

Farmer Information Sheet

Drench efficacy on your farm will be measured by a faecal egg count reduction test (FECRT) 14 days after treatment. The aim is to evaluate the field efficacy of drenches for the control of a range of internal parasites in naturally infected sheep. The aim is to confirm the efficacy of each chosen drug against the nematode population on the farm and to generate resistance data for sheep parasitic nematodes. No negative control group will be used. Faecal egg counts 14 days after treatment will be compared to samples taken on the day of treatment (Day 0). Trays for collection of faecal samples and pre-paid return postage bags are provided.

At the end of the Drench Test the following information will be available:

- **worm species present on your farm**
- **efficacy data of drenches used against those species**

The most important details to remember are:

- 1) You will have to submit a **PRE-sample kit** of 15 individual samples to determine the average FEC in your mob to check, if a drench test can go ahead, unless a worm egg count has already been ascertained.
- 2) You will need **2 sampling days, 14 days apart** (Day 0 & Day 14). The first will involve faecal sampling and treatment, the second visit will be faecal sampling only.
- 3) Sampling (and treatment) days should not be a Thursday or Friday, to ensure that samples do not get stuck in postage over the weekend.
- 4) You will be required to muster the sheep into the yards on both Day 0 & Day 14. On Day 0, ensure the yards are clean (not previously occupied by other animals that day) before mustering the sheep since faecal samples can be picked up from the yard prior to treatment. Try to muster the animals as close to start time as possible.
- 5) On Day 0, 15 healthy animals per drench group will be drafted from the mob, avoiding the head/tail, for inclusion in the study (*5 drench groups = 75 animals*).
- 6) The animals selected for the study will be allocated into different treatment groups on Day 0. Each group will be individually marked/identified (i.e. raddle spray/coloured ear tag). **Ensure correct treatment and sampling.**
- 7) Run all treated animals as one mob in the same paddock for the study period.
- 8) Be compliant with the WHP / ESI for all the different drugs given to your animals. You will find the respective information on the labels of the treatment canisters for reference.
- 9) **Do not administered any other anthelmintic treatments throughout the study period.**
- 10) In you have any questions, please do not hesitate to contact Dawbuts
- 11) In the case of an adverse event / emergency (i.e. if any of the study animal becomes unwell), contact your local vet if required and notify the colleagues at Dawbuts (02 4655 6464) within 24 hours.
- 12) You will be emailed the study results. Please ensure your email address provided is correct.

Collecting faecal samples from sheep for FEC and larval culture

Background information

Worm eggs in faeces hatch when they are exposed to air, warmth, and moisture. It is therefore important to collect samples and seal inside the tray **within 10 minutes of being voided**. Wear appropriate clothing to protect against exposure to faeces. For samples collected rectally, ensure sheep are comfortably restrained in a suitable crush.

Equipment

- ✓ Faecal collection tray
- ✓ Disposable rubber gloves
- ✓ Tissues and bucket of water
- ✓ Mailing kit including resealable plastic bag, cardboard box, and pre-addressed mailing bag

Procedure

- A. From the ground (Day 0)
 1. Observe mob of sheep in yards. When sheep have deposited sufficient faecal pats, let them out of the current yard.
 2. Choose faecal pats that are less than 10 minutes old.
 3. Open collection tray.
 4. Fill one well of the collection tray with plenty of faecal pellets from a selected faecal pat.
 5. Continue until all wells are filled (15 samples in total)
 6. Make sure you fill each well to the top to exclude air.
- B. From the rectum (Day 14 +/- 1 day)
 1. Run all animals from one treatment group into the race.
 2. Restrain each animal in a suitable way.
 3. Using a plastic glove, gently insert fingers into the rectum and take sample of faeces.
 4. Fill one well in the collection tray with a faecal sample from one animal.
 5. Make sure you fill each well to the top to exclude air.
 6. Clean glove by washing in a bucket of water OR use a separate glove for each sample. Glove must be changed between treatment groups.
 7. Repeat above procedure until 15 samples have been collected per treatment group.
 8. Once completed, repeat the procedure with each treatment group.
 9. **Ensure each tray is clearly marked** with a pen with the name of the treatment group.

Once a tray is full, carefully seal lid of tray (all cells plus outside) and place into the re-sealable plastic bag provided. All trays (*1 on Day 0, and however many treatment groups on Day 14*) are then to be placed into the cardboard box and into the provided envelope. Submit to the laboratory via Express Post, courier, or direct drop off to lab on the day of collection.

DO NOT refrigerate samples, do not leave in sunlight or heat as this will bias the results of the larval culture.