

Transfer of 'Sericillin' technology

SERICILLIN

Sericulture is a mixed industry of Cottage and Agriculture. Sericulture is one of the chief cash crops in West Bengal. A massive loss in silk production has been observed due to outbreak of silkworm diseases. Any disease of silkworm is harmful. Disease of silkworm may be caused due to the infection of bacteria, virus, fungus and protozoa. Grasserie, Flacherie and Gattine diseases cause heavy loss during unfavourable seasons i.e.,, Jaistha (May-June), Shravani (June-July), Bhaduri (July-August) and Aswina (August-September). In other seasons, crop loss is also noticed due to Grasserie and Muscardine.

Harvesting of disease free healthy cocoon is the integral part of Sericulture. Central Sericultural Research & Training Institute, Berhampore, West Bengal, recently has formulated 'Sericillin' an eco-friendly and safe bed disinfectant. It is equally effective to prevent common silkworm diseases and it is proved in our laboratory also. Besides, 'Sericillin' has also been proved as superior bed disinfectant used by farmers. It has also been experimented successfully in the State Sericulture Farms. To meet up the farmers need, National Research Development Corporation, Govt. of India, New Delhi, has licensed the product to two entrepreneurs,

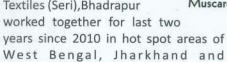
M/S Nabagram Resom Shilpa Unnayan Co-operative Society, Ltd, Billol, Nabagram, Murshidabad and M/S Saha Resom Enterprise, Berhampore for commercial production.

LARGE SCALE TESTING AT CSB AND DOS FARMS

With the objective for validation of 'Sericillin' especially against Muscardine disease, four Regional Sericultural Research Stations and fourteen Research Extension Centers have carried out trial for last four years since 2006-07 in Eastern and North Eastern region and satisfactory result was obtained.

'Sericillin' is very effective in preventing the spread of common diseases like grasserie, flacherie and especially muscardine. Average cocoon yield gain over control was 4.91 Kg / 100 dfls (14.54 %) using 'Sericillin' by three thousand farmers on three lakh dfls at all test centers. Moreover, satisfactory results was also recorded using 'Sericillin' by the farmers against incidence on Muscardine in some 'hot spot' areas, notably Rajmahal in Bihar. Imphal in Manipur, Singnanpur in Orissa, Panchgram, Balaspur in Murshidabad district, Bhadrapur, Raipur in Birbhum and Mothabari in Malda district of West Bengal.

Recently, this Institute and its four Research Extension Centers and four Sericulture Service Centers of Zonal Silkworm Seed Organization, Malda and Technical Service Centre, Directorate of Textiles (Seri), Bhadrapur





Muscardine disease

Chattishgarh state for studying the incidence of 'Muscardine' disease and determining the efficacy of 'Sericillin' for control of 'Muscardine' disease in 'hot spot' areas and satisfactory result was obtained. Average cocoon yield gain by using

Sericillin over control was 4.46 Kg / 100 dfls (13.70 %) by 500 farmers by rearing 50,000 dfls at all test centers.

Characteristics of Sericillin

- It is made of non-hazourdous components and effective in all seasons.
- It is eco-friendly bed disinfectant and preventive against all common silkworm diseases especially Muscardine.
- It contains anti-viral and anti-bacterial chemicals which prevent Grasserie, Flacherie, and Gattine disease effectively.
- It is easily available, cheap and safe.
- It is very easy for application.

Stage of application	'Sericillin' required for 100 dfls (40000 larvae)
After 1 st moult before resumption of feeding	80 gm
After 2 nd moult before resumption of feeding	120 gm
After 3 rd moult before resumption of feeding	300 gm
After 4 th moult before resumption of feeding	800 gm
3 rd day of 5 th instar after complete consumption of feed	1200 gm
5 th day of 5 th instar after complete consumption of feed	1500 gm
Total	4000 gm or 4 kg

Method of application

- Pour 'Sericillin' on a piece of muslin cloth and dust 3-4 g per square feet of bed area on silkworm body.
- Dusting is to be done on silkworm larvae after each moult 30 min before the resumption of feed.
- One additional dusting is to be done

- on the 4th day of 5th instar after bed cleaning.
- On the appearance of disease symptom, dusting frequency may be increased to everyday.
- 4.0 kg of Sericillin is required for conducting 100 dfls rearing.





Dusting of 'Sericillin'

Precautions

- Never apply dusting while silkworms are settling or settled for moult.
- Dusting is to be done on silkworm larvae after each moult 30 min before the resumption of feed.
- The disinfectant to be kept in dry and separate place.
- Keep away from the reach of children after opening the packet.







"Sericillin'- awareness programme

For further details contact:

Dr. S. Nirmal Kumar, Director Central Sericultural Research & Training Institute Ministry of Textiles: Govt. of India

Berhampore - 742101

Ph.: (03482) 253962 Ext.-244, 245 FAX: (03482) 251233/253930/224890 EPABX: (03482) 253962/63/64 CSR&TI, Berhampore

Design: Tapas K. Maitr Printed by: Unimage

SERICILLIN

A disinfectant for silkworm body and bed





Dr. Satadal Chakrabarty

Dr. A.K.Saha

Dr. S.Nirmal Kumar

Silkworm Pathology Section
Central Sericultural Research and Training Institute

ISO 9001: 2008 CERTIFIED Central Silk Board

Ministry of Textiles: Govt. of India Berhampore - 742101 (West Bengal)