**Experiment No. 2: Determination of degree of drying of Cocoons.**

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**Aim:** To determine the degree of drying in the given cocoon sample.

**Introduction:** The process of killing the pupae and drying of cocoons is known as stifling of cocoons. Cocoons can be stifled by several methods but the popular methods in reeling industry are sun drying, steam stifling and hot air conditioning. Of these methods sun dried and hot air conditioned cocoons can be stored for any length of duration without fear of either moth emergence or mold attack. Therefore, it is very essential to know the degree driage in different strains of cocoons prior to preservation.

**Requirements:** Cocoon lots, Balance, metal containers/trays, *etc.*,

**Procedure:**

Weigh the given lot of cocoons and this is considered as initial weight ($W_1$). Then keep the weighed cocoons in a hot air oven at 90 °C. After one hour take out the cocoons and record the weight ($W_2$). After recording the weight, keep the cocoons in the same oven at same temperature. Repeat the same procedure for $W_3$, $W_4$ and $W_5$. Calculate the moisture loss percentage by using the following formula.

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$$\text{Moisture Loss Per cent age} = \frac{\text{Initial Weight} - \text{Final Weight X 100}}{\text{Initial Weight}} = \_\_\_\ \%$$

**Report:** ____, ____, ____ and ____ are the moisture loss % after 1st, 2nd, 3rd, and 4th hour drying at 90 °C respectively.

**Observations and Calculations:**

| Breed | Initial Weight ($W_1$) | After 1 hours | | After 2 hours | | After 3 hours | | After 4 hours | |
|---|---|---|---|---|---|---|---|---|---|
| | | Final Weight ($W_2$) | Driage % | Final Weight ($W_3$) | Driage % | Final Weight ($W_4$) | Driage % | Final Weight ($W_5$) | Driage % |
| Pure Mysore | | | | | | | | | |
| $CSR_2$ | | | | | | | | | |
| Cross Breed | | | | | | | | | |

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