EXPERIMENT 8  FULL-HAND MILKING OF A DAIRY COW/BUFFALO

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8.1 INTRODUCTION

The term “Milking” means drawing milk from the udder of a dairy animal. Milking should be done at regular intervals, quickly, cleanly, gently, quietly and completely and should be completed within 5-7 minutes. Milking should be done in clean environment. It has been observed that cows remaining comfortable during milking yield more milk than cows which are under stress. The udder should be milked out completely as any amount of left-over (residual) milk present in the udder can cause infection of the udder (Mastitis).

Objective

After performing this experiment, you should be able to:

- perform full-hand milking and draw milk from the given milch Cow/Buffalo.

8.2 EXPERIMENT

8.2.1 Principle

There are different methods of milking cows and buffaloes namely, full-hand milking, stripping and knuckling. Among these, full-hand milking is considered the most comfortable and best method of milking since it does not cause damage to the teats and the cow will remain comfortable, if milking is done correctly. This is the recommended method of milking as it is similar to (simulates) natural suckling of a calf. This method can be practiced in cows with large teats and also in buffaloes. Full-hand milking removes milk quicker than stripping as there is no loss of time in changing the hand position during milking.

8.2.2 Requirements

- One milch Cow/Buffalo
- Rope
- Clean cloth
- Potassium permanganate or any other antiseptic solution
- Milk Can
- Milking bucket
- Muslin cloth or strainer
- Small quantity of concentrate feed
- Strip cup or any clean, dry utensil

### 8.2.3 Procedure

1. Approach the cow/buffalo as described in experiment 1 of this manual. Cows generally do not react to washing. However, you should not excite the animal during the process.

2. Wash the cow/buffalo especially the hindquarters, before bringing it to milking parlour/place.

3. Tie the cow/buffalo at its milking place and provide a little quantity of concentrate to divert the attention of the animal to be milked.

4. Apply milkman’s knot using a small rope. Get a rope of heavy cotton between 18-20 inches around the hind leg just above the hock in figure of “8” fashion crossing between the legs. If the animal is familiar to you, you can even milk the animal without applying milkman’s knot. Secure the tail suitably to minimize contamination.

5. Wash the udder and teats with an antiseptic solution such as Potassium permanganate.

6. Dry the udder and teats using a clean, dry cloth. Gently massage the udder and teats to stimulate milk let down.

7. To check for mastitis (disease), draw a few strippings from each quarter in the strip cup or any clean, dry utensil and check for any abnormal flakes or clots or colour.

8. If the milk is having abnormal colour/clot/flakes, do not milk the animal.

9. If the milk is normal, with the four fingers of a hand on one side and the palm on the other side, hold one teat.

10. Close the proximal (near the udder) end of the teat with the circle formed by the thumb and the index finger (see figure 8.1).

11. Gently squeeze the teat by tightening the fingers starting with the index finger. The middle, ring and little fingers are then sequentially tightened, so as to force the milk collected within the teat to come out into the milking bucket.

12. Relax all the fingers simultaneously and repeat the sequence in succession.

13. Remove the last drops of milk by stripping method.

14. Un-tie the animal, pick up the milking bucket, weigh the milk and record the quantity of milk produced against the animal number.

15. Transfer the milk to the milk can through a strainer or muslin cloth and store at a cool place till its disposal.
8.2.4 Observations

Perform the milking by full-hand method and observe the behaviour of the cow/buffalo and note down your observation.

8.2.5 Results

The given animal is milked completely by full-hand method.

8.3 PRECAUTIONS

- Approach and restrain the milch cow/buffalo properly.
- Cleaning of the udder and teats is important for clean milk production.
- The person performing the milking should be healthy and clean.
- Milk should be collected in a clean dry vessel.