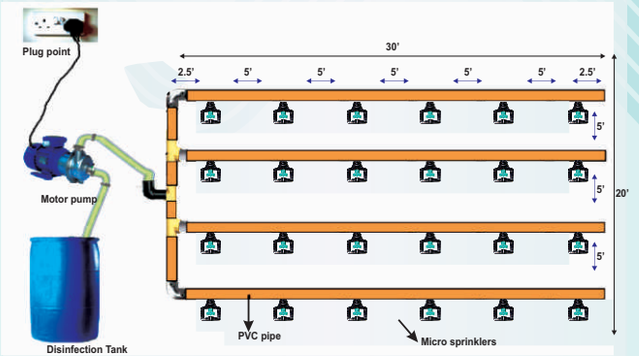
Cost of Installation

Materials	Unit Cost (Rs.)	
	20′ x 30′	20′ x 50′
Microsprikler	600	800
PVC Pipes	4400	6100
PVC Brass Tee	2400	4000
Gate valve, Unions, Suction pipe etc.	1800	1800
Pump (1Hp)	10000	10000
Brass gun with pipe	2300	2300
Miscellaneous	1000	1500
Installation Charges	4000	8000
Total	**26500**	**34500**
Electrical connection is mandatory		

The refined Automated Disinfection System was validated at CSRTI-Mysuru and its regional units at Salem, Kodathi & Bidaraguppe. The system performed efficiently and successful cocoon crops were harvested.

Advantages

- Completely avoids human exposure and subsequent risks associated with manual spraying of chemical disinfectants
- Automated Disinfection System is user-friendly, economic and easy to install and operate
- Saves labour, time and reduces drudgery in the disinfection of silkworm rearing house
- This can be installed as a permanent fixture or as a removable unit



Schematic Representation of Automated Disinfection Model Developed for 20′×30′ Rearing House

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Automation in Disinfection of Silkworm Rearing House

a farmer's innovation

Farmer
Lab
Land

Sri. S.V. Rajasekharappa
Yalanganahalli
Hassan, Karnataka

Central Sericultural Research & Training Institute
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Silkworm cocoon crop losses occur mainly due to silkworm diseases. Pathogens causing silkworm diseases contaminate the rearing house and equipment. These become the main sources for onset and spread of diseases. Proper disinfection and maintenance of hygiene ensures pathogen-free environment. Chemical disinfection is an effective method to destroy harmful microbes present in the rearing environment. Wide variety of disinfectants are recommended in sericulture including Bleaching powder, Sanitech, Sanitech Super, Serichlor, Decol, Asthra, Serifit, *etc*.

- Presently disinfection is done manually using sprayers where the sericulturist is exposed to harmful chemicals
- Sericulturists seldom use mask, gloves and other protective devices, leading to health issues

Automated Disinfection Technology

Sri S. V. Rajasekharappa, a progressive farmer designed and installed effective automated system in his rearing house using irrigation pipes and sprinklers. He is a recipient of innovators'award presented by the CSRTI-Mysuru.

Technology Refinement by CSRTI-Mysuru

The farmer's system was studied and refinement was undertaken at CSRTI-Mysuru for greater efficiency.

- The alignment of the pipes was changed to reduce obstructions in conducting regular rearing operations
- The irrigation sprinklers were replaced with micro sprinklers for controlled discharge
- The modified system was validated through in-house trials

Large Scale Testing Unit at CSRTI -Mysuru

Connectivity to Pump

Control Valves

Micro Sprinkler

Spray Gun