

**BOTANICAL DESCRIPTION OF THE COLTROP (CENTAUREA CALCITRAPA L.),  
DISTRIBUTION IN THE TERRITORY OF FERGHANA AND SIGNIFICANCE****Jumabaeva Feruzabonu***3rd year student, Fergana State University*

**Abstract:** *The article provides information about the morphology of the coltrop (Centaurea calcitrapa L.), about its ecology in the Fergana ecosystem, as well as about the medicinal value of the plant.*

**Keywords:** *coltrop (Centaurea calcitrapa L.), achene fruit, sessile leaves, alkaloids, flavonoids, mountain slopes, weed plant.*

**Аннотация:** *В статье приведена информация о морфологии василька колючеголового (Centaurea calcitrapa L.), о его экологии в экосистеме Ферганы, а также о лекарственном значении растения.*

**Ключевые слова:** *василёк колючеголовый, плод-семянка, сидячие листья, алколоиды, флавоноиды, склоны гор, сорное растение.*

Coltrop (*Centaurea calcitrapa* L.) belongs to the department of angiosperms, class dicotyledonous or magnoliform, family Asteraceae (compound flowers), genus cornflower.

Coltrop is a biennial herbaceous plant with a height of 15-16 cm. The stem is erect, ribbed, strongly splayed-branched, rather coarse, pale yellow. The root system is rod-shaped. The main root is thickened, 3-4 cm thick, spindle-shaped, with thin lateral branches, deepens into the soil up to 1.5 m. When pruning, for example, during plowing, it is capable of producing a mass of shoots that form powerful sockets on the soil surface. Up to 36% of the roots that remain after treatment take root well. The leaves are green, pinnately dissected; the basal leaves are petiolate, dying early; the stem leaves are sessile. Baskets on the tops of the lateral branches and their shortened twigs, single, in large numbers; pink-purple flowers; fruit is an achene formed by the lower ovary of a binomial paracarpous gynaecium, broadly ovate or elliptical, compressed. The rib is closer to the base, in a recess, 0.3 mm long. The apex is truncated, with a central knob. Without a tuft. The surface is whitish, silvery-gray, sometimes with brown spots, smooth, matte. the achene is about 3 mm long and 1.5-1.7 mm wide; the crest is absent. Blooms in June-September.

#### Ecology of growth

It is found everywhere in the territory of the Fergana ecosystem. It can be found in irrigated fields and meadows. It is considered a weed of cultivated herbs, causing great harm to crops. The main area of growth is the slopes of the mountains, the lower parts of the mountains. It grows on dry slopes along roads as a weed.

The analysis of the studied cenopopulations allowed us to consider the ecological space of the species. According to the studied schools, the boundaries of the ecological space of the coltrop coenopopulations do not go beyond the ecological range, except

for the scale of variability of moisture and soil moisture. The highest ecological valence of the species was found on the scale of soil acidity, and the lowest on the scale of soil moisture. The tolerance index on all ten scales is 0.55. The species in question belongs to the mesobiont group.

The density of coltrop individuals is maximal on neutral and fairly rich soils according to the salt regime. A comparison of the densities of individuals between cenopopulations showed that the differences are significant ( $P=0.000033$ ).

The meaning of the plant

For medicinal purposes, grass (stems, leaves, flowers) is used.

The plant contains beta-amyrin, beta-sitosterol, alkaloids, flavonoids, sesquiterpenoids, phenolic carboxylic acids, chlorogenic acid, tannins, lipids, acids: myristic, palmitic, stearic, oleic, linoleic. Pectin, inulin, beta-amyrin, cichorine, flavonoids (quercetin, naringenin) were found in the flowers.

An infusion of the herb is used for stomach diseases and as a diuretic.

1. 3 tablespoons of dry chopped herbs per 0.5 liters of boiling water, insist for 2 hours, strain. Take 1/2 cup 30 minutes before meals for gastritis, peptic ulcer of the stomach and duodenum.

2. 2 tablespoons of chopped herbs per 1 cup of boiling water, insist for 2 hours, strain. Take 1-2 tablespoons as a diuretic.

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