1. **PURPOSE**

To describe the procedure for collecting rumen contents from a fistulated cow.

2. **RESPONSIBILITY**

2.1 Researcher
2.2 Farm staff
2.3 Dairy Manager
2.4 Research students (must have taken animal handling class)

3. **MATERIALS**

3.1 Shoulder length gloves
3.2 Eye protection (e.g. safety glasses, visor)
3.3 Nitrile or latex gloves
3.4 Coveralls or lab coat
3.5 60cc syringe or small plastic cup
3.6 Paper towel
3.7 Pail

4. **PROCEDURE**

4.1 The researcher must coordinate the number of cows required and time of collection with the Dairy Manager prior to the start of the research study.
4.2 Remove any jewelry or items, which may fall into the rumen during collection.
4.3 Don latex gloves, coveralls/ lab coat and eye protection (e.g. safety glasses, visor).
4.4 Restrain the cow:
   4.4.1 In box stall: restrain cow with halter.
   4.4.2 In tie stall: ensure trainers are unplugged.
4.5 Gently unplug the cannula by pushing the plug inside the rumen and then pulling it out.
4.6 Place plug in a clean pail half filled with water. Note: If the plug falls onto the floor, wash with soapy water (dish soap).
4.7 Don shoulder length breeding glove on the arm reaching inside the rumen.
4.8 Collect the necessary contents
   4.8.1 Fluid content: Collect using a 60cc syringe or small plastic cup.
   4.8.2 Solid content: Collect with shoulder length gloves.
4.9 Ensure not to leave any foreign objects in the rumen (e.g. gloves, paper towels, extraction equipment, etc.).
4.10 Insert the plug back into the cannula, ensuring correct placement. Note: If incorrectly placed, the plug may leak or may fall into the rumen or onto the floor.

4.11 Use paper towel to wipe and dry the exterior of the cannula, and the side of the cow if she has been soiled.

4.12 Remove any debris from beneath the outer flap of the cannula.

4.13 Remove any soiled bedding from the stall.

4.14 Plug in trainers if contents are collected in a tie stall.

5. REFERENCES


Document Status and Revision History

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