

# HAIRY ERVA (POL-POLA) AERVA LANATA JUSS. ON THE MEDICINAL PROPERTIES OF

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**Abstract:** Hairy erva (Aerva lanata Juss). Pol-pola is one of the cultivated medicinal plants in the territory of Uzbekistan, the interest and demand for this plant is increasing due to the presence of biologically active substances belonging to different groups in this plant, the sufficient amount of plant stock, the content of flavonoids (rutin), essential oil, etc., this plant has anti-toxin, cystitis, urethritis, chronic pyelonephritis, antispasmodic effects, the root is decoction for headache. This plant is important because of its medicinal properties.

**Key words.** Aerva lanata, Botanical description, pharmacological aspect, morphology, phytochemistry, alkaloids, flavanoids.

**Introduction.** Hairy erva (pol-pola)-Aerva Lanata Jussa perennial plant belonging to the Amagapthaseae family, 55-70 cm tall. The root is not deep and has an inconspicuous flowing color, the root has an arrow root, and there are also large second-order branch roots that replace the main root. The root is located in the 3-8 cm layer of the soil. The leaves are lanceolate, oval, or elliptic, flat-edged, opposite on the stem and branches with the help of a short band. The ball flower is a cone-shaped dense spike, covered with thick flowing hair. The flowers of the plant are 2 mm wide, the outer side is gray, and the inner side is light green. Accents are 0.6-0.8 mm black, shiny. The seed ripens in November.[3]

Hairy erva grows as a natural perennial plant in tropical and subtropical countries such as Africa, Asia, the Philippines and New Guinea. In

Uzbekistan, this plant is considered a one-year plant, it is said to be found in dry bare soils, desert plains, and sandy soils.[2]

It contains flavonoids (rutin), essential oil, pectins, tannins, specific alkaloids, amino acids, etc. In addition, this plant, which contains elements such as K, Ca, has 299 medicinal properties for the human body. In addition to diabetic nephropathy, arterial hypertension and edemas of various origins, it is used as a tincture for urination.

***Positive effects of various compounds in the plant:***

1. Strong diuretic, but does not cause rapid dehydration
2. Removes urea, chlorides in patients with pyelonephritis, urethritis and cystitis.
3. Removes sand from the kidneys
4. Helps restore salt balance
5. Excellent anti-inflammatory agent
6. Strengthens the immune system
7. Treats prostatitis
8. It helps the stable functioning of the gastrointestinal tract
9. Treats atherosclerosis, polyarthritis
10. Normalizes blood pressure, metabolic processes [5]

Mechanisms of positive action of some compounds contained in *Aerva lanata* plant. Alkaloids - These substances can relieve spasm, pain and stop bleeding, activate normal blood circulation. It should be considered that the effect of alkaloids on the body depends on the dose.[3]

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 named after Abu Ali Ibn Sino, Pop District, Namangan Region, in the small private enterprises engaged in pharmaceutical activities in our Republic, "Mekhri Giyok", "Asel" and "Aqtosh", plant raw materials are the first processed and released in pharmacies in 25-50g 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.

Pectins - They cleanse the body of harmful cholesterol and toxins, and also activate all metabolic processes. Phenolic acids - Helps to eliminate the effects of harmful microorganisms on the body. Inorganic salts - These components are involved in tissue repair.[3]

The different components of the herb *Aerva lanata* are said to have different chemical compositions. B-sitosterol, campesterol and chrysin compounds, vanillic acid, syringic acid, daucosterol were isolated from Egyptian plants. It is said that various compounds feruloyltyramine, lupeol derivatives have been isolated from plants in Russia.[8]

Russian and Indian scientists have isolated alkaloids, terpenoids, sterols, several flavonoids, glycosides, and polyphenols from the composition of this plant.[7]

In conclusion, it can be said that the purpose of studying this plant is to treat various diseases on the basis of medicinal plants. The hairy erva plant is also widely used in the form of a natural tincture to dissolve stones in kidney stone diseases, eliminate infectious toxins in the urinary tract, and prevent them.

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