SHORT COMMUNICATION

A CASE STUDY ON DEVELOPMENT OF DISEASE IN RELATION TO WEATHER PARAMETERS ON ALTERNARIA BLIGHT (ALTERNARIA PORRI) OF GARLIC

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Abstract: The present study was carried on Alternaria blight (A. porr) of garlic on the effect of weather parameters on the development of the disease. Purple blotch development observed a negative correlation with minimum temperature (r = -0.004), relative humidity (r = -0.775) and rainfall (r = -0.258) whereas the maximum temperature (r = 0.870) exhibited a positive correlation with the disease progress. The results indicated that the purple blotch was favored by high maximum temperature coupled with low minimum temperature, low relative humidity and low rainfall during the crop seasons.

Keywords: Alternaria blight, Development of disease, Garlic, Weather parameters

REFERENCES

Bisht, I.S. and R.C. Agrawal (1993). (a) Susceptibility to purple blotch leaf spot (*Alternaria porri*) in garlic (*Allium sativum*). *Ann. of Applied Biology*, **31** (8): 122-123.

Dubey, S.C. (2005). Influence of weather factors on development of Alternaria blight *J. Mycol. Pl. Pathol.*, **35**(2):369.

Miller, M.E. and M.L. Lacy (1995). Purple blotch. In: Schwartz HF, Mohan SK, eds. *Compedium of Onion and Garlic diseases*. St. Paul, MN: APS Press, 4: 23.

Mishra S.P.and A. Krishna (2001). Influence of crop density on the development of *Alternaria* blight in cotton. *Ann. Plant Soil Res.*, **3**: 264-66.

Shrivastava, P.K., B.S. Bhardwaj and P.P. Gupta (1994). Status of field disease and select pest of onion in India. *Neweletter National Hort. Res. Dev. Foundation*, **14**: 11-14.

Suheri, H. and T.V. Price (2000). Infection of onion leaves by *Alternaria porri* and *Stemphylium vesicarium* and disease development in controlled environments. *Plant Pathology*. **49**(3): 375-382.