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Field survey for some fungal diseases on egg plant

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Abstract
India is the second largest producer of vegetables next only to china. The prime need of our nation is to improve the vegetables as most of the population of INDIA is vegetarian. In this country, Eggplant is important crop due to its cheaper rate and easy availability. Several diseases pose a great threat to the cultivation of eggplant. These diseases not only reduce the yield of fruits but also deteriorate the quality of fruits.

Keywords: Egg plant , Pathogenic Fungi , *Solanum melongena* L.,Brinjal

INTRODUCTION

Brinjal *(Solanum melongena L.)* is the important vegetable crop of India due to its cheaper rate and easy availability. It belongs to family Solanaceae and is native of southern and eastern Asia including north India, where it has been cultivated since remote antiquity for its fleshy fruits. The fully developed plants are often 2' to 3' in height. Flowers are of violet colour. Fruit is of fleshly berry type. The colour of fruit varies from dark purple to yellowish white or sometime striped and has a shining surface.Fruits are used as vegetables and cooked in combination with Tomato, Potato etc. or as meshed form like Bhurta or sometime it is preserved as pickeles.

The everage rainfall is about 60-100 cm/year while the average temperature varies from 6.9^{o}C to 37.3^{o}C. Generally the climate is moderate and humid. The winter season of this region is specified by thick covering of fogs over the crops which even persist for weeks together.

The Present study was conducted in different localities which were selected on the basis of type of soil, cropping pattern and distance from the centre of the city.

MATERIALS AND METHODS

Samples were brought to lab and sorted out various visible diseases, which were categorized viz. leaf, fruit and stem diseases. Regular visits were made to all selected sites every fortnight. For identification of diseases the temporary and permanent slides of the pathogens were prepared in lab. The authenticity of pathogen was established through Koch's postulates. The pathogens were also cultured in lab and were kept in the form of permanent pure culture for further physiological and cultural studies.

Different media viz. PDA, Oat meal agar, peptone-Destrose-Rose Bengal agar and Malt extract agar were utilized. For isolation serial dilution, pour plate and streak plate methods were used. Cotton Blue was used as mounting medium.

RESULTS AND DISCUSSION

Only 2 spp. of fungi i.e. *Cladosporium fulvum* and *Choanephora cucurbitarum,* have been encountered. *Choanephora cucurbitarum* was present on leaves, flowers and fruits and was abundantly present from August to November. *Choanephora cucurbitarum* was found in the months of July to Dec. Its frequency was almost equal in all the months of its occurrence. As per climatic data it may be concluded that *C. cucurbitarum* favours most humid condition and temp ranging around 30^{o}.

Cladosporium fulvum was present on both plant and fruit and generally occurred from Nov. to May. *Curvularia lunata* showed its maximum occurrence in the month of Dec. Therefore it may be concluded that with the lowering of temperature and rainfall its occurrence increased excessively.

Kaul (1982) controlled the post harvest disease of Apple caused by same pathogen. Singh et al. (1997) reported the efficacy of different fungicides against leaf spot of Brinjal caused by same pathogen. Zayed et al. (1980) controlled *Fusarium solani* with the use of Benlate.

REFEENCES

[1] Kaul, J.L. 1982.Comparative effectiveness of systemic fungicides for control of postharvest fungal rots of apple. *Indian phytopathology*.35:2,315-316.

[2] Singh, M., Singh, R., Narain,U. 1997. Management of *Curvularia* leaf spot of Brinjal through chemicals. Annals of plant protection *sciences*.5:2,195-196.

[3] Zayed,M.A.,Yehia,A.H.,El-Sabaey,M.A.,Gowily A.M. 1980 .Studies on Safflower root-rot disease in Egypt. *Agricultural Research Review*. 58:2,91-104.

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