

Forewarning of thrips incidence on mulberry in Tamil Nadu

S. Mahiba Helen, Chikkanna and B. B. Bindroo

Infestation of thrips, *Pseudodendrothrips mori* (Thysanoptera: Thripidae) is now becoming a serious problem in all sericultural areas of Tamil Nadu. Unlike previous years now a days due to climate change heavy incidence of thrips is being reported throughout the year in Dharmapuri, Salem, Namakkal, Erode, Thirupur and Madurai districts of Tamil Nadu and causes severe damage to mulberry leaves.

Symptoms

Affected leaves show yellow streaks in the early stages and later it becomes brittle, leaf area reduced and malformed.

Life cycle

Fecundity : 30 -50 eggs

Hatching : 6-8 days

Nymphal period : 15-18 days

Longevity :

Male : 10-14 days

Female : 15-20 days

Management

Close observation on the upper side of the mulberry leaves for the presence of yellow spots reveal which is the first and foremost symptom of thrips incidence. If this symptom is noticed, the farmers are advised to see the backside of the leaves for the presence of adult and nymphal stages during morning hours. Thrips are very minute, adults have a slender and spindle shaped body and immature stages have no wings and are smaller, usually light in colour.

- In the early incidence water spray using power sprayer targeting the lower part of the leaves will help to dislodge the pest population.

- If the incidence is severe, spraying of 3% Neem oil mixed with 0.5% soap solution twice at 10 days interval targeting the lower part of the mulberry leaves (safe period for leaf harvest : 10 days after spray)
- In the case of very severe incidence, spray with 0.2 % Dimethoate (Rogor) twice at weekly interval. (Safe period : 10 days)
- Release of *Chrysoperla* ten days after neem oil spray or chemical spray will help to prevent further infestation
- If thrips incidence is below 15 % release of *Chrysoperla zastrowi sillemi* (Neuroptera: Chrysopidae) 1000 eggs per acre will help to control the pest

How to release *Chrysoperla*

The small stalked eggs of *Chrysoperla* attached with paper will be supplied. Farmers are advised to staple these paper containing the *Chrysoperla* eggs in to the lower part of the mulberry leaves.

The *Chrysoperla* eggs will be available from S.R.K. Seri Biocontrol Unit, V.G.P. Agro Farm, Nallur, Hosur .Mobile : +91 9994622647 and National Bureau of Agriculturally-Important Insects, P.Bag No: 2491, H.A. Farm Post Bellary Road, Bangalore -560 024, Karnataka, India. +91 (080) 2351 1982/ 98.



Early symptom of thrips incidence on mulberry



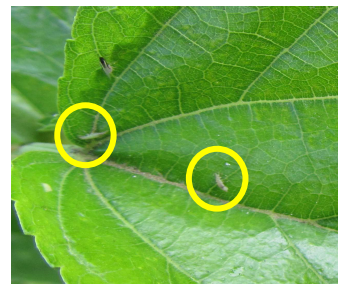
Presence of nymphs of *P. mori* on mulberry



Chrysoperla eggs



Adult



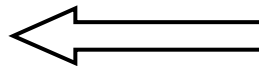
II- Instar larvae



Pupae



III- Instar larva



Life cycle of *Chrysoperla zastrowi sillemi*

For further details please contact Director, CSR&TI, Mysore