

Economic Efficiency of Medicinal Tire Plantations in Khmer Rouge

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Abstract: The study used the type of medicinal clover (*C. officinalis*) as an object. The main task of the study is to create a reserve of raw materials and to determine its economic efficiency by establishing industrial plantations in the soil of the Khmer Rouge.

Based on the results of the research, the *foundation of the pharmaceutical industry is developed by establishing plantations in large areas* of *C. officinalis*, which is selected separately in the soil conditions of Khmer Rouge.

Key words: Khmer Rouge, soil conditions

Relevance of the research topic. In the modern economy, medicinal plant resources are of a strategic nature and are used as raw materials for the production of medicines that promote public health and life. The production of medicinal plant raw materials provides opportunities to harvest wild plants, cultivate them on an industrial scale, and preserve their natural resources by creating large plantations [3].

Statistics show that the annual demand of food and pharmaceutical industry companies for dry medicinal and bitter aromatic raw materials is 696.4 tons, which provides only 54.5% of local medicinal plant raw materials, confirming the need to increase the cultivation of medicinal and essential oil plants. [4].

Therefore, a number of decisions have been made by our government and the government on the cultivation of natural medicinal plants and the organization of their plantations. See the April 10, 2020, issue of the United Nations Declaration on the Elimination of All Forms of Discrimination against Women and the Elimination of All Forms of Discrimination against Women Resolutions PQ-4901 of November 26, 2020 on measures to expand the scope of scientific research on the development of their offspring [1, 2] and the Action Strategy for the Further Development of the Republic of Uzbekistan[3] Scientific research in this direction is of some importance in carrying out the tasks set out in other regulatory and legal documents related to these activities.

Analysis of the topic. The study used the type of medicinal clover (*C. officinalis*) as an object. The main task of the study is to create a reserve of raw materials and to determine its economic efficiency by establishing industrial plantations in the soil of the Khmer Rouge.

Based on the results of the research, the *foundation of the pharmaceutical industry is developed by establishing plantations in large areas* of *C. officinalis*, which is selected separately in the soil conditions of Khmer Rouge.

Although this medicinal plant has been studied in other regions of the republic, there is very little information about the growth, development, and yield of medicinal tires in the sandy soils of Khmer Rouge. Research was carried out in a small area in the Khiva district of Khorezm region, the experimental experimental base of the Khorezm Academy of Sciences, and the experimental field of the "Qoraqum" scientific experimental station in a large area.

Scientific experiments have been planted in 1.5 fields prepared in the fall (October) season of 2021, the experimental base of the Khmer Rouge Academy of Sciences in the early spring of 2022 (the first decade of March), and at the depth of planting the seed 2-3 cm.

During scientific experiments in plantative practical work, the spring planting period for medicinal tires, a circular row (60 cm) in the order of planting in the field, was selected as the optimal option and optimal

agrotechnical activities were used. Practical work on the plantation scale was carried out in the fields of the Goraqum Scientific Experimental Station of the Forestry Research Institute in Khiva.

Murdakhaev (1991), Toxtaev (2009) also conducted extensive scientific research on the cultivation and plantation of this plant in Uzbekistan. Based on their work, extensive plantations were established in fertile and degraded soils of the republic [1.5].

Observations through scientific default styles in the study of the seasonal stages of development *were conducted between the start and end of the main development phases of C. officinalis*. Statistical analysis of the results of the phenological survey was carried out on the recommendations of V.N.Nilov [6]. Cross-correlations of the data obtained were also identified [7].

Results obtained and their analysis

Agrotechnical activities that are applied to the cultivation and development of each type of plant play an important role. That is, the use of agro-technical activities will result in a change and improvement in crop yields in quantity and quality.

In the selected area, *C. officinalis* seeds are cultivated in hand-style on the feathers of rows 60 cm between the rows.

The agrotechnical activities developed in the research *were followed in the organization of a wide range of crop plantations of C. officinalis*.

During the first fire, 1-2 plants were left in each hive at a distance of 15-20 cm between the kators. The weeds in the row were cleaned in kettles and the underside of the seedlings was softened, and between the rows it was softened in a tractor cultivator.

During the season, *the C. officinalis* crop was watered 13 times (from May-1, June-July-August-2-3 times, September-2 times). After every 2-3 irrigation, the ground is softened until the branches are intertwined, the rows are cleared of foreign plants.



Picture 1. The seeding of *C. officinalis*, irrigation, plantation's first clearance of weeds, and the beginning of the generative process.

With the extension or branching of the main foundations and side foundations, the plant was given juice twice during natural manure irrigation at a rate of 10 to 12 tons per hectare for high yields: the first fertilization - 15-20 days after the formation of grass, the second fertilizing was held during the beginning of flowering.



Figure 2. The process of flowering and picking flowers on the plantation of *C. officinalis*.

In plantation, the flowering phase of plants is first observed 45-50 days after the seed is planted. This time coincides with the 2nd decadency of April.

During the vegetation period (mid-November), the medicinal incisors bloom and are picked up to 9-10 times. Flower baskets of *C. officinalis* are initially much larger and more orange. As the air temperature rises, the color of the flower turns hungry, because the essential oils of the flower flies quickly with the rise in temperature.

During the observation period, it was found that each spit medicinal nail contains 3-5 flowers and 7-8 buds (Figure 3).

To determine the yield, 5 fields were allocated on the plantation or calculations were based on 5 returns (table 1).

Table 1
Indicators of yield in the plantation of medicinal nails

Separated fields	Weight of flowers picked during vegetation, 1m2/gr		Yields per 1, kg	
	Without wet	Dry otherwise	Ho'l holda kg	Dry otherwise kg
1	130	16,25	11700	1462,5
2	170	21,25	15300	1912,5
3	120	15,00	10800	1350,0
4	140	17,50	12600	1575,0
5	150	18,75	13500	1687,5
O'rtacha			12780	1597,5

Generally speaking, the average yield on the plantation was 12780 kg without wet, 1597.5 kg dry, or 15.98 cents per hectare on average (Figure 3).

To quickly dry the collected flower baskets of medicinal nails, it is necessary to dry them in a special anchor, where a good wind turns. Flowers are under a temperature of 24-25 °^oC, and at the shadow exposure the drying process is normal for 3-4 days, up to 13% humidity. In special anchors, each square meter weighs about 1.5 - 2.0 kg. in the account.

In calculating the economic efficiency of the crop from *officinalis* C.E., expenses and revenues were obtained, as well as expenses and revenues in the sharaoitis of Khmer Rouge (pharmacies, medicinal plant raw materials sold in markets). Today, 1 kg of *C. officinalis* raw materials amounted to 35,000 gallons [35,000 L]. The cost of plantation of this type of medicinal plantation (for the preparation of the field, the use of agricultural activities, the collection and initial processing of crops, and the coverage of raw materials) were calculated (table 2).

Table 2
Economic efficiency of *M. chamomilla* and *C. officinalis* L

Indicators of economic efficiency		<i>C. officinalis</i>
Average yield, s/ga		15,98
Purchase price of 1 kg of raw materials		35000
Proceeds from the sale of crops, soums/ga		55930000
Total expenses, so'm/ga		30970918
Including so'm/ga	For fertilizer	1715000
	For spawning	1 200 000
	labor rights	20000000
	mechanization and additional costs	8 055 000
net profit, so'm/ga		24950082

Scientific-based suggestions and recommendations. The results of the scientific research carried out were concluded as follows: planting methods affect the indicators of yields in the plantation of medicinal nail growth;

It should be noted that for the first time, according to the results of our scientific research, the possibility of planting medicinal tires in moderately saline soils of Khmer Rouge, cultivation and plantations in a wide range of areas, and providing the pharmaceutical production network with local raw materials was based on scientific results

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