

Collection of milk sample from sheep

Recommended instructor to student ratio: 1:15

Category

1. Observation Involving minor interference

Objective

To collect a colostrum or milk sample from lactating ewes

Alternatives to animal use

A milk sample can only be collected from a lactating ewe. For teaching purposes, photographs or video may be sufficient to explain the technique, but handling of an animal is required if students are to become experienced in application of the technique.

Equipment

Overalls, Gloves, Collection container, Milking Machine if required, paper towel, clean water, teat disinfectant

Safety and Risk considerations

Persons working with the sheep must be aware of the following:

- Sheep are herd animals and milking ewes requires a single ewe to be restrained
- Sheep have a fight or flight response so must be well restrained
- Sheep may have recently lambed so may be protective of their lambs

Drugs, chemicals or biological agents

Teat dip (disinfectant)

Procedure

A colostrum or milk sample can be collected from ewes between the day of birth and the end of lactation. A lactating ewe will be restrained either in the sitting position, or in a standing position if a second operator is available to hold the ewe or a suitable restraint method (head bale, crate which restricts movement) is available. The sitting position is preferred for animals not regularly milked as kicking is minimised.

Operators will have clean hands and wear disposable gloves.

Milk will be collected from one side of the udder only to ensure some colostrum will remain immediately for the lamb, where sampling is conducted on the day of birth.

The teats will be washed with clean water to remove soiling (manure, mud), wiped dry with single-use paper towel, then one teat gently squeezed using fingers to expel milk into a container. Avoid touching the ends of the teat with hands or container. A 50 ml sample may be collected.

After collection, the teats will be dipped in a suitable teat dip (disinfectant) to minimise the risk of teat infection.

The ewe is then released and returned to her lamb.

Impact on wellbeing of animals

The procedure will cause short-term stress due to handling, for animals not regularly milked. However, the procedure is fast – less than one minute to collect a sample – and there are NIL other impacts on the well-being of the ewe or lamb.

Animal Care

No special care is required, other than quiet handling. Ewes should be observed after the procedure to ensure they return to their lamb.

Pain Relief

None required

Reuse and repeated use

Samples may be collected from the same ewe up to 2 times daily for research purposes, throughout lactation, which may be a period of up to 12 weeks. For teaching purposes, a new animal should be used for each sample, with the same animal only collected twice per day, and not more than twice per week.

Qualification, experience or training necessary to perform procedure

Demonstrator: Extensive experience in sheep handling.

Students: Experience in sheep handling. The technique should be clearly demonstrated before students attempt it.