

## Experiment No. 5. Commercial Characters of Cocoons

*Dr.H.B.Mahesha, Yuvaraja's College, University of Mysore, Mysuru.*

**Aim:** To determine the cocoon weight, shell weight, shell per cent age and floss per cent age of the given cocoons.

**Introduction:** Though the cocoon contains floss, shell, pupa and its larval skin; cocoon weight, shell weigh, shell percentage are the most important traits from the point of reelable silk. Therefore, determination of these commercial characters is the most important parameters to be considered for price fixation in cocoon markets.

**Requirements:** Cocoon lots, blade, balance, plastic containers, *etc.*,

### Procedure:

1. Weigh the given cocoons along with pupa. This gives the total weight of the cocoons. Calculate the average weight of the cocoon.
2. Remove the floss, note down the weight and calculate average weight of the floss.
3. Cut open the cocoon, takeout the pupa and larval skin, and record the weight of the shell to determine the average weight of shall and also pupa.
4. From these observations, calculate shell % and floss % from the following formulae.

$$\text{Shell Per cent age} = \frac{\text{Weight of the shell X 100}}{\text{Weight of the cocoon}} = \text{_____} \%$$

$$\text{Floss Per cent age} = \frac{\text{Weight of the floss X 100}}{\text{Weight of the cocoon}} = \text{_____} \%$$

**Report:** The \_\_\_\_\_ and \_\_\_\_\_ is the shell % and floss % respectively.

### Observations and Calculations:

1. Weight of five cocoons (A) = \_\_\_ gm.
2. Average weight of the cocoon (A/5) = \_\_\_ gm.
3. Weight of 5 floss (B) = \_\_\_ gm.
4. Average weight of the floss (B/5) = \_\_\_ gm.
5. Weight of 5 pupae (C) = \_\_\_ gm.
6. Average weight of the pupa (C/5) = \_\_\_ gm.
7. Weight of 5 shells (D) = \_\_\_ gm.
8. Average weight of the shells (D/5) = \_\_\_ gm.

-----