

DRENCH RESISTANCE TEST PROTOCOL

1. Conduct a faecal worm egg count on weaner sheep/cattle that are less than 12 months of age and preferably animals that have not been drenched before. The ideal time to test is around 1-2 weeks before weaning or at weaning itself. It is also OK to use animals that have had one drench at marking.
2. A worm egg count around 300 epg or higher is required before the resistance test can be conducted.
3. If a count of less than 300 is obtained, draft off 100 "tail enders" from the mob and run them as a separate management group. Re-test these sheep in 2 weeks time. The balance of the mob (minus the 100 you have drafted off) can be drenched at weaning.
4. When a count of 300 epg or higher is reached, Call Steve at Dynamic Ag who can arrange the setup of the trial or provide you with all the equipment to do it yourself.
5. If you want to set the trial up yourself:
 - a. A standard drench resistance test requires approx. 72 animals (5 drench groups + a control (no drench) group)
 - b. Run the 100 animals into the yards
 - c. Remove any visually larger, smaller or weak animals by drafting these off and remove these animals from the trial.
 - d. You will need a minimum of 72 animals for the trial. A more comprehensive trial including more drench groups can be set up and this will require a larger number of animals plus additional lab testing costs. See table over the page for other products that can be tested.
 - e. Out of the remaining 72 animals you have selected for the trial, pick 5-6 visually larger animals and weight them. Record the weight of the heaviest animal.
 - f. Set all drench guns to appropriate dose rate based on the heaviest liveweight animal as conducted in *step (e)*
 - g. Dose rates of products supplied by Dynamic Ag are as follows:
 - i. Duocare (BZ/Lev) – 1mL/5kg
 - ii. Rametin – Dose rates are written on drenching container supplied
 - iii. Triguard (Aba/BZ/Lev) – 1mL/5kg
 - iv. Ivomec (Ivo) – 1mL/4kg
 - v. Abamectin (Aba) – 1mL/4kg
 - h. Walk through the pen of animals before you load the drenching race to mix them up and ensure random animals enter the drench race
 - i. Fill up the drench race with animals (not too tight).
 - j. With the orange spray marker provided, randomly select 12 animals in the race and spray their heads with orange marker. Ensure you spray on the top-knot to ensure the paint will stay there for 2 weeks. Part the wool on the head and get the spray nozzle right down onto the skin surface and right through the wool fibres. The mark only needs to be the size of a 50c coin. These are your control sheep.

- k. Repeat step (i) above, this time spray another 12 random animals with the red paint and drench them with the corresponding drench as shown in the table. Ensure you drench them as soon as you spray them to avoid errors with mis-drenching.
- l. Repeat step (j) on the remaining sheep until you have used all the drenches and colour sprays as described in the table. Re-fill the race with more sheep as required and continue the process until all animals have a coloured mark on their head and have been drenched.
- m. Trial is now completed. Individual faecal samples from ALL animals needs to be collected in 10-14 days and submitted to Dynamic Ag for counting and culturing. Steve will be in contact to arrange a suitable date and time to complete the collection.
- n. In the interim, keep all trial animals as one mob and preferably in a paddock that is reasonably close to the yards so these can be drafted off into their colour groups for collection in 10-14 days time.
- o. After the worm egg counts and cultures are completed, you will receive a comprehensive report detailing the effectiveness of the drenches tested against the worms species identified on your property. You will also receive a detailed three-year drench plan and on-going support and assistance with routine worm egg count monitoring of your livestock.

GROUP	SPRAY on HEAD	Number in group
Control (<i>No Drench</i>)	ORANGE	12
BZ/LEV (<i>DuoCare</i>)	RED	12
Rametin/BZ/Lev (<i>DuoCare</i>)	Green	12
BZ/Lev & Abamectin (<i>Triguard</i>)	RED Blue	12
Ivermectin (<i>Ivomec</i>)	Purple	12
Abamectin (<i>Resolute</i>)	Blue	12

Other products that can be tested:

GROUP	Active ingredients
Startect	Derquantel + Abamectin
Zolvix	Monepantel
Napfix#	Napthalophos/Albendazole/Abamectin
Cydectin	Moxidectin

- Product not currently available for testing

For any further questions, please call Dynamic Ag on (03) 5571 1760