).

*Arctium tomentosum* Mill. experimental work has been carried out in the city of Fergana from 2020 on the study of the biomorphological properties of. The soil of the experimental field is Meadow gray soil, located at an altitude of 580-600 m above sea level.

*Arctium tomentosum* Mill. the seeds were sown on November 10, 2020, 2-3 cm deep, 70 cm between the rows. Its sprouts germinated on April 15-18, 2021. The germination of the seed in laboratory conditions (20-25°C) was 88.7%, while that in field conditions was 80.7%. Plant germination in early may consisted of two seedpallabargs and 2-3 chin leaves, the height of the plant reached 3-5 cm. Their stems branched up to the second level, reaching 12-15 CM. 70-80% of sprouts passed from the second half of May to the yuvenil stage. The height of the Yuvenil plants was 10-12 cm, and their leaves were 6-8 CM, and 5-6 cm wide. In Yuvenil plants, the seedpalla observed leaf wilting. Their axial roots branched 28-32 CM to the third degree. Plants in the Immatur phase were observed in late may through the first half of June. They reached a height of 15-17 CM, the length of the leaves reached 10-15 cm, and the width-8-12 CM. In plants of the immature stage, ballbars were formed, and a side Bud was formed in the leaf axils. Their stems are 45-50 cm long and branched to the third degree. In late June to early July, 70-80% of plants passed into the virginil stage. Virginil plants were 35-40 cm tall with leaves 30-45 cm long and 20-25 cm wide. The leaves of the virginyl period resemble those of an adult plant, with the side shoots on the leaf axils becoming fully formed. They had 5-8 leaves that formed a ball in the root throat. The roots of Virginil plants developed strongly and reached 100-120 CM, they branched up to 3-4 degrees. The arrow is coughed up to 3-4 cm in diameter of the part of the root near the surface of the soil.

The peculiarities of the entry of the *Arctium tomentosum* Mill into the winter tin age are that the Leaf petals and leaf band formed in the virginil stage dry out, but the side shoots at the base of the Leaf band are preserved. The main and side shoots at the root throat will be protected between a band of dried leaves. Therefore, in winter-10-15°C is preserved even in the cold. However, 10-15% of plants that enter the virginil stage later may die in the cold-15°C li, since the buds are not completely protected.

The second-year vegetation of the plant, that is, the spring vegetation, was observed in late March to April 2017, and the rapid growth of the main stem was observed in late May to early June. The entry of plants into the generative period was observed in mid-June. Generative plants are 100-120 cm tall, with the main stem branching to the third order. The second-order stems were 10-12 long by 10-35 CM. The leaves formed on the root throat reached 8-10, 40-55 cm long and 25-30 cm wide. The flowering of the plant lasted from June to July, and the ripening of the fruit lasted from July to September. The roots of plants of the generative period were 140-160 CM, the largest part of the main Root was 4-5 cm in diameter. On average, the wet mass of one plant was 1500-1700g, and the dry weight was 250-300g.

*Arctium tomentosum* Mill.the root, leaf and flower of the medicinal It contains inulin, essential oil, arctinin glycoside, flavonoids, Tar, additives, while the seed contains oil, sesquiterpene lactones. *Arctium tomentosum* Mill. in folk medicine and scientific medicine, it is used in the treatment of gastric ulcer, internal bleeding, chronic gastritis, kidney stone disease, bod, podagral, skin diseases, urination, cancer, as well as in the veterinary field.

Thus, the strengthening of conservation measures and the implementation of explanatory work with the population - provides the basis for the rational use of the biological resources of our country and the preservation of reserves of natural medicinal plants.

In conclusion, it should be said that *Arctium tomentosum* Mill. a promising medicinal plant, it is necessary to establish plantations for the cultivation of raw materials by identifying its natural reserves, in-depth study of plant ontogenesis.

#### LIST OF BIBLIOGRAPHY:

1. Opredelitel rasteniy Sredney Azii. - Organization: Science, 1993. T. 10. - S. 464-467.
  2. Opredelitel rasteniy Sredney Azii( kritichesky synopsis Flory): t.11: spravochnik / sostaviteli: f.O. Khasanov, [I Dr.]. An Ruz, ins-t geofonda rastitelnogo i jivnogo Mira. - Organization: Science, 2015. -456 P.
  3. Rastitelny Pokrov Uzbekistana I Puti ego rasonalnogo ispolzovaniya,-Tashkent, "fan" Uzssr. 1976. T. III. - S. 145-149.
  4. Rastitelny Pokrov Uzbekistana I Puti ego rasonalnogo ispolzovaniya. - Tashkent, " Fan " Uzssr, 1984 T. IV. - S. 18-299.
  5. Rakhimova T.T. Plant ecology and Phytocenology // methodological guide. - Tashkent, 2009. - 71 B.
  6. Flora Uzbekistana. - Arrangement: most Uzssr, 1962. T. 6. - S. 78-81.
  7. Flora USSR.- M.- L.: ANSSSR, 1959. T. 25. - S. 404-431.
  8. Khodzhimatov M. Dichorastutshie lekarstvennie rasthenia Tadjikistana. - Dushanbe, 1989. - C. 176.
1. [www / floruz. uz](http://www.floruz.uz)
  2. <https://www.gbif.org>
  3. [www.ipni.org](http://www.ipni.org)
  4. [www.plantarium.ru](http://www.plantarium.ru)
  5. <http://www.theplantlist.org/>