

## **Forewarning for Pink Mealy Bug, *Macconellicoccus hirsutus*, infesting mulberry**

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As per the survey data of last four years incidence of pink mealy bug, *Macconellicoccus hirsutus* ranges between 4.32 - 17.8 % in Samayanallur, Krishnagiri and Salem districts of Tamil Nadu from May to August. Hence necessary precaution may be taken to control this pest during this ensuing summer.

*Macconellicoccus hirsutus* is a major pest of mulberry. It is recorded to infest more than 300 host plants and its polyphagous nature helps this insect to survive on other plants when mulberry is not available. It is a sucking pest, which feeds on the plant sap. Besides they inject toxic saliva into the plant while feeding. This results in the formation of malformed leaf and shoots, growth stunting and curling of the leaves similar to damage caused by virus. This symptom developed by the feeding of pink mealy bug on mulberry is known as 'Tukra'. The mealy bug nymphs are mobile and they move to the tender growing part of the plant. They are dispersed by ants, wind and man or animals. It is known as a hard to kill pest due to the presence of mealy substance which will prevent the penetration of insecticides and act as a protective covering. They also get protection from curled leaves which help in providing space for hiding.



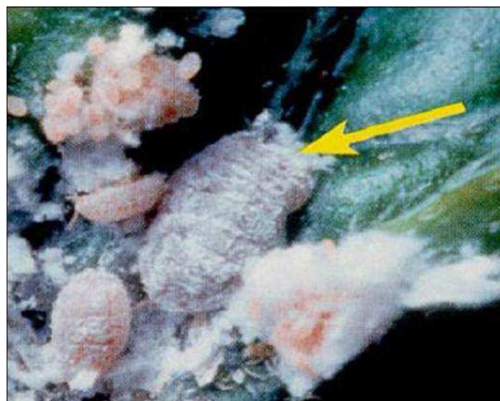
Typical 'tukra' symptom caused by the pink mealy bug on mulberry

### **Life cycle**

- ◆ Each female lays 350-400 eggs in an ovisac covered with cotton like mealy substance.
- ◆ The eggs will hatch in 6-9 days
- ◆ Nymphal period lasts 23-27 days
- ◆ Females have 3 nymphal stages and males four nymphal stages
- ◆ Males are winged and live for only 3-4 days. Females are wingless and live for 10-12 days.
- ◆ There will be 10-12 generations in a year.



Egg mass of the pink mealy bug inside the curled apical portion



Different life stages of the pink mealy bug on affected plants

**Control measures:**



Cutting and burning of 'tukra' affected portion to kill the insect, a mechanical control measure



Spraying insecticide at the right time to prevent the pest attack.



Releasing lady bird beetles, *Scymnus coccivora* on the tukra affected plant as a biological control measure

### **Management:**

1. **Mechanical:** Clipping and destruction of infested portions by burning.
  2. **Chemical:** Spray of 0.2 % DDVP (76%EC) @ 2.63 ml/litre 12 to 15 days after pruning. Safe period 15 days. For severe infestation spray one more dose after 10 days.
  3. **Biological:** Release of predators
    - a. *Cryptolaemus montrouzieri* - 250 adults/acre in two split doses: Oct- Nov and Jan-Feb.
- OR
- b. *Scymnus coccivora* -500 adults/acre in two split doses: Oct-Nov and Jan-Feb.