International Journal of Academic Multidisciplinary Research (IJAMR)
ISSN: 2643-9670
Vol. 4 Issue 11, November - 2020, Pages: 88-90

Measures To Combat Widespread Diseases And Aging Of Peas In The Fergana Valley

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ANNOTATION: *This article was written about the damage caused by widespread diseases of the PEA in the Fergana Valley. Aschokhytosis disease of chickenpox. Reference is given on fuzariosis disease (Fusarium oxusporum Sehleht). Rust disease, Flour dew disease Colletotrichum lindemuthianum Pythium debaryanum Thielaviopsis basicola Rhizoctonia solani Botrytis cinerea.*

Keywords : Peas, aschokhytosis disease of chickenpox, reference is given on fuzariosis disease (Fusarium oxusporum Sehleht), rust disease, flour dew disease, colletotrichum lindemuthianum, pythium debaryanum, thielaviopsis basicola, rhizoctonia solani, botrytis cinerea.

I. INTRODUCTION

It is known that as a result of the annual increase in the population around the world, the demand for food, in particular products rich in protein, is increasing.It is necessary to create an effective system of measures aimed at further deepening the reforms in the agrarian sector, ensuring food security in the field of adequate supply of the population of the Republic with agricultural products.Leguminous cereals include peas, blue peas, soybeans, beans, lentils, corn, khashaki legumes, vigna, lyupin, vika. They all belong to the family of legumes. Leguminous cereals are rich in protein in relation to cereals, are easy to digest, give a good quality, inexpensive grain crop and have the property of absorbing nitrogen in the air with the help of finished bacteria. At present, in the complex of cultivation of grain crops with a spike in the lalmikor fields of the Republic creates opportunities for the application of leguminous grain crops peas and khashaki peas in the system of short rotational exchange by farmer farms.

Common diseases of peas in the Fergana Valley

Aschokhytosis disease of chickenpox. This disease is provoked by the fungus Ascochyta rabiei.On the leaves, feathers, legumes and grains of the crop develop gray-brown, sometimes dark-brown, then darkened, oblong or often round spots, on which the width of which reaches 0,1-0,2 mm piknidas are located in the tissue, round, sometimes flattened. The mouth is obliterated, length 62-145 microns, width 62 - 212 microns (sometimes 246 x 336 microns). Picnies 1, less often (less than 1%) 2 - cell, cylinder, less often ellipsoid, egg-or pear-shaped, the upper and lower sides of which are rounded, the size-6-16 x 3,4-5,6 µm (average 10,3 x 4,6 µm) in the damaged plant organs, smaller in the artificial feed environment-4,8-14 x 3,2-5,2 µm, When the damaged grain is sown, it does not germinate, or the sprouted grains will rot later.

II. MATERIAL AND METHODS

Strongly damaged plants will dry out. In the case of frequent rains and at an air temperature of +20 +25 0S, the pickles and hangers of the fungus quickly spread in the crop, and the disease of ascocytosis develops strongly. The minimum air temperature for the growth of Spores is +3 0S, the maximum is +33 0S. Favorable conditions arise when the relative humidity of the air, which is optimal for the development of the disease, is higher than 65%, and the air temperature is 18-230S. It winters the pathogen on a picnic in the seeds and plant residues, and in the case of chloromides. Chloromides can be stored in the soil up to 4 years. The disease of aschokhytosis makes the seedlings sparse, the leaves dry and shed before the time. The plants lag behind the development, tiny, low in growth capacity and fertility, and damaged seeds are formed.

In addition to root rot in Fuzariosis disease (teleomorph:Fusarium oxusporum Sehleht), dry rot of the lawn, salting, dry rot of fruits and seeds is also common.The disease causes a lot of harm in the plants of peas, lyupin.In the conditions of Uzbekistan, the corner crop from fuzariosis is severely damaged. It is possible to observe that part of the stem above the root of the plant, in particular, is reddened in the tubular ligaments of the cuticle.The Root will crack depending on the height, and The Root will dry out.The main source of infection that imposes this disease is plant residues and seeds.

III. RESULTS

Rhizoctonia solani (teleomorph: *Thanatephorus cucumeris*) is a plant pathogenic fungus with a wide host range and worldwide distribution. It was discovered more than 100 years ago. *R. solani* frequently exists as thread-like growth on plants or in culture, and is considered a soil-borne pathogen. *R. solani* is best known to cause various plant diseases such as collar rot, root rot,

damping off, and wire stem. *R. solani* attacks its hosts when they are in their early stages of development, such as seeds and seedlings, which are typically found in the soil. The pathogen is known to cause serious plant losses by attacking primarily the roots and lower stems of plants. Although it has a wide range of hosts, its main targets are herbaceous plants. *R. solani* would be considered a basidiomycete fungus if the teleomorph stage were more abundant. The pathogen is not currently known to produce any asexual spores (conidia), though it is considered to have an asexual lifecycle. Occasionally, sexual spores (basidiospores) are produced on infected plants. The disease cycle of *R. solani* is important in management and control of the pathogen **Pythium debaryanum** family is a species of water mold in pythiaceae. It is known as a plant stimulant for many species of wild and cultivated plants, including peanuts, beets, eucalyptus, peas, tobacco, and pine trees.

IV. DISCUSSIONS

Thielaviopsis basicola is a plant-pathogenic fungus in the division Ascomycota. It is a soil-borne fungus that causes black root rot. It has a wide host range consisting of gerbera, kalanchoe, pansy, petunia, poinsettia, primula, snapdragon, sweet pea, verbena, and viola. After *T. basicola* infects the host some of the symptoms consist of "stunting of foliage and root systems, blackened area on roots, yellowing of leaves between the veins or along the margins, and branch dieback. The yellowing of leaves means the plant cannot do photosynthesis and the blackened tissue means it is dead. And some of the signs include dark brown, multi-celled spores form in the infected roots. The individual cells appear to snap apart. Light colored spores are formed in a long tapering cell and extruded in chains". If the hypocotyl along with the roots become infected it can lead to "black, rough, longitudinal cracks.

Rust disease is a dangerous fungal disease of peas. The disease spreads from milkweed and appears as a change of plant leaf. From above, a small yellow spot is visible, on the back there are bright orange cushions with spores. Rust consists of two types of fungi. One destroys the leaf blade, and the other destroys the entire plant. These two mushrooms work in pairs.

Flour dew disease. with Odium peas, local peas, beans, mosh, peas, soybeans, lentils, such plants as China and leguminous fodder alfalfa, sebarga, esparset and other crops are damaged. The main sign of the disease is formed in the leaves and stems of the plant from flour-white Bakers, which gradually turn gray and black dots (claystocarpies of fungi) are formed in the bud. the damaged part of the plant will turn yellow and dry up. Flour produces erysiphe sommunis and Leveilulla taurise gel, which belongs to the class of saccharified fungi, shudring disease. These fungi are propagated by the conidiums of the plant in the period of growth, and in the state of kleystocarpia winters in the remains of plants.

Colletotrichum lindemuthianum is a fungus which causes anthracnose, or black spot disease, of the common bean plant (*Phaseolus vulgaris*). It is considered a hemibiotrophic pathogen because it spends part of its infection cycle as a biotroph, living off of the host but not harming it, and the other part as a necrotroph, killing and obtaining nutrients from the host tissues.
The anthracnose of common bean was first identified in 1875 in the fruit and vegetable garden of the Agricultural Institute of Popplesdorf, Germany by Lindemuth By 1878, Saccardo and Magnus had made many observations on the cause of the anthracnose disease, recording their results in *Michelia* I:129 They concluded that it was caused by a fungus, which they named *Gloeosporium lindemuthianum* after Lindemuth himself. Several years later, Briosi and Cavara discovered the presence of setae on the fungus, reclassifying it from the genus *Gloeosporium* to *Colletotrichum*, where it remains today. Recognizing the devastating effect the fungus was having on common bean populations worldwide, it quickly became a heavily studied subject among scientists, who principally investigated means of controlling its spread. In 1911, Barrus reported the discovery of multiple fungal strains, each of which differed in its ability to infect certain varieties of bean plants, which initiated the work of Edgerton and Moreland, who found eleven different strains of the pathogen, but theorized more may exist. Since then, numerous strains have been identified, each targeting specific varieties of bean plants. During the early part of the 20th century, the various races were identified by use of the Greek alphabet, paired with numbers, but at the turn of the 21st century a naming system using binary code was adopted. Under the binary naming system, each plant cultivar is given a binary number, and the code for a particular race of the pathogen is determined by the sum of the binary numbers of the cultivars which it infects

Botrytis cinerea is a necrotrophic fungus that affects many plant species, although its most notable hosts may be wine grapes. In viticulture, it is commonly known as "botrytis bunch rot"; in horticulture, it is usually called "grey mould" or "gray mold". The fungus gives rise to two different kinds of infections on grapes. The first, grey rot, is the result of consistently wet or humid conditions, and typically results in the loss of the affected bunches.

V. CONCLUSIONS

The second, noble rot, occurs when drier conditions follow wetter, and can result in distinctive sweet dessert wines, such as Sauternes or the Aszú of Tokaji/Grasă de Cotnari. The species name *Botrytis cinerea* is derived from the Latin for "grapes like ashes"; although poetic, the "grapes" refers to the bunching of the fungal spores on their conidiophores, and "ashes" just refers to the greyish colour of the spores *en masse*. The fungus is usually referred to by its anamorph (asexual form) name, because the sexual phase is rarely observed. The teleomorph (sexual form) is an ascomycete, *Botryotinia fuckeliana*, also known as *Botryotinia cinerea* (see taxonomy box).

Measures to combat the widespread disease of peas in the Fergana Valley:

1. Crop rotation. 2. Harvest and lose the remains of legumes for a year. 3. After harvesting the plants for a year, we take a mixture of sulfur powder and lime during the autumn plowing period (in the ratio 1:1 to 20-30 kg per hectare), we pollinate the Earth.

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