



Medicinal properties of the *Chelidonium Majus*

Khamroeva Maftuna Kobilovna¹
Khamdamov Iskandar
Khamdamovich²

EMAIL : maftunahamroeva@bk.ru

Received 26th December 2020,

Accepted 17th January 2021,

Online 06th February 2021

¹doctoral student of "Natural and scientific sciences" chair of the "Biotechnology, technology of livestock products processing" faculty

²Scientific adviser, Doctor of biological sciences, Professor

ABSTRACT: *Chelidonium majus* is a perennial plant belonging to the Papaveraceae family, reaching a height of 50-100 cm. It is mainly distributed on the European continent and is also found in Siberia, Kazakhstan, Kyrgyzstan, the Caucasus and some parts of Central Asia. It contains flavonoids, organic acids, additives, vitamin C, provitamin A, phytoncides and a large number of various alkaloids.

This plant can be used to treat severe wounds, skin tuberculosis, liver and biliary tract diseases, colon polyposis, gastric ulcers and bronchial asthma. *Chelidonium majus* 1000 seeds weigh 0.9 grams, one seed is 1.5 mm long and 1.2 mm wide.

KEYWORDS: *Chelidonium majus* is a perennial plant, poisonous, contains various alkaloids, organic acids, flavonoids, vitamins. Used in the treatment of liver, peptic ulcer, bronchial asthma, intestinal polyposis, various wounds.

INTRODUCTION

Chelidonium majus- *Chelidonium majus* L is a perennial plant belonging to the Papaveraceae family. The body is branched and covered with scattered feathers, reaching a height of 50-100 cm. The leaves are cut in a single stalk and are arranged in a row on the stem. The side leaves of the root are thicker and are located in a long leaf band. The upper leaves of the stem are arranged without bands. (I.Z Akapov 1990) According to I.Z.Akapov (1690) the flowers are light yellow, they are attached to a simple cymose inflorescences at the tip of 3 to 8 stems. The calyx consists of 2 sepals, which usually shed after the flower opens. The corolla is inverted ovoid, 4 in number. The pollen grains consist of a single cellular node. It blooms from May to autumn. The fruits ripen in July-September, the seeds are very small, black.

(I.I.Andreeva, L.S.Rodman.2005, E.I.Barabanov Botany, 2006). The plant is all poisonous and contains a lot of brown juice. According to Yu. Savsieva (2020), it is widespread in Europe, it is also found in Siberia (Tyumen region), the Caucasus, Kazakhstan, Kyrgyzstan and some regions of Central Asia. This plant contains flavonoids, organic acids (amber, malic, lemon and helidonic acids), up to 17% vitamin C, up to 15% provitamin A, phytoncides, various alkaloids from 1.8% to 4.2%, milk juice, resins and oils. The seeds contain 68% fat.(by ... Sovelyeva, 2020).

According to I.P. Neumva KIP (2017), the drug chelidonium majus is used in the treatment of burns, severe wounds, cutaneous tuberculosis. In addition, drugs derived from this plant are also used in the treatment of liver disease, ulcers. In ancient Greece, Dioskarmd and later Galen used chelidonium majus to treat liver. According to Abu Ali ibn Sina (Ibn Sina, vol. 11, p. 662), when the swallow child lost its sight, it began to see when its mother gave it chelidonium majus. Drugs derived from chelidonium majus are used against colds, itching. It is also used as a painkiller antiseptic, diuretic and herb repellent. In addition, these drugs have fungistatic bacteriostatic properties, stopping the tumors growth. It is used in some fungal diseases prevention and has also been found to have antiviral properties. M.O. Garbarets and others have suggested that chelidonium majus can also be used to treat colonic polypsis (1982). The effective treatment possibility of bronchial asthma with the help of chelidonium majus is also highlighted in V.I. Zavrajanov and others works (1977).

V.I.Papova and others noted that the use of chelidonium majus in the diseases treatment of the liver, biliary tract, stomach and intestines with the help of milk juice is highly effective (1984).

In order to study the fact that chelidonium majus is a promising medicinal plant and its cultivation possibility in the climatic conditions of Uzbekistan, we set ourselves the task to study the ecobiological properties of this plant and its some cultivation technology elements. Our first observations in this area were to study the morphological characteristics of seeds imported from the Russian Federation. Determining the seeds morphological characteristics in the fruits and grains composition formed during plant ontogeny is important not only in the systematics, morphology, but also in their seed production and selection, as well as in economic importance. The chelidonium majus seeds morphology has been almost never studied in our conditions.

Morphological characteristics of chelidonium majus seeds

№	Mass of a thousand seeds gr M+m	Seed size	
		Length (mm) M+m	Width mm (M+m)
1	1.6±0.08	1.5±0.07	1.2±0.08
2	0.7±0.07	1.4±0.05	0.9±0.06

3	0.8±0.08	1.6±0.09	1.1±0.09
4	0.5±0.07	1.6±0.09	1.1±0.07
5		1.5±0.07	1±0.09
6		1.5±0.07	1±0.09
7		1.6±0.08	1±0.08
8		1.6±0.07	0.9±0.09
9		1.5±0.09	1.2±0.09
10		1.4±0.04	1±0.08
total	3.6±0.3	15.2±0.71	10.2±0.79
average	0.9±0.07	1.5±0.6	1.2±0.08

Conclusion.

Determination of the mass and size of 1000 seeds was carried out by H.K. Karshibaev and O.A. Ashurmetov method (2008), in which 1000 seeds were counted in 4 re-bees and weighed to the nearest 0.0001 g, weighted and averaged. Seed size was determined on a millimeter ruler. Our observations in the field of studying the morphological characteristics of hemp seeds imported from the Russian Federation are given in Table 1. From the data in the table, it was observed that the average weight of 1000 seeds of *chelidonium majus* was 0.9 ± 0.07 grams, while the length of seeds was 1.5 ± 0.07 and the width was 1.2 ± 0.07 mm.

References

1. I.Z.Akapov. The most important domestic medicinal plants and their use. (M.1990, p. 407-409)
2. Garbarets M.O., Zapadnyuk Dovidnik. In herbal medicine. Kiev, Prophetic school, 1982. FXE
3. V.I. Zavrazhnov., R.I. Kitaeva, K.F. Khmelev, Medicinal plants of the central black soil Voronezh, 1977. 65 p
4. I.P. Neumyvakin, Celandine. Moscow - St. Petersburg publishing house Dilya, 2017, 4-120 p
5. V.I. Papov, D.K. Shapiro, I.K. Danusevich. Medicinal plants. Collection. Preparation, application. Minsk, 1984. 12-48 p