

EFFECTS ON THE GROWTH, DEVELOPMENT AND PRODUCTIVITY OF HAIRY ERVA PLANTS

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Annotation. Medicinal plants have been grown and cared for in cultured conditions for human health since ancient times in our country. Among them, "pol-pola" is a medicinal plant, its properties, history of origin, and its use for health are described in detail in this article.

Key words. pol-pola, nashtarinish, egg-shaped, ellipsoidal, conical, ground, drawn.

Introduction. Medicinal plants are widely used in the prevention and treatment of kidney diseases in nature. Such medicinal plants are called diuretic plants, that is, medicinal plants that drive urine. In the nature of our republic, there are many such plants, such as bird's-eye, forty-joint, royan and several other plants. In addition, corn cobs, cucumbers (especially those that have started to turn yellow), dill and parsley are also used in medicine as diuretics. However, one of the medicinal herbs that can effectively treat kidney diseases is hairy erva, or "pol-pola", which is widely grown wild in tropical and subtropical countries, including the Philippines and New Guinea.

Relevance of the topic. In the past, hairy erva raw materials were supplied under the name "pol-pola" from Colombo, Sri Lanka to the port cities of the former union, albeit in small quantities. After our country gained independence, special attention was paid to the cultivation of medicinal plants. For this purpose, state

forestry farms specializing in the cultivation of medicinal plants were established in our Republic. The goals and objectives of these farms are mainly to preserve the natural reserves of medicinal plants growing wild, some medicinal plants that are not found naturally in our flora, but are very necessary for medicine, that is, mackai sano, Cultivation of peppermint, chamomile, marigold, lion's tail, hairy erva - "pol-pola" and others, delivery of medicinal plants for the needs of the pharmaceutical industry, and creation of a solid base of raw materials.

Reviews from literature guides. Hairy erva (*Aerba lanata* (L.) Juss.) - Is a perennial plant belonging to the Amarantaceae family. Hairy erva is also called erva sherstistaya or "pol-pola" in Russian. In its homeland, it grows as a perennial herb in rocky and sandy plains, deserts, and scrubland. In the conditions of Uzbekistan, this plant is grown as an annual herb. The root system is not deep and reaches 15-20 cm. The stem is woody and has an average length of 70-75 cm. The leaves are lanceolate-ovate or ovate-elliptic, length -2-3 cm, width - 0.5-1.5 cm, short banded, entire, the tip is pointed or blunt, the base is poniform. The leaves are located on the stems first opposite, then in a row, and the first leaves in the lower part are larger and smaller as they grow higher. The ball is in the form of a cone-shaped dense spike, covered with thick flowing hair. The size of the flowers is 2 mm, the outer side has a grayish color due to its hardness, and the inner side is light green. The seeds are 0.6-0.8 mm, black and shiny.

As mentioned above, the above-ground parts of "pol-pola" are used in medicine as a diuretic. Its tincture is used in the treatment of diseases of the kidneys and urinary tract and colds of the prostate glands. In Indian and Nylon folk medicine, herbal tincture is used to dissolve kidney stones, treat complications of kidney colds, and remove worms and various helminths from the body. It is worth noting that this plant is currently being cultivated in specialized forestry farms and some farms of our republic. For example, in the specialized State Forestry of Abu Ali Ibn Sina, Pop District, Namangan Region, in the small private enterprises engaged in pharmaceutical activities "Mekhri Giyok", "Asel" and "Aqtash" in our Republic, plant raw materials are the first processed and released in pharmacies in

25-50 g packaging. It is recommended to grow "Pol-Pola" plant in two different ways.

The first method is by sowing seeds on the ground with a distance of 60 cm. is increased. Seeds are sown at the rate of 10 kg/ha in late March and April. In order to properly distribute the seeds to the specified area, equal amounts of sand, ash or composted manure in the form of powder are mixed with them and sprinkled on the surface of the fields. After the seed is sown, the fields are irrigated and the soil surface is kept moist until the grass is formed. As soon as the soil temperature reaches 20-25, grasses are observed in late April and early May.

The structure of the plant. The grasses are very thin, after they form 3-4 pairs of true leaves, they are cultivated between the rows. The plant area is watered 8-10 times during the growing season. Cultivation is carried out after watering every 2-3 times, and the rows are plowed with a hoe. In order to properly distribute the food area of the seedlings and develop them in moderation, they (2-3 in each nest at a distance of 10-15 cm from each other) are planted and singled and cared for. The second method is that tomatoes, eggplants, cabbage and other agricultural crops can be grown in greenhouses using the seedling method. Seedling cultivation is carried out in 18-240 greenhouses at the end of February and beginning of March. In this case, places with cells are made from boards 60-30 cm in size and 25 cm in height.

Small gravel and large-grained sand are placed at the bottom of the boxes as drainage. A 3x3x1 mixture prepared in advance (soil, rotted manure and sand) is placed on top of it and seeds are sprinkled. In order to preserve moisture, you can sprinkle wood shavings 1-2 mm thick on the sown seeds. 50 grams of seeds are used per 1 m². Sown seeds are watered daily using a watering can. Until the formation of grass, the surface of the earth is kept moist. Seeds germinate after 8-10 days. With the emergence of lawns, the number of waterings is gradually reduced and depending on the condition of the lawns, it is watered 2 times a week. After a pair of leaves grow, the grasses are transplanted (picked) at an interval of 3-5 cm from each other. After the emergence of 3-4 pairs of true leaves, they are

transferred to open fields at a distance of 10-15 cm to the egates prepared in advance according to the weather conditions.

For the comfortable growth and development of the plant, transplanting 60-70 thousand seedlings per 1 ha will give effective results. Seedlings planted in open ground are treated and cared for according to the agrotechnical rules mentioned above. After the above-ground part of the plant has flowered and the seeds have ripened, it is harvested with a hand scythe or other sharp-edged reaper. Due to the woodiness of the upper part of the earth, it is advisable to cut them in length of 5-10 cm in the wet state, and dry them in the shade and in cool sheds. Well-developed separate areas are allocated for seed collection. The raw materials collected from the designated area are dried on tarpaulins and other equipment. Then the plant is crushed and passed through a sieve, the seeds are removed and cleaned. The cleaned seeds are placed in gray bags and labels are attached to them. The raw material consists of the above-ground part of the plant, i.e. stem, leaf, spike and seeds, and has a light-gray color and a specific smell and taste.

List of used literature

1. Mirziyoyev Sh.M. Together we will build a free and prosperous democratic state of Uzbekistan. Tashkent, "Uzbekistan" NMIU, 2017. -56 p.
2. Mirziyoyev Sh.M. The rule of law and the protection of human interests are the key to the development of the country and the well-being of the people. NMIU "Uzbekistan", 2017. - 47 p.
3. Mirziyoyev Sh.M. We will build our great future together with our brave and noble people. "Uzbekistan" NMIU, 2017. - 485 p.
4. Mirziyoyev Sh.M. Critical analysis, strict discipline and personal responsibility should be the daily rule of every leader. "Uzbekistan" NMIU, 2017. - 103 p.
5. Law of the President of the Republic of Uzbekistan No. PP-4670 of April 10, 2020 "On measures for the protection, cultivation, processing and rational use of available resources of wild medicinal plants" Collection of legislation of the Republic of Uzbekistan.