

Influence of Weather Parameters on Seasonal Incidence of Citrus Leaf Miner (*Phyllocnistis citrella* Stainton) in Sweet Orange cv. Sathgudi

G Sarada, K M Yuvaraj and K Devaki

AICRP on Tropical Fruits (Citrus), Citrus Research Station, Tirupati-517502

ABSTRACT

Seasonal activity of the citrus leaf miner, *Phyllocnistis citrella* Stainton was investigated during 2009 and 2010 in Sweet Orange at Citrus Research Station, Tirupati, Andhra Pradesh. The leaf miner activity was noticed throughout the year with peak infestation during winter (September to January) months and low or nil damage in peak summer (April, May) months. Peak infestation of *P.citrella* was recorded as 38.4% and 35.4% during the months of December and October in 2009 and 2010 respectively. During the entire study period leaf damage caused by *P.citrella* ranged between 0.3 to 38.4%. Correlation studies of the pest incidence with meteorological data from 2001-2010 indicated that pest damage was positively correlated with both morning (RH1) and evening (RH2) relative humidity ($r = 0.561207$ and 0.436502) and negatively correlated with minimum temperature ($r = -0.62829$) and wind velocity ($r = -0.51968$). Regression analysis resulted that about 79% contribution of observed variation in pest infestation is due to the biotic (existing pest activity on available new flush) and abiotic factors (Temperature, Relative humidity and wind velocity) together.

Key words : Citrus leaf miner, Meteorological data, Seasonal abundance.