

- (i) Rearing stands. These are wood or bamboo stands of frames on which rearing trays are placed.
- (ii) Rearing trays. Rearing trays are made up of split bamboo used for rearing caterpillars. Since, young larvae i.e., 1st and 2nd instar larvae are very delicate and susceptible paraffin paper is used to cover bottom and top of the rearing trays, which are generally circular, but sometimes box type wooden trays are also used. Paraffin paper are used to maintain humidity and prevent withering of leaves.
- (iii) Ant wells. These are circular or rectangular water containing bowls in which legs of rearing stand are kept to prevent attack of ants.
- (iv) Chop sticks. These are tapering bamboo rods required for picking up younger larvae to avoid any injury.
- (v) Feathers. These are usually white feathers used for brushing together freshly hatched larvae to prevent injuries.
- (vi) Baskets. Baskets made up of bamboo are needed to fetch mulberry leaves.
- (vii) Chopping knives. These are required to cut the mulberry leaves into fine pieces.
- (viii) Chopping boards. Chopping board on which leaves are cut is made up of soft wood and placed on mat.
- (viii) Leaf chambers. These are chambers of wooden strips used for storing mulberry leaves.
- (ix) Cleaning nets. These are cotton or nylon nets of different mesh sizes suitable for placing different instar larvae. These are used for changing the rearing beds so that the left over leaf pieces and other remains are filtered out without the larvae being disturbed.
- (xi) Refrigerator. Refrigerator is required to store the eggs. Other appliances include thermometer (used to measure temperature), Hydrometer (used to measure humidity),

Heater and cooler to maintain the required temperature, formaline to sterilize the tools incorporated in the process etc.

Procedure of sericulture.

The seed cocoons are reared under optimum conditions in the grainage and for obtaining seeds they are spread as a single layer on the trays arranged in racks. The place is well ventilated and a constant temperature of 23-25°C and humidity between 75-80% RH is maintained. Once the adults emerge after 10-12 days of cocoon formation, the two sexes are separated and allowed to mate in the same way as discussed earlier. Then eggs are to be collected for which there are several methods such as cellular bag method, cellular card method, flat card method etc. In cellular card method, a craft paper is divided into 20 squares in 4 rows each having 5 compartments. The mated females are kept on the card squares under moth funnel. Once the eggs are laid, the female moths are removed. The eggs are soaked for 30 to 60 minutes to separate the eggs from the paper, which are again soaked for 10 minutes in 0.5% of bleaching powder solution to remove the glue. Then they are transferred to a salt solution of 1.06-1.20 sp. gravity to remove floating unfertilized eggs. Then the fertilized eggs so obtained are washed in 2% formalin to disinfect them. Then they are dried and packed in boxes for marketing. The eggs, known as seeds now are kept in sterilized trays at 4°C and moved periodically with feather to ensure 100% hatching. The rearers are provided with either seeds or the 2nd instar- larvae, depending on their knowledge and managing capacity for obtaining good quality cocoons. After hatching, the caterpillars are placed in rearing trays having a layer of uniformly distributed well Chopped mulberry leaves. During the first two-three days, leaves are changed after every 2-3 hours. For 3-4 weeks, the larvae eat voraciously and continuously and the 5th instars spins cocoons. After the construction of complete cocoons. They are gathered and marketed and about 5500 silkworms are required to produce 1 kg or raw silk. The quality of the cocoons spun by the larvae depends on the environmental conditions. When the caterpillar has spun its silken cage or cocoon around itself. It casts off its skin to pupae. It is crucial to harvest