Drench Testing

It's that time again when drench companies roll out their Christmas giveaways to draw your eye to their products and pry those hard earned dollars from your wallet. The big question should not be whether or not you get a free ham with your drench but is this drench really right for my stock?

Now farmers are creatures of habit and if it has worked for them before it will sure as hell work for them again but in the case of drenches that may not always be the case.

Over the last few years we have been conducting Faecal Egg Count Reduction tests for farmers around the area who are interested in finding out the effectiveness of drench families on their properties. What we have found is, like most areas in NZ, we have resistance to at least one or more drench families on farms here in Taranaki. We have known for a while now that single active drenches containing just a white (Benzimidazoles/BZs) or clear

We have known for a while now that single active drenches containing just a white (Benzimidazoles/BZs) or clear (Levamisole) drench type is relatively ineffective with resistance as high as 85% recorded in NZ on samples sent to the lab in 2013.

The more worrying trend is the development of resistance to some combo drenches (especially BZ/levamisole combos) and the decline of effectiveness of Moxidectin on some farms. Moxidectin is present in products such as Eweguard, Exodus LA and Cydectin and is used as long term protection for ewes and also haemonchus control and would leave a large hole in the tools available to farmers if resistance was to develop further.

There has been a lot of work done into establishing some proper guidelines and practices for farmers to avoid drench resistance on their farm. Feeding animals well to lower the impact of worms, grazing crops to lower pasture contamination, leaving certain mature stock undrenched to maintain refugia and using an appropriate drench have all been advocated to help curb the trend towards resistance. The last one is where we can help.

Faecal Egg Count Reduction test (FECRT) is something we have been offering to farmers for a while now, we test up to 5 drenches on your property by collecting faecal samples at the start, drenching and marking as to which drench was used and collecting a follow up faecal sample to measure the eggs left 7 days later. We offer this service at a reduced cost of \$500 (which is 3x cheaper than other vet clinics around central north island) and the best time to do this is mid-summer when the worm counts are high. There are more 'streamline' options which are less involved and usually don't require a vet visit where the farmer collects faecal samples before and 7 days after drenching to see whether the drench used is effective. This is known as 'drench checking'.

If you are interested in booking a drench analysis for your farm or any follow up information regarding drench testing give us a ring at the clinic.



Breeding for Tolerance

A follow on to the facial eczema article printed elsewhere in this newsletter: One of the most practical methods of FE control in sheep is to genetically select for tolerance. Buying FE tolerant rams is an effective way to help reduce FE on your farm. It is important though to understand how this works to optimise the success of using FE tolerant genetics.

FE tolerance is a highly heritable trait, quantified at 0.42. This means that 42%

of a ram's offspring will carry his 'tolerant' genes. His offspring will also carry the ewe's genes, so any effect in the lambs will always be diluted by 50%, by the maternal genetics. So when first introducing an FE tolerant ram after one season, 42% of his lambs will have half his genetics. This demonstrates why it takes a number of years to lift the overall FE tolerance of the flock. This also reinforces the importance of knowing how long any ram breeder has been testing, and you should always ask your breeder this question. The Ramguard FE tolerance testing service is a list of SIL ram breeders selecting for FE. However there is a wide variety of sporedesmin dose rates used within the scheme and it is important to know what level the rams are being exposed to. Due to this confusion, the FEGold brand was formed. To join this brand, breeders must fulfil the following criteria:

- Testing with Sporidesmin at 0.60mg/kg
- At least 10 years of testing history
- 10% of sale rams tested for facial eczema tolerance
- All rams used are Ramguard tested

Whether your ram breeder belongs to Ramguard or FEGold you should be asking questions of him in regards to how long he has been testing and what selection and breeding processes he goes by.

The conclusion of this information is that no one single prevention or control method is sufficient. In years of overwhelming challenge, such as this last season, even highly tolerant animals can be overcome and in these circumstances giving a Zinc bolus to young or valuable stock is not a failure of the system and will not affect their FE tolerance. It will hopefully keep them alive and productive. Using spore counts on your farm is the best way to know what is going on, and gives you the best indication of when to treat. Although this year was exceptionally bad for FE, all indications are that FE is likely to become worse and more widespread in the face of global warming. For more information on facial eczema Beef and Lamb NZ have an indepth booklet outlining the disease from a drystock farm point of view and can be found on their webpage at

http://beeflambnz.com/Documents/Farm/Facing-up-to-facial-eczema.pdf





Fly Strike - Be Proactive

The adage that 'the best defence is a good offence' holds true when looking at your blowfly prevention programme. Fly strike is best approached from docking onwards using a proactive attitude - product choice and application play crucial roles. By getting in early with treatment you are mitigating any economic impact of waiting until active flystrike appears. Even a mild case of flystrike can lead to up to 5kg liveweight loss in as little as 6 days and can take over a month for an affected animal to recover this lost LW. This growth response and the reduction of fertility associated with flystrike is why it is said to cost the sheep industry millions of dollars each year.

Ideally, the prevention plan you put in place will take into consideration things like time until shearing, chemical class previously used for lice control and regional knowledge about seasonal weather forecasts/patterns and the relative blowfly challenge.

When it comes to chemicals insect growth regulators (IGRs) are the most common chemical family used for flystrike prevention, mainly due to their persistence. The two categories of IGRs are:

- *Triazine-pyrimidine derivatives* this category is sufficient for fly control only and actives include cyromazine (*Cyrazin*) and dicyclanil (*Clik*)
- **Benzoyl Phenyl Urea (BPU) compounds** suitable for fly & lice control which includes the actives diflubenzuron and triflumuron

The above chemicals are common choices for those proactively approaching the upcoming season; however, should there be a need to treat strike it is important to look for products that have two actives, one of the above for ongoing strike control and the secondary ensuring rapid knockdown of maggots. For example, $Cyrazin \otimes K.O$ which contains the IGR cyromazine in combination with ivermectin or Cyrex which combines cyromazine with spinosad. When assessing the comparative protection periods of different products (usually stated as "up to" X weeks) it is important to remember that the actual length of protection against fly strike will be determined by factors such as effectiveness of application, fly pressure, environment and other influences. To make sure this period is as long as promised by the manufacturer keep to the label instructions including dilution rate, application rate per animal (minimum 2lt per animal) and time off shears.

Top Tips

- Be proactive, act before there is a problem
- Follow the product label guidelines
- Use the correct equipment and product for the job
- Remember the most expensive flystrike product is the one not used properly so check dilution and application rates and if in doubt run a handful of animals through first then check them for full saturation through to skin level.



If you have any concerns or questions regarding your flystrike treatment please contact us to discuss your options.



Using Teaser Rams?

Although mating is a while away yet, here is some food for thought on the use of teaser rams.

A teaser ram is an entire ram that has been vasectomised. They are used during premating to encourage oestrus activity in ewes, and synchronise ovulation.

The main benefits of using teaser rams are synchronising ovulation (thus having a more

concentrated lambing), advancing lambing date, and improving lambing percentage.

Teasers are introduced to the ewes 17 days before the planned start of mating, (timing is very important here!) Rams (or teaser rams) produce a natural chemical (pheromone) that has a strong effect on ewes to start oestrus activity. The first cycle of the season in ewes is silent and has much poorer fertility, so getting this cycle out of the way with the teaser first, means that once the rams are joined 17 days later they will be ready for mating. This means a more predictable start to lambing, more lambs born early, earlier docking (and less shedding), and more lambs sold at weaning.

A study by Paul Kenyan through Massey University compared 2 groups of ewe hoggets, one exposed to the teaser ram for 17 days prior to mating, the other not. The mob exposed to the teaser had 30% more ewe hoggets mated in the first 17 days of mating, and a 6.6% higher pregnancy rate.

The best rams for teasers are 2 tooth Dorsets, though Romneys can be used as well. We can surgically prepare some of your rams, or you may be able to get them through a local breeder. Remember to have these rams tested for Brucella Ovis before buying or getting them made! After the surgery to make teasers, the rams will stay fertile for 6 weeks, so be sure to have these done at least 2 months before mating.

Get in touch if you would like to have a chat about teasers, or if you are thinking of getting some for mating season.