Responsible drenching of Goats

The NSW Department of Agriculture has produced an excellent article entitled Drenching Programs for Goats, as part of the ongoing agnote series. This article provides a stepwise guide for developing drenching programs for goats, and stresses the point that anthelminics (drenches) are only one part of what MUST be an integrated approach to worm control on any farm. Factors such as drench resistance, worm monitoring and grazing management are also discussed.

As a direct result of lack of registered goat anthelmintics (drenches), goat producers are being forced to use products registered for sheep and lambs. Many drugs which are registered for sheep have also been administered to goats by farmers, veterinarians or researchers. This is particularly so for most (if not all) of the active ingredients used in drenches. In many cases the ingredients may be safe in goats. However as outlined in the Drenching Programs for Goats agnote, use of any product not specifically registered for goats can only be done following approval from a veterinarian. Producers should be warned that the manufacturing companies take no responsibility with regard to losses caused directly or indirectly by the use of any product which is contrary to label directions, ('off label').

Many sheep farmers will also run goats on their properties, often with the assumption that the two species can be handled in the same way for procedures such as drenching. This is not the case!

Goats tend to become stressed more easily that sheep, particularly when feral goats which have had minimal handling, are involved. Where large numbers of sheep can be squeezed into a race and drenched down the line, goats will tend to become very stressed and rapidly suffocate each other when loaded into a race. To avoid unnecessary deaths when handling goats, no more than 10 goats should be run in a race at any one time, and two operators must be involved, one to administer the drench, and a second to monitor the other goats in the race to ensure they do not suffocate each other.

When drenching goats, a standard sheep-drenching gun is generally adequate, but it is essential to ensure the tip of the drench gun is placed over the tongue. Goats often struggle and will vocalise ('yell') more than a sheep in stressful situations (especially feral goats) which increases the risk of drenching liquid going down the trachea (windpipe) and in to the lungs, rather than down the oesophagus. This can often be fatal, especially if the goats have been near suffocated in the race. Where goats have become highly stressed just prior to drenching and are struggling and yelling, it would be much safer to allow them about 15 minutes to settle down in a race before attempting to drench them, rather than risk deaths.

By following the procedures outlined in the Drenching Programs for Goats agnote, and the additional guidelines provided here, goat procedures will be well on the way to establishing a safe and effective worm-control strategy on their farm.

Goat breeders will be pleased to know that Virbac Animal Health currently market a range of registered goat products.
These include:
Alben for the control of Benzimidazole sensitive mature and immature Roundworms, Tapeworms and Lungworms
Flukare S for the treatment of all stages of Liver Fluke.
More information can be obtained from Virbac Animal Health on 02 9533 2000.

Drenching programs for Goats

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Worms are and expensive drain on both your goats and your finances. A goat with worms is not a productive goat. Weight loss, sours and death can occur in affected animals. Prevent this loss by a good parasite control program.

An effective program should lead to:

Healthier goats
Less worms on pasture to pass to other goats and livestock
Less drenches needed each year
Drenches remain effective longer

A good program will involve grazing management combined with a minimum number of drenches.

Drenching programs will vary between districts and between different properties within a district. Ensure your program is effective for your property. In NSW seek specialist advice from the local District Veterinarian at the Rural Lands Protection Board, or your private veterinarian, on what drenching program is suitable for your flock and district.

Choosing the right drench

There are many drenches on the market. Not all drenches are registered for use in goats. Those that are not registered can only be used under veterinary supervision. Your veterinarian will prescribe does rates, withholding periods for meat and milk and determine how frequently the drench can be used. There are not drenches currently registered for use in lactating dairy goats.

Effective drenching

Use the correct dose.
Avoid under-dosing any goat in your herd.
Check the correct dose rate with your veterinarian.
Do not guess the weight of a goat if uncertain. Goats with heavy fleeces can be difficult to estimate (Use scales or a weight band – see Agfacts A7.1.5: Goat production: the role of liveweight scales, and A7.2.4: Dairy goats – calculating weight).

In flocks with mixed sexes and ages, draft goats into different groups by size.

Drenching programs for goats

Calculate the dose volume according to the heaviest goat in each group.
Give drench effectively.
Check the accuracy of the drench gun. Use a known volume of drench to check if the gun will give the correct dose. Carry out repeated squirts into a measuring container.
Repeat to make certain of accuracy.
Remove goats from feed from 12 hours before drenching.
Ensure they have access to water.
Place the drench gun over the back of the tongue before the drench is administered. If the drench is placed in the mouth, all or part of the drench can be spat out.
When giving two drenches, give the drenches separately, unless your veterinarian says they may be combined as a single dose.
After drenching keep the goats off feed for a further four hours but with access to water, then resume their normal feeding.
Drench all goats on the same day.
Feed goats correctly.

Growing animals, especially young goats resist worm infection better. Poorly fed or malnourished goats will succumb to low worm burdens on pasture.

Use effective drenches

Not all drenches remain effective. The reduction in effectiveness cannot be predicted – you must test for this on your farm.

Test for drench resistance. This is called a faecal egg count reduction test. It is a test that can be conducted on your own goats to determine if a drench is working. Many drenches may not work – especially white and clear drenches. This is due to the development of resistance to the anthelmintic by the worms. When testing the drench you want to use, select 10 goats of similar age and size. Collect fresh faecal samples from each goat using a WORMTEST kit. Contact your nearest Regional veterinary Laboratory, RLPB, veterinarian or drench reseller for these kits.

It is important that the selected goats have not been treated with an anthelmintic within the last six weeks. Fill out the details on the kit and send it to the laboratory to carry out worm egg counts in the faeces.

After sampling, the goats should be treated with the drench you wish to test. The dose should be either that recommended on the label for goats or else after consultation with your veterinarian.

Estimate the weight of the goat by using a girth band or by using scales.

Ten to fourteen days after treatment again sample the same goats using a WORMTEST kit. Send to the samples to the laboratory as before.

The laboratory will calculate the reduction in egg counts as a result of the treatment. An effective drench should remove all or most of the worms producing the eggs.

DRENCHRITE is another test which can be used to determine if a drench is effective for your herd. Your veterinarian can give you advice on the right test to use.

Regular monitoring.

Regular monitoring of your flock with WORMTEST will tell you how well worm control is proceeding. It should be performed every 1-2 months.

Type of worm eggs in faeces can be identified and counted. Regular checks of the number of worm eggs in at least 10 goats will indicate the need for drenching. It shows how your worm control program is progressing.

Grazing Management

Worm burdens on pasture at critical times during the year can be reduced if drenching is combined with grazing management. A “worm-safe” pasture will result, with low numbers of worm larvae.

Without “worm-safe” pastures, drenching programs will fail. Newly drenched goats will immediately pick up worm larvae from a contaminated pasture. In a few weeks, these goats will be showing signs of worms and will require another drenching. Too frequent drenching can lead to anthelmintic resistance and less effective drenches.

Grazing management can involve:

Paddock rotation with spelled paddocks and pastures which have not been grazed by goats or sheep since the previous summer – for example cropping paddocks.

The use of other livestock such as cattle or drenched adult goats as “vacuum cleaners”.

Allowing goats to browse rather than graze by providing browsing species of vegetation.

Grazing pastures with at least 10cm growth helps reduce the uptake of worm larvae.

Drenching programs can fail if properties are heavily stocked or if there are too many goats on inadequate pasture. The chance of goats picking up worm larvae increases in these conditions. Aid worm control by reducing stocking rates or – especially in dairy goat herds – housing the goats on slatted floors.

When to drench

In most areas of NSW the timing for drenching will be similar to that recommended for the sheep.

Wormkill or DrenchPlan programs
Riverina and South West NSW – DrenchPlan
South West Slopes and Southern and Central Tablelands- DrenchPlan
Northern Tablelands – WORMKILL
Coastal areas and Hunter Valley – Worm-a-Goat

There may be similar programs in other states. However these programs may need to be modified for goat herds. Always consult your veterinarian for help when setting up your program.

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