



# Investigation

...investigate anthelmintic resistance

## Is anthelmintic resistance present?

If a drench review test has indicated that there is a breakdown in drench performance, then further investigation is required to detect if anthelmintic resistance is present in the flock. Faecal egg count reduction tests (FECRT) with larval cultures will identify a resistance problem.

Investigation programmes should be customised for each farm and will depend on:

- Size of farming operation
- Result of drench review tests
- History of anthelmintic resistance on farm and in the area
- Current and historic drenching regimes
- Farmer engagement and budget
- Farming operation—ability to test multiple drench groups

Our team of pathologists and parasitologists are always available to advise on drench investigations, tailoring a testing approach to each farm situation.

### Ovine drench efficacy investigation tests available:

Pre-drench, post-drench and control\*

- Individual FEC
- Standard larval culture (*composition of parasite species only*)
- Quantitative larval culture (*composition of parasite species and total counts of all third-stage larvae recovered*)

\*A minimum of 10-15 individual FEC and a pooled standard or quantitative larval culture is recommended pre-drench, for the control group and also each anthelmintic group post-drench.



# Ovine parasitology toolbox

... target, review, investigate.



# Targeted drench

...parasite burden and identification

## Is drenching required?

Target drenching to when parasites are actually present in your flock.

Reduce the advancement of anthelmintic resistance by drenching only when required.

### Ovine targeted drench test package:

- 10x individual faecal egg counts (FEC)



# Drench review

...monitor drench effectiveness

## Is the current drench working?

Review drench effectiveness regularly. Regular checks will help reduce the advancement of drench resistance by identifying poor drench technique and highlighting potential emerging drench resistance early.

Post-drench parasite burden indicates a breakdown of drench performance, this can be due to:

- Incorrect drench selection
- Incorrect dosage rate
- Poor drench technique
- Emerging resistance

Ensure the current on-farm drench programme is effective at reducing parasite burden with a Drench Review.

### Ovine drench efficacy review packages:

#### OPTION 1:

- 10x pre-drench FEC and a pooled larval culture; 10x post-drench FEC and a pooled larval culture.

#### OPTION 2:

- Post-drench FEC and pooled larval culture.

*Note: Larval cultures can be standard or quantitative. Larval culture will detect parasites at a lower burden level than regular FEC, increasing the chance of detecting emerging anthelmintic resistance.*