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Mode of Perpetuation and Impact of Weather Parameters in Development of Anthracnose Disease of Walnut *Marssonina juglandi* (Lib.) Magnus

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***Abstract*:** Perpetuation studies were conducted on *Marssonina juglandis*(Lib.) Magnus causing Anthracnose disease of walnut revealed that the pathogen perpetuated in the form of acervuli on both leaves and twigs and produced viable conidia up to the end of May. The disease development under field conditions on leaves was found to be highly correlated with mean minimum temperature, followed by mean maximum temperature and mean minimum relative humidity, where as positive correlation with average rainfall on leaves, negative correlation with maximum relative humidity was observed. The disease development on twigs was highly correlated with mean minimum temperature, followed by mean maximum temperature, where as it showed negative correlation with rainfall and maximum and minimum relative humidity. Multiple correlation coefficients indicated strong relationship between leaf and twig intensity and weather parameters, there by establishing that rainfall, relative humidity (morning and evening) and temperature (maximum and minimum) had cumulative effect during the course of disease development and induced more than 99.0 and 92.8 per cent variation in leaf and twig intensity of anthracnose.

***Keywords**: Marssonina juglandis* (Lib.) Magnus, Walnut, Anthracnose, Perpetuation, Disease intensity, Weather parameters