

Role of weather parameters on bhendi yellow vein mosaic disease incidence and whitefly (*Bemisia tabaci*) population

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ABSTRACT : Field trial was undertaken at Main Agricultural Research Station, Dharwad during summer-2015, to assess the effect of various weather parameters consisting of maximum and minimum temperature (°C), rainfall (mm) and relative humidity (%) on bhendi yellow vein mosaic disease incidence and whitefly population. The result revealed that, the first incidence of the disease was noticed during 12th standard meteorological week (March 4th week) with a lowest PDI of 3.5 and 4.6 whiteflies/plant. Then the disease progressed as the crop growth advanced depending on the congenial weather factors prevailed and whitefly population and reached the peak intensity of 43.10 PDI by the end of May (22nd standard meteorological week), where the crop reached its maximum age. The per plant whitefly population increased continuously reaching a maximum of 7.2 at 50 days after sowing (16th standard meteorological week) thereafter, invariably whiteflies population were recorded. Per cent disease incidence and whitefly count had highly significant positive correlation with minimum temperature (0.904**) and maximum temperature (0.760**), respectively. Morning and evening relative humidity had significant positive correlation with disease incidence. Whereas, Rainfall had significant negative correlation (-0.369*) with number of whiteflies.

Key Words : *Abelmoschus esculentus* L., yellow vein mosaic disease, whitefly (*Bemisia tabaci*).