

OCURENCE OF POWDERY MILDEW FUNGI ON GUAVA LEAVES IN VICINITY OF BEED

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ABSTRACT

The fungus and pest population spread during winter & summer season. Leaf surface is the plat form of the numerous fungal spores present in the air. During suitable micro habital these spores are settled down on this platform and colonized the crop remained below the economic level due to the infection in Beed District Maharashtra.

KEY WORDS: powdery Mildew Plant Bugs and Guava Leaves.

INTRODUCTION:

Pathogen *Erysiphe polygoni* causes powdery mildew to Guava Leaves during summer & winter season leaf are infected by pathogen.

The pest is found on the dorsal surface of the leaves. The pest is abundant in two seasons. I.e. winter & summer. Summer rice in Chhattisgarh, region of Madhyapardesh is claimed for the cause of pest incidence for the ensuing Karif season by Gangrude et.al.(1979) hence observation were recorded periodically in two seasons prewinter to post summer.

The fungi belonging to family Erysiphaceae are highly pathogenic to the variety of Angiospermic plants causing disease. "Powdery Mildew" the fungi grow ecto parasitically on the surface of the infected plant parts.

The superficial mycelium of the fungi produces enormous number of conidia usually on the leaf surface which appear like a mass of white powder hence the name powdery mildew.

As a group powdery mildew fungi infect many species of plants including many trees, shrubs, crops, vegetables, cereal's, grasses, numerous ornamentals and even weeds.

Powdery mildew is more common on cultivated plants and grows luxuriantly in dry, cool season. It is clear from the literature that powdery mildew were found to occur on plants from tropics to the arctic & from below sea level to 4000m height (Hirata, 1966)

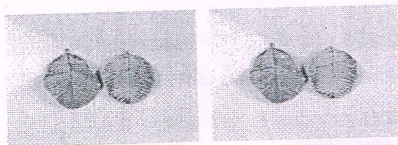
The incidence of powdery mildew on wild & forest plants in India have been reported by various workers as it was on

teetona grandis at Jabalpur by Agrawal et.al (1959). **Table-2:** shows Pest Population in Summer Season.

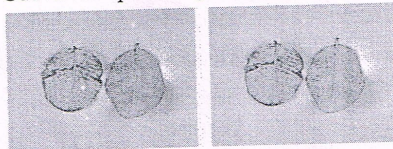
MATERIAL METHOD:

The data were recorded by counting the number of insect individuals collected with 1.5 radius of Guava Leavs in the present work extensive visits were carried out to different localities in vicinity of Beed region. The identification of the insect species collected was carried out by the Department of Zoology, Dr. Babasaheb Ambedkar Marathwada University Aurangabad.

RESULTS AND DISCUSSION:



Photograph.I: shows infected leaves of Guava with plant bugs ventral side



Photograph.II: shows infected leaves of Guava with plant bugs dorsal side

Table-1: Shows pest population in winter season.

Plant Guava Leaves	Plant Bugs		
1	10	15	20
2	08	07	09
3	06	08	10

Plant Guava Leaves	Plant Bugs		
1	10	20	15
2	18	20	14
3	15	12	10

Table 1 reviews that most of the insect were recorded in winter season. It is evident from table 2 that the pest population in summer was below the economic threshold level.

Studies carried out in the present work are mainly to record the incidence of powdery mildew fungi on host Guava in Beed district of Maharashtra. For which extensive visits were carried out to different localities in the region.

Similarly repeated visits were made to disease prone areas to observe the time of incidence of powdery mildew & to capture stages of disease development on the Guava leaves. The photograph shows about symtomological work, etiology & morphological feature of the causal organism may be coridial stage or both conidial and as cocarp stages plant bugs are carried out.

The result given in the table 1 & 2 showed sever infection of powdery mildew resulting it into drastic damage of infloresnce, defoliation and damage to fruits and seed development.

Study of the leaf surface mycoflora in different crops and vegetables done by the many scientists. Leben. (1961) studies micro organism on cucumber seedling. Navneet & Mehrotra (1987) studied phylloplora mycoflora of potato leaves in relation to climatic factors. Sahu and Tiwari (1994) studied airspora and leaf surface micro flora of cauliflower. Sahu S.K. and K.L. Tiwari (1994) Airspora and leaf surface mycoflora of cauliflower at Raipur. Ad plant Science 7(2): 203-211.

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