Advantages

- Sampoorna, the plant-based steroid with moulting hormone activity is safe for silkworms.
- Sampoorna can be used for early and uniform maturation of mulberry silkworm.
- Application of Sampoorna saves labour in picking the matured worms and time.
- It can save the crop from unforeseen shortage of mulberry leaf in the final instar
- The cocoon characters are not affected.

Cost economics of Sampoorna (100 dfls)

Items	Cost
Cost of Sampoorna	Rs. 140.00
Cost of Sampoorna spray	Rs. 200.00
Savings on leaf cost	Rs. 1500.00*
Savings in labour cost	Rs. 1500.00**
Total savings	Rs. 2660.00

*Rs 5/- per kg mulberry leaf, for 300 kg
** 3 man days for 3 days @ Rs.500/-

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SAMPOORNA

- A Phytoecdysteroid hormone for uniform maturity in Silkworm, *Bombyx mori* L.

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In sericulture several technologies has been developed to make the sector more profitable. Sericulture demands high labour and the work is time bound. Silkworms larval period depends on the quantity and quality of the mulberry leaf and the rearing temperature. Due to low the temperature and insufficient leaf the larval period gets extended by a day or two. This results in inferior quality of cocoons and economic loss to the farmers.

The spinning behaviour of silkworm larval and maturation are driven by the change in ecdysone hormone. The change in the hormone titers are induced purely by the physiological and behavioral modifications. During the last phase of rearing activities, if the ecdysone synthesis is not reaching the optimum level,

the uniform maturation is interrupted. Especially during the cooler months these incidents are commonly seen in the field as the larval duration is extended and results in leaf shortage. In normal silkworm rearing practice, farmers are forced to pick up and mount the silkworms as and when they mature and the mounting process extends up to 2 days or even more.

This involves a lot of time, labour, extra mulberry leaf, which leads to higher production costs besides marketing difficulties and an extended grinage operation where seeds are produced. During the crisis of leaf shortage and to regulate and synchronize spinning behaviour, CSRTI-Mysuru have developed a plant-based spinning hormone called Sampoorna. By using this, the maturation process will be hastened and can induce synchronized spinning in mulberry silkworms. Sampoorna can be used for any breeds, cross breeds and hybrids.

Dosage for 100 dfls

- 4 lit. of diluted hormone solution (Two 10 ml vials dissolved in 4 lit. of water)

When to use

- At the onset of spinning (when 3-5% of matured worms are noticed in a batch)

How to use

- A thin layer of mulberry leaves is spread on the silkworms rearing beds.
- Spray the 4 liters of diluted solution for 100 dfls over the leaves using a hand sprayer.
- One more feeding (if necessary) can be given after complete consumption of treated leaf.
- All the worms will mature within 18-24 hours after spraying can be observed.