



## RESEARCH PAPER

# Effect of sowing environments on tikka (*Cercospora* spp.) in groundnut (*Arachis hypogea* L.)

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**Abstract :** The experiment was laid out in Randomized Block Design with five sowing dates viz., S<sub>1</sub> -22<sup>nd</sup> June, S<sub>2</sub> -29<sup>th</sup> June, S<sub>3</sub> -6<sup>th</sup> July, S<sub>4</sub> -13<sup>th</sup> July and S<sub>5</sub> -20<sup>th</sup> July and four replications. The observations on initiation of tikka diseases and per cent disease intensity were recorded periodically at an interval of one week after the occurrence of these diseases. The first incidence of tikka disease was observed at 30 DAS in S<sub>1</sub>, S<sub>2</sub>, S<sub>3</sub>, S<sub>4</sub> treatments and at 56 DAS in S<sub>5</sub>. The maximum incidence in all the five dates of sowing in *Kharif* season was observed between 65 to 79 DAS. Favourable climatic conditions for disease incidence and development were temperature ranged between 26°C to 32°C and relative humidity ranged between 61-79 per cent. The data revealed that in case of tikka disease there was positive significant correlation between disease intensity and maximum temperature (0.66), morning relative humidity (0.34), evaporation (0.39) and bright sunshine hours (0.65), whereas minimum temperature (-0.55), evening relative humidity (-0.69), wind speed (-0.73) and rainy days (-0.26) showed negatively significant correlation with disease intensity in *Kharif* season and wind speed, rain and rainy days were responsible for development tikka disease intensity. From the multiple regression analysis here it is concluded that the tikka disease severity was significantly related with wind speed (-5.53), rain (0.12) and rainy days (-4.46) and these factors were found to be significantly superior among the all weather parameters.

**Key Words :** Sowing, Environment, Groundnut, *Arachis hypogea* L.

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