

Rearing of Mulberry Silkworm



BY

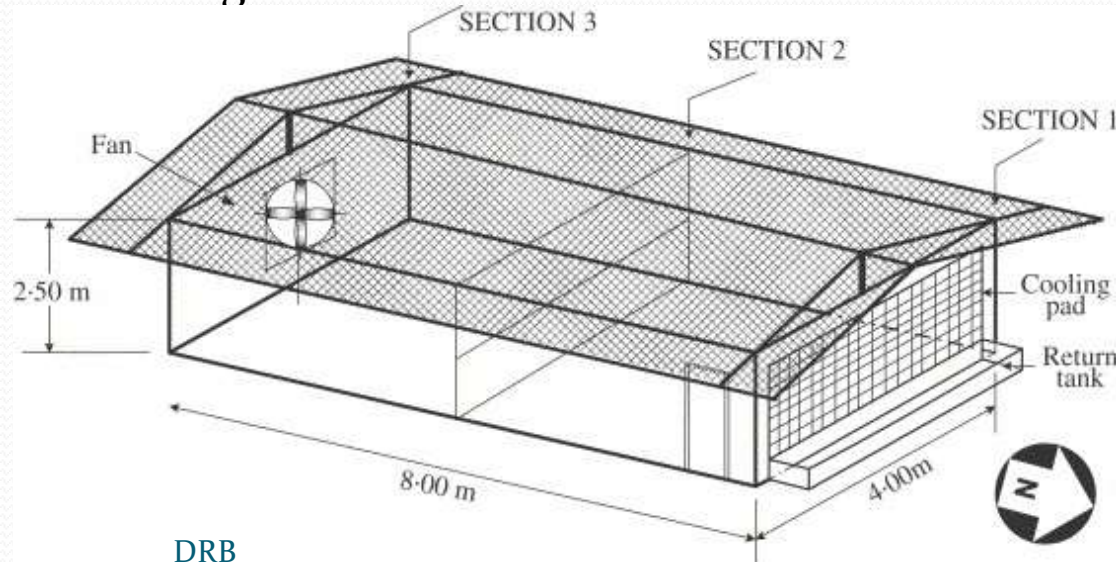
*Prof. Borhade D. R.
Department of Zoology*

Rearing Equipments:



i) Rearing house:

- The rearing house should meet certain specification, as the silk worms are very sensitive to weather conditions like humidity and temperature.
- The rearing room should have proper ventilation optimum temperature and proper humidity.
- It should be ensured that dampness, stagnation of air, exposure to bright sunlight and strong wind should be avoided.



ii) Rearing stand:

- Rearing stands are made up of wood or bamboo and are portable.
- These are the frames at which rearing trays are kept.
- A rearing stand should be 2.5 m high, 1.5 m long and 1.0 m wide and should have 10 shelves with a space of 20 cm between the shelves.
- The trays are arranged on the shelves, and each stand can accommodate 10 rearing trays.



iii) Ant well:

- Ant wells are provided to stop ants from crawling on to trays, as ants are serious menace to silk worms.
- They are made of concrete or stone blocks 20 cm square and 7.5 cm high with a deep groove of 2.5 cm running all round the top.
- The legs of the rearing stands rest on the centre of well filled with water.



iv) Rearing tray:

- These are made of bamboo or wood so that they are light and easy to handle.
- These are either round or rectangular.



v) Paraffin paper:

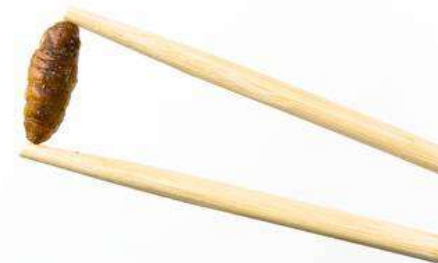
- This is a thick craft paper coated with paraffin wax with a melting point of 55°C .
- It is used for rearing early stages of silk worms and prevents withering of the chopped leaves and also help to maintain proper humidity in the rearing bed.

vi) Foam rubber strips:

- Long foam rubber strips 2.5 cm wide and 2.5 cm thick dipped in water are kept around the silkworm rearing bed during first two instar stages to maintain optimum humidity.
- Newspaper strips may also be used as a substitute.

vii) Chopsticks:

- These are tapering bamboo rods (1cm in diameter) and meant for picking younger stages of larvae to ensure the hygienic handling.



viii) Feathers:

- Bird feathers preferably white and large are important items of silkworm rearing room.
- These are used for brushing newly hatched worms to prevent injuries.



ix) Chopping board and Knife:

- The chopping board is made up of soft wood it is used as a base for cutting leaves with knife to the suitable size required for feeding the worms in different instar stages.

x) Leaf chambers:

- These are used for storing harvested leaves. The sidewalls and bottom are made of wooden strips.
- The chamber is covered on all sides with a wet gunny cloth.

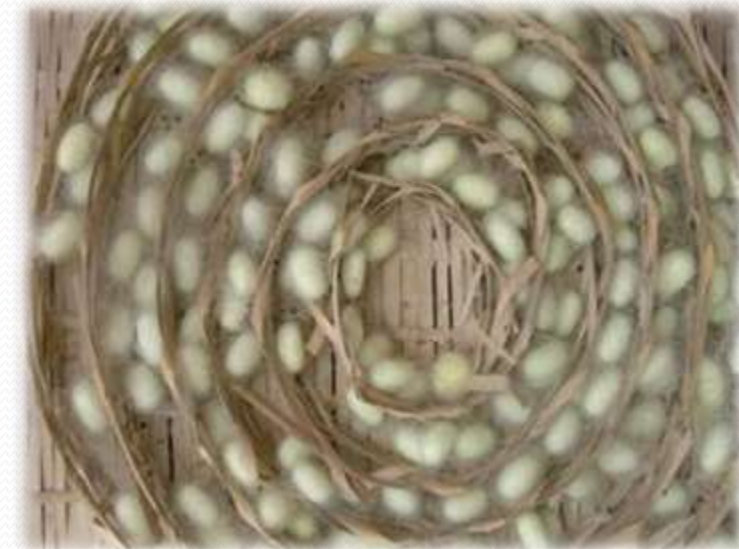
xi) Cleaning net:

- These are cotton or nylon nets of different mesh size to suit the size variations of different instars of the silk worm.
- These are used cleaning the rearing beds, and at least two nets are required for each rearing tray.



xii) Mountages:

- These are used to support silkworm for spinning cocoons. These are made up of bamboo, usually 1.8 m long and 1.2 m wide.
- Over a mat base, tapes (woven out of bamboo and 5-6 cm wide) are fixed in the form of spirals leaving a gap of 5-6 cm.
- They are also called chandrikes.
- Other types of mountage such as centipede rope mountage, straw cocooning frames etc. are also used.



xiii) Hygrometers and Thermometers:

- These are used to record humidity and temperature of the rearing room.

xiv) Feeding stands:

- These are small wooden stands (0.9 m height) used for holding the trays during feeding and bed cleaning.
- Other equipments like feeding basins, sprayer, and leaf baskets may also be required.

