

Worm Testing – FACTSHEET

The TFS Board have developed a project that is designed to help members proactively target worm activity on the Southern Tablelands. TFS sees this project as becoming an important management tool for members within their businesses. The main activity of the project is Worm Egg Count (WEC) testing with the results of the testing collated and analysed with feedback on results provided back to members. One of the aims of this project is to get non-testers to start testing with the increased number of tests leading to more meaningful feedback.

Worm egg counts are an accurate method of checking the worm status of a mob/group or individual animals. The test provides an indication of the type and size of worm burdens present. This allows the producer to choose whether a drench is required. Furthermore, it can assist in minimising the use of drenches when they are not required. The test determines the number of eggs in a sample of faeces and is expressed as 'eggs per gram' (EPG) of faeces.

TFS has joined with Dawbut's Animal Health to assist with the testing. Dawbut's focus is on providing parasitology diagnostic services, research for pharmaceutical companies both in Australia and overseas, training, production and biosecurity to businesses and producers and providing on farm advisory and consultancy. Dawbut's was established in 2009 to provide services to the livestock industry and is dedicated to supporting its customers and their animals to maximise animal production and welfare.

Dawbut's Animal Health Managing Director Matt Playford estimates that only around 15% of producers currently worm test (2020), so to encourage members to get testing TFS will provide an incentive for members to test through Dawbut's. This incentive entitles each TFS member to **\$310** (GST Inclusive) of testing.

Please note that even though the incentive is set up through Dawbut's, WEC test results from other Labs will be accepted if members are willing to send them to the TFS email and submit them into the project.

Dawbut's Individual Worm Egg Count

An individual WEC gives you 15 individual counts from each of the wells in the sample collection tray in the test kit. EPG are calculated for each of the 15 samples to show the highs, lows and distribution of eggs in a mob. This provides valuable information on existing (adult) worm burdens and paddock larval populations if samples were collected just prior to drenching, or for anthelmintic efficacy if faecal samples were collected 10-14 days post drenching.

Larval Differentiation

As eggs of the significant worm species appear very similar during worm egg counts, a larval culture is required to identify individual species. Determining the species present in your worm egg count can assist you in choosing the best drench.

For more information regarding the testing available through Dawbut's please visit their website.

How the Project Will Proceed:

1. TFS will purchase and store WEC test kits and members will get in contact with Tracy or Pip to request kits.
2. Members will collect required samples using the provided kits. Within the kit you will find a reply-paid express post satchel (includes a tracking number), collection tray and box (suitable for up to 15 samples), zip lock bag (to air seal the collection tray), glove and submission form.
3. Members will be responsible for getting the sample to the post office. Dawbutts have indicated that sending the samples earlier in the week is beneficial to getting the results returned faster as the weekend is avoided.
4. Once the test results are returned to TFS they will be entered in a spreadsheet and this data will provide the material to be analysed and feedback provided.

How will the results be handled upon return to TFS?

1. Results will be de-identified when entered in the spreadsheet.
2. Follow up tests completed post drenching will be identified so that worm burden results aren't skewed but are considered important to record in relation to the effectiveness of drenches.
3. The level of feedback provided will depend largely on the number of participants in the project, but the aim is to provide as much information as possible by location and by worm species. Larval cultures of results is considered important so that worm type is identified.
4. The spreadsheet (de-identified) will be provided to Dawbutts from time to time to enable them to provide detailed analysis of the results which will be communicated to members.

Invoicing

Dawbutts will invoice TFS for all testing carried out by TFS members unless members indicate otherwise on submission form. TFS will cover testing up to \$310 for each membership per financial year and once the incentive level is reached, we will then invoice members for any additional testing. We would encourage members to continue to test once they have used their full incentive as the more results we receive, the more meaningful the feedback.

Cattle Testing

This project is largely focused on sheep testing but if there are any cattle producers wanting to test and think that a cattle-based worm testing project would be beneficial to TFS members, please get in touch with Tracy or Pip. TFS members who are cattle producers are entitled to use the testing incentive.



General Instructions on how to collect for a Worm Test

1. Obtain a worm test kit from Tracy or Pip.
2. Decide when to collect the samples - If samples are to be posted or couriered, collect them in time to send earlier in the week so that samples are not held in the post over the weekend.
3. Collect dung from fresh piles.
 - Ideally, choose a time when the mob is camped or are grazing close together.
 - Approach the mob just close enough so they are alerted and they either stand or run only a short distance into a close group. Alternatively, muster sheep into a group or to a corner or fence line and hold them there.
 - After a few minutes (longer if the group is small or if they have been mustered), slowly approach the group so that they walk away (running sheep will scatter the dung piles).
 - Ensure the dung is fresh—it should be both moist and warm.
 - Choose dung with the least amount of dirt and debris attached and collect from a separate pile of dung for each tray compartment.
 - Very soft or runny dung can be collected with a plastic spoon into the trays.
 - If some piles are pellets and some are soft, collect a proportionate amount of both.
 - If lambs are still with their mothers, samples from the lambs must be collected and tested separately from the samples of their mothers.
 - Collect the number of samples per mob as recommended by the lab.
4. Complete the submission form ensuring that the option to send the results to the TFS email address is selected.
 - It is suggested that a larval culture is requested when the average worm egg count is 200 eggs per gram or above especially if barber's pole worm is a concern. Please note that cultures can be completed at lesser EPG.
5. Pack the samples
 - Exclude as much air as possible from samples.
 - Pack the samples as instructed on the kit.
 - Complete and enclose the submission form and seal the kit.
6. Submit the samples to the lab either via the satchel included in the kit or courier.
 - Keep samples in a cool place but not in the refrigerator, until they are delivered or collected for postage/couriering.
7. The Results
 - Worm egg count results will generally be sent back within 24 hours of the lab receiving the samples.
 - Larval culture results will generally be sent back within 7–10 days.
 - The results will indicate the average level of worm infection throughout the mob, expressed as the number of worm eggs per gram (epg) of dung.
 - The larval culture will identify the types of worms present and the proportion of each type.

