Forewarning pertaining to papaya mealybug incidence on mulberry in Tamil Nadu

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Incidence of papaya mealybug *Paracoccus marginatus* Williams and Granara de Willink has been a continuous threat to sericulture areas of Tamil Nadu. During November 2013 to till date the infestation is being reported from mulberry gardens of Udumalpet, Gobichettipalyam, Bhavani, Tenkasi, Trichy, Dharmapuri, Thiruvannamalai and Samayanallur. The pest incidence reported from these areas ranges from 5-40 per cent. Due to less rain and dry climate favours the spread of papaya mealybug in Tamil Nadu. To prevent the further spread of papaya mealybug incidence control measures have to be taken immediately.

Prevention

Monitoring and scouting to detect early presence of the mealybug.

Identification

Papaya mealybug infestations are typically observed as clusters of cotton like masses on the tender leaves and stems of mulberry. Movement of ants also another indication of the presence of mealybug. Ants are attracted by the honey dew secreted by the mealybug. Papaya mealybug egg and adult females are yellowish in colour covered by a white waxy secretion and short waxy filaments around the body with short caudal filaments. But in the case of tukra mealybugs are reddish to pink in colour but covered in white mealy wax with the body colour showing through. To differentiate papaya mealybug from tukra mealybug farmers can take one small bit of white paper and press a third-instar mealybug on it. If yellow colour fluid (haemolymph) comes out, it may be inferred as papaya mealybug and pink means it is tukra mealybug. This is only for farmers level identification for further confirmation farmers can show the infested leaves along with mealybug to nearby Research Extension centres.

Period of occurrence

Occurs throughout the year, but incidence is more during summer.

Biological control

- Release of the exotic parasitoids *Acerophagus papayae* @ 250 numbers per acre to the infested mulberry gardens.
- Release may be repeated if necessary
- Conservation of the released parasitoids by avoiding the use of chemical pesticides

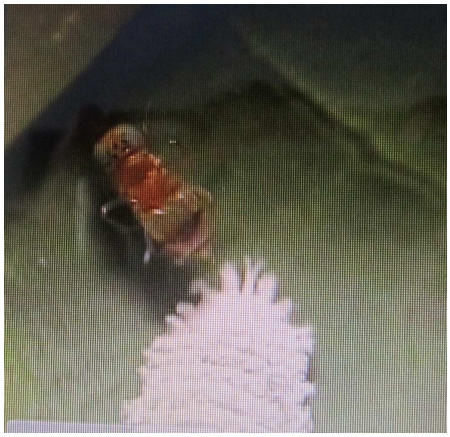
Parasitoids will be available from the following Centers

Scientist -D, Regional Sericultural Research station, Central Silk Board, Govt of India, Vaikalpattarai, Allikuttai post, Salem - 636 003. Telephone: +91 427 2296374	Centre for plant protection Studies, Tamil Nadu Agricultural University Coimbatore. Telephone : +91 422 6611237	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

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

Papaya mealybug (A) Egg mass B) Second instar C) Third and Fourth instar

Field release of *A. papayae*



***A. papayae* laying egg on second instar papaya mealybug**

***A. papaya*e infested mummified mealybugs**