

## Biological method

Release predatory ladybird beetles *Cryptolaemus montrouzieri* or *Scymnus coccivora* @ 250 or 500 adults/year in two split doses at an interval of six months between two doses.

(Cost: Rs. 250 for 250 adult beetles of *Scymnus coccivora*)

## Recommended predatory lady bird beetles



*Cryptolaemus montrouzieri*



*Scymnus coccivora*

Beetles ready  
for supply



## Bio-control agents available at

CSRTI-Mysore

Ph: 0821-2903285

NBAIR, Bangalore

Ph: 080-2351 1982

Parasite Breeding Lab

Dept. of Agri., Mandya

Ph: 08232-238602

S.R.K Bio-control Centre

Hosur, Tamil Nadu

Ph: 099946 22647

Text

Vinod Kumar & J. B. Narendra Kumar

### For further details Contact:

DIRECTOR

Central Sericultural Research & Training Institute  
(ISO 9001 : 2008 Certified)

Central Silk Board, Min. of Textiles

Govt. of India, Srirampura, Mysuru-570 008

Tel: 0821-2362757, 2362406

Fax: 0821-2362845

Web: [www.csrtimys.res.in](http://www.csrtimys.res.in)

Email: [csrtimys.csb@nic.in](mailto:csrtimys.csb@nic.in)

# INTEGRATED PEST MANAGEMENT OF MEALYBUG CAUSING TUKRA IN MULBERRY



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Central Silk Board, Min. of Textiles

Govt. of India, Srirampura

Mysuru-570 008

## INTEGRATED PEST MANAGEMENT OF MEALYBUG CAUSING TUKRA



### Status

Major pest; popularly known as 'hard to kill' pest. Commonly called as 'pink mealy bug' (*Maconellicoccus hirsutus*).

### Period of occurrence

Throughout the year but the incidence is high in summer months.

### Nature of damage and symptoms



- The leaves of infested apical shoot are wrinkled, thickened, become dark green in color and then turn yellowish.
- Heavily infested plants have shortened internodes resulting in resetting or a 'bunchy top' appearance called Tukra.
- A heavy, black sooty mould may develop on infested plants' leaves and stem as a result of honey dew secretion by the mealy bug.
- Leaf yield is reduced by 4500 kg/ha/yr.

### Life cycle

Fecundity	: 350 – 500 eggs
Hatching	: 6-9 days
Nymphal period	: 23-27 days
	Females have 3 while males have 4 nymphal instars
Adult longevity	: Male: 3-4 days; Female: 10-12 days

## Management

### Mechanical method

Clip off infested portion by sickle or secateur into a polythene bag and destroy by burning.

To prevent further infestation, top clip and burn all the apical tips in the garden when the silkworms are in IV moult.



Clipping & burning of affected portion

### Chemical method

Spray 0.2% DDVP (76% EC) 15 days after pruning @ 2.63 ml/ltr.

Safe period: 15-17 days.

