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HEALING PROPERTIES AND BIOMETRICAL INDICATORS OF CHELIDONIUM MAJUS L., INTRODUCED IN UZBEKISTAN

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ABSTRACT

Despite the fact that Uzbekistan has a long history of collecting medicinal plants, there is a lack of information on the current state of the natural population of even the most promising medicinal, food, technical and other raw plants. Analysis of the available materials showed the need to establish a comprehensive research program to determine the current state of natural medicinal plant resources, to study the rate of recovery (results) of populations after the harvest of raw materials.

Keywords: *Perennial, erect, succulent, hairless, milky sap, ovoid, rounded, long-flowered, liver-colored, gooseberry fruit, seeds.*

АННОТАЦИЯ

Несмотря на то, что Узбекистан имеет давнюю историю сбора лекарственных растений, отсутствует информация о современном состоянии естественной популяции даже наиболее перспективных лекарственных, пищевых, технических и других сырьевых растений. Анализ имеющихся материалов показал необходимость создания комплексной программы исследований для определения современного состояния природных ресурсов лекарственных растений, изучения скорости восстановления (результатов) популяций после заготовки сырья.

Ключевые слова: *Многолетник, прямостоячий, суккулентный, голый, млечный сок, яйцевидный, округлый, длинноцветковый, печеночный, плоды крыжовника, семена.*

INTRODUCTION

The number of wild plants in Uzbekistan reaches 4,500. Of these, 1,200 have healing properties. Despite the rapid development of chemistry, in particular the production of new chemical compounds, including fast and effective drugs obtained by synthesis, medicinal plants have not lost much of their value. Medicinal products used in scientific medicine According to health authorities, about 60% of the

available drugs are extracted or prepared from plants. Some valuable medicines, such as glycosides (cardiac glycosides) used to treat heart disease, are still obtained only from plants. Alkaloids, glycosides, flavonoids, coumarins, saponins, essential oils and other substances of great importance in medicine are also extracted from plants.

Medicinal plants are also used to make various medicines and vitamin-rich concentrates.

DISCUSSION AND RESULTS

The reserves of raw materials for naturally growing medicinal plants are also limited, and the study of their protection, bioecological properties, the proper use of raw materials and the development of science-based methods of reproduction is one of the urgent problems.

Therefore, it is necessary to meet the needs of the pharmaceutical industry in Uzbekistan with raw materials for medicinal plants, to enrich the local flora with new introducing plant species and to develop technologies for their cultivation. It is now one of the most important tasks of botanists to study and develop the properties of (*Chelidonium majus* L). Poppies are a perennial herbaceous plant belonging to the Papave-gasea family, and all the organs of the plant store milky juice in pink. The inside of the plant stem is yellow and the outer thyme is very red. The stalk is only growing, 30 to 100 sm long. The leaves are green, 7-20 sm long and 2.5-9 sm wide. The leaves on the upper part of the stem are bandage-free and the leaves are long will be busy. The shape of the leaves is ovate or rounded, the edges of the leaves are entire, in some cases trimmed. The flowers are yellow, with long petals, 15-20 mm in diameter. The fruit is a gooseberry, 3-6 sm long and 2-3 mm wide. The seeds are ovoid, liver-shaped, in two rows in a cocoon. The plant blooms in May-August. Depending on the place of growth of the plant, the process of fruiting is observed in July-September. Propagated by plant seeds. The surface part of the plant is used as a raw material. The juice made from the plant is bitter and smells bad when used.

Chelidonium majus grows naturally in Europe and the Mediterranean, in the Crimea, partly in Siberia, Kazakhstan, Altai and the Far East, among the bushes, on the edges of forests, on the slopes, in populated areas, gardens and orchards.

In medicine, the surface part is used. It contains alkaloids (chelidonin, chelerithrin, sangvinarin, etc.) and organic (chelidon, malic, citric, etc.) acids (flavonoids, saponins, etc.). The tincture is used in the treatment of tuberculosis of the skin in the treatment of liver and gallbladder diseases. The upper part of the land is part of the herd.

Biometric measurements of *Chelidonium majus* were observed in this area using 60x30 cm sowing methods. It is known that the yield of any plant or the weight of the phytomass directly depends on the growth process, the number and size of the main and side branches, the size of the leaves. We measured the length of the main and side branches, the number of leaves, length and width of the main and side branches formed every ten days during the period from the germination of the *ch.majus* plant to the flowering phase of the vegetation. Our results are given in Table 1.

According to the table, when *ch.majus* germinated on the fifth of March, the main branch produced 2.0 leaves, 0.3 cm long and 0.1 cm wide. The height of the main stem was 0.2 cm. On March 25, the number of leaves on the main stem was 3, the length of the leaves was 0.5 cm, the width of the leaves was 0.3 cm, and the length of the main stem was 0.5 cm. By May 5, the height of the main branch and the number of leaves in it increased, the number of leaves increased, and by May 5, when the height of the main stem reached 10 cm, the axils of the main stem began to form lateral branches, the length of the leaves was 0 cm. Reached 2 cm.

With the passage of the growing season, the length of the main stem, the number of side branches and leaves on the side branches, and their size increased.

For example, on May 15, the height of the main stem reached 16 cm, the number of leaves formed was 9, the leaves were 2.5 cm long and 0.9 cm wide. The side branches on the main stem were 2.4 cm long, the number of leaves on the side stem was 8 and the leaf width was 0.5 cm and the height was 0.7 cm.

table-1

Ch. Majus biometric measurements for 2020-2021 (cm)

Date of observation	The number of leaves on the main stem	The leaves on the main stem	Leaf width at main stem	Main stem length	The number of branches on the main stem	The height of the rod at the base	The number of leaves on the branch	The width of the leaf on the branch	The length of the leaf on the branch
5.03	2,3	0,3	0,1	0,2	-	-	-	-	-
15.03	3,1	0,5	0,3	0,5	-	-	-	-	-
25.03	4,5	0,6	0,5	0,7	-	-	-	-	-
5.04	5,3	0,7	0,6	0,9	-	-	-	-	-

15.04	6,2	0,9	0,7	2,1	-	-	-	-	-
25.04	7,3	1,2	0,8	6,3	-	-	-	-	-
5.05	7,1	1,5	0,9	10,3	2,7	0,2	6,3	0,2	0,3
15.05	9,4	2,5	0,9	16,3	4,3	2,4	8,1	0,5	0,7

CONCLUSION

Introduced in Uzbekistan, the *ch.majus* plant grows from the beginning of the growing season until the 15th of May, when the main stem, the number of side branches and the number of leaves on the side branches and their size increase.

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