

ANALYSIS OF THE MEDICINAL PROPERTIES AND SOIL COMPOSITION OF CASSIA ACUTIFOLIA DEL

Sharipbaeva Yulduz Muzafarovna*; Sadriyeva Zevarxon Nasim kizi

*Assistant Teacher,
Chirchik State Pedagogical University,
UZBEKISTAN

**Student,
Chirchik state pedagogical university,
UZBEISTAN
Email id: yu.sharipbayeva@cspi.uz

DOI:

ABSTRACT

Today, great attention is being paid to the development of the agricultural and pharmaceutical economy organized by our President (April 10, 2020 Presidential decision №4670 the importance of medicinal plants). Medicinal plants and safety importance in Central Asia Republic, Uzbekistan. Types of phytonematodes that cause sufficient damage to plants, and species that cause sufficient damage to medicinal plants production of Uzbekistan. Cassia Acutifolia Del. is grown as an annual plant in Central Asia and the Caucasus. Cassia acutifolia Del. It is also called African, Egyptian or Alexandrian psalm because it was exported through the port of Alexandria. Cassia anugutifolia Wahl. It is called Indian hymn because it is grown in India.

KEYWORDS: *Nematode, Medicinal Plant, Eusaphrophyt, Deviosaphraphyt, Phytoelmints, Agriculture, Cassia Acutifolia Del.*

INTRODUCTION

Medicinal plants are valuable, but there are pests that damage them and cause various diseases, and the yield of medicinal plants is decreasing year by year. Various microorganisms that parasitize medicinal plants, including viruses, bacteria and fungi, their damage to plants have been well studied, and measures to combat them have been developed. As for phytonematodes, among them there are species that cause enough damage to various plants, and species that cause damage to medicinal plants has not been studied in the conditions of Uzbekistan. In the conditions of Uzbekistan, phytonematodes of medicinal plants have not been studied in comparison with their neighboring ecosystems. The purpose of the work is to determine the complex of phytonematodes found in the area where medicinal plants are planted and in neighboring ecosystems and their parasitic species. Leaf tincture, complex sano tincture (Liquor of Vienna), dry extract (released in the form of tablets), leaf powder (powder), complex licorice powder (powder), sano leaf and fruit are included in the composition of the kafiol complex preparation. Since the fruit does not contain tar, it has a milder effect.

Preparations made from Sano leaves in India are Senade and Glaxena, and a similar preparation produced in Uzbekistan is Senadexin.

Tea, which is used as a suppository and is used in the treatment of hemorrhoids, is also included in the preparations.

Material and Method

The following methods, based on the Baermann funnel technique, rely on the activity of nematodes to separate them from plant material; they are not therefore suitable for extracting sluggish or sedentary nematodes although the juveniles and males of such forms will usually be recovered. Where possible, plastic or stainless steel rather than brass/bronze gauze, rings or pans should be used because metallic ions, especially copper, released into small volumes of static water can be toxic to nematodes, especially dorylaids (Pitcher & Flegg, 1968). However, brief contact with metal sieves as in the sieving technique (section 16) does not appear to be harmful. A piece of rubber tubing is attached to the funnel stem and closed with a spring or screw clip. The funnel is placed in a suitable support and almost filled with water. Plant material containing nematodes is chopped into small pieces, placed in a square of muslin cloth, nylon gauze, etc, which is folded to enclose the material, and then gently submerged in the water in the funnel. Nematodes emerge from the tissues and sink to the bottom of the funnel stem. After some hours, or overnight, some of the water can be run off and examined for nematodes. Lack of oxygen at the base of the funnel stem often inactivates nematodes obtained by this method but these usually revive in fresh water.

27 species of phytonematodes belonging to 7 families and 12 genera were identified from the roots and soil around the roots of the tested medicinal plants.

Fig.1

№	Ecological groups of nematodes	0-30 cm	30-60cm
1	Pararhizobionts	4	-
2	Eusaprobionts	5	4
3	Devisaprobionts	1	3
4	Phytohelnths	8	2

Based on the ecological classification of A.A. Paramonov and in addition to it, O.Z. Metlitsky, T.V.Volkova, T.V.Volkova, A.S.Eroshenko. According to the systematics of phytonematodes of medicinal plants were divided into the following groups: pararhizobionts, eusaprobionts, devisaprobionts, phytohelnths. Systematical position of nematodes:

1. *Proteroplectus longicaudatus* (Buetschli, 1873) Paramonov, 1964

Order *Enoplida* Chitwood et Chitwood, 1933.

Suborder *Enoplina* Chitwood et Chitwood, 1933.

Family *Prismatolaimidae* Micoletzky, 1922.

Genera *Prismatolaimus* de Man, 1880

2. *Prismatolaimus dolychurus* de Man, 1880.

Типкым *Mononchida* Jairajpuri, 1969.

Кенжа туркум *Mononchina* Jairajpuri, 1969.

Family *Mylonchullidae* Jairajpuri, 1969.

Mylonchulus (Cobb, 1916) Altherr, 1953.

3. *Mylonchulus solus* Mulvey, 1961.

Туркум *Dorylaimida* (de Man, 1870) Pearse, 1942.

Кенжа туркум *Dorylaimina* Pearse, 1942.

Кенжа оила *Dorylaimoidea* (de Man, 1876) Thorne, 1934.

Оила *Nordiidae* (Jairajpuri & Siddiqi, 1964) Siddiqi, 1969

Кенжа оила *Nordiinae* Jairajpuri & Siddiqi, 1964.

Авлод *Enchodella* Khan, 1964.

4. *Enchodellus macrodorus* (de Man, 1880) Siddiqi, 1964

Genera *Xiphinema* Cobb, 1913

5. *Xiphinema index* Torne et Allen, 1950 (2-расм)

Subfamily *Aporcelaiminae* (Heyns, 1965) Siddiqi, 1969.

Genera *Aporcelaimellus* Heyns, 1965.

6. *A. obtusicaudatus* (Bastim, 1865) Alther, 1968.

Family *Qudsianematidae* (Jairajpuri, 1965) Siddiqi, 1969.

Subfamily *Qudsianematinae* Jairajpuri, 1965.

Genera *Eudorylaimus* Andrassy, 1959.

7. *Xiphinema index*

8. *Ditylenchus dipsaci*

9. *Pratylenchus pratensis*

10. *Helicotylencus multicinctus*

11. *Paratylenchus hamatus*

CONCLUSION AND DISCUSSION

As a result of the research, the following type of ectoparasitic nematodes belonging to the *Xiphinema* genus was found: *Xiphinema index*. In the established ectoparasitic phytonemato, a viral infection begins. The hosts of this phytoparasite include sugar cane, grapes, cotton, figs, cultivated and wild fruit trees. In our story, *Cassia Acutifolia* Del., the master plant, made us. *Ditylenchus dipsaci*, *Pratylenchus pratensis*, *Helicotylencus multicinctus*, *Paratylenchus hamatus* were identified from the parasitic species causing special diseases. They are common in cultivated fields and cause great damage to vegetables, rice and other crops.

REFERENCES:

1. Mirziyoev Sh.M. The Decision "On Measures To Expand The Scope Of Scientific Research On The Development Of Cultivation And Processing Of Medicinal Plants, Their Seed Production." November 26, 2020.
2. Azizova E.P., Abdurakhmonova G.Va. Text Of Lectures From The Special Course Of Phytohelminthology. - Tashkent. 2000. -24 P.
3. Ginatullina, Y. N., Tuychiev, K. S., & Sharipboyeva, Y. M. (2022). Growing Chlorella For Fisheries In Uzbekistan. *Pedagogs Jurnal*, 17(1), 77-82.
4. Sharipboyeva, Y., Ne‘Matov, H., & Ibroximov, M. (2022). Analysis Of Soil Nematods Plantations Planted In Melilotus Officinalis Descr. *Academic Research In Modern Science*, 1(9), 299-302.
5. Abdullayeva Guzalxan Vladimirovna (2022). Orol Atrofi Nukus Shahrida Yashovchi Yoshlarda Arterial Bosimning O‘Zgarishi. *Science And Innovation*, 1 (D3), 82-86. Doi: 10.5281/Zenodo.6659374