The Advantages of Wheat's Biological Ways of Fighting against Endophit Fungus

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Abstract— *The article examines the effect of endophytic fungi on wheat germination. It was observed that when the seeds of Trichoderma viride and Fusarium oxusporum mixed with the soil at the roots, seed germination and vegetation of the plants ceased. The study found that the fungus Trichoderma viride was effective against soil pathogens and that high yields could be obtained from crops if this fungus was used as a fertilizer against soil pathogens.*

Keywords— Trichoderma, Fusarium, soil, wheat, fungus, antagonist.

I. INTRODUCTION

The content of floristic biocioses contain wide range of systometic categories that are situated in Centeral Asia's teritories.Desertifications salted yards and antropogens factors which are occuring in these places are effecting negatively for demolishing types of plants . As three parts of our republic is desert and half desert, climate changes ,factors of antropogen's deterrent affects are breaking ecological systems.Such as, our natural mazies have been privating for farming or pheasonning, cows sheep are feed and their numbers enhancing, saksavul ,juzg'un, teresken, chagon, shuvoq, yantoqs are cutting for woods, excavations, industry, and precious and useful substances are being taken from ground all of them impact erodicating of fungus.

The things that can effect detrimentally for plants are: radical declininf of temperature, becoming in a high temprature in a long period, cold weather in early spring and summer, late autumn, acid rain, dright, desertifications and salty yards ate creating abiotic stress condition. As a result, they are being main reasons of the lack energy or immune, condition of paranekros, the changes of evolving, some ailments and fading of plants. In the researches we learnt wheat grain as well as useful and patogen funguses through polishing artificially their growth and developments in the extremal atmosphere.

II. MATERIAL AND METHOD

2.1 The methods of investigation

The most interesting desease is fusarois plants proccess among village vegetables, however, the most difficult to study as well.To find its types and characteristics of morphologics are basic obstacle of learning them in our country.The most fundamental thing is Fusarium fungus identifiers (Snyder, Hansen, 1954, Gerlach, Nirenberg. 1982 Leslie 2001) are not available or (Wollenveber, Reinking, 1935, Rayllo, 1940 Bilay 1977, Booth 1977 Leslie 2006) their amount declining so it creats to pick up them

In Uzbekistan scientists have been researching them more than 70 years

Fungus that are in the Fusarium group can be come acrossed easyly in our countries grounds soil plants air and water. They live in the plants rizosferas and make harm to wild grasses, plants, insects, nematodas. They participate proccess of origining of soil in extremal condition of our country, they distribute their portion to the save food reservation chain in modirate condition, demolishing rest of food, sytezing organic and biologic active substances. Litvinov (1969) style is used to learning illnesses of Fusarioz that separate micraorganizms from soil and identificating selected fungus spices V.I.Bilay (1977) identifiers were utilized.

2.2 Thr results of investigations

Researches are made over mainly models of soil and plants that were brought from Tashkent regions wheat fields.Wheat grains are growen after polished artificiallt with fungus from Trichoderma and Fusarium groups having been sorted out real culturals. Experiences demonstrate primary results as follow. There is distinct difference in progressing seeds which is polished with Trichoderma viride and Fusarium oxusporum.

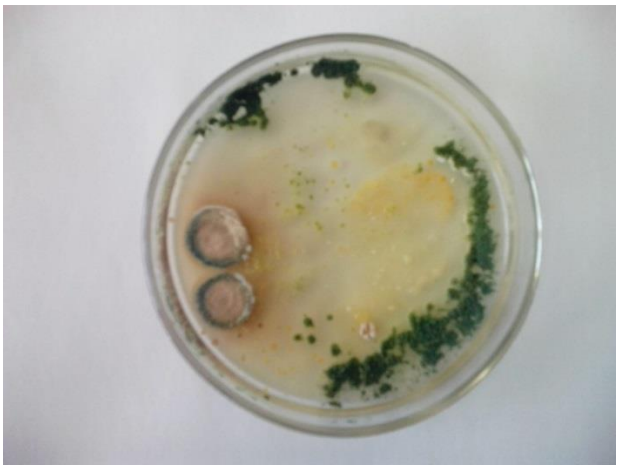

FIGURE 1: Fungi belonging to the category Trichoderma and Fusarium isolated from the soil

FIGURE 2: Fungi belonging to the category Trichoderma and Fusarium isolated from the soil

FIGURE 3: Wheat plant, cultivated by processing with fungi belonging to the category of Trichoderma and Fusarium

FIGURE 4: Wheat plant, cultivated by processing with fungi belonging to the category of Trichoderma and Fusarium

FIGURE 5: Wheat plant, cultivated by processing with fungi belonging to the category of Trichoderma and Fusarium

FIGURE 6: Wheat plant, cultivated by processing with fungi belonging to the category of Trichoderma and Fusarium

FIGURE 7: Plants infected with Fusarium oxysporum fungus. The plant died before the end of vegetation

FIGURE 8: In the control variant (unprocessed), 5 spike was formed and 1 spike was formed in one plant, which was artificially damaged by Fusarium oxysporum fungus.

When wheat grow with Trichoderma and Fusarium oxysporum fangus with polishing outer markes did not noticed. When plant was observed by vegetation, Trichoderma fangus option was successful whereas fusarium oxysporum was unsuccessful.Beforehand wheat ripes all graind and their heaviness everything took into account.

The fruitfulness degree's decreasing in the ill plants.

2.3 Decline in productivity in diseased plants

No.	Options	1 the formation of a spike in the bush plant (On account of 1 m2)	1000 PCs grain weight
1	Trichoderma viride	7	41
2	Fusarium oxysporum	3	29
3	Control variant (unprocessed)	5	35

III. CONCLUSION

According to tabular tested Trichoderma viride fungus proved our trust with less ailment impacts on plants and harvest or results rocketed dramatically. Patogen fungus Fusarium oxysporum option raise sumptoms of deseases. Moreover, they provoked only one wheat and a stem.

On balance, Trichoderma viride sort fungus possesses more antogonistic trait than Fuzarium oxysporum patogen. It was proven in subsequent experimentation. If we apply Trichoderma viride fungus againist wheat's fusarios ailments as biogical priporats we will achieve alarming rate of harvests.

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