# Goatvetoz Winter Newsletter

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# Black scour worms

Autumn, winter and spring in Australia is the time that we see black scour worms or *Trichostrogylus* spp. worms causing problems in goats. *Trichostrongylus colubriformis* is the species seen mainly in Queensland and NSW and *Trichostrongylus vitrinus* in southern states or those with a Mediterranean climate.

Unlike barbers pole worms (*Haemonchus contortus*) these worms only sometimes cause severe anaemia so the eye mucous membranes can remain pink. They do cause scouring or diarrhoea. Before this happens these worms can cause clumping of the faeces (often with mucous) so that the pellets can be stuck together. So if you see clumping then get a worm egg count and larval culture done.

Also unlike barbers pole worms you can't see these worms as they are so tiny. These scour worms live in the first part of the small intestine and scientists that research these worms have to put the gut contents through special sieves to find them.

While in the small intestines they prevent the villi (small protrusions pointing up from the gut wall) to stop regenerating. These villi are essential for absorbing nutrients so the clinical signs include poor weight gains and losing condition. There can also be bleeding from tiny blood vessels in the small intestine wall and this can lead to anaemia, although not as bad as the anaemia from barbers pole worms. In high numbers they cause diarrhoea and scouring (hence their common name of black scour worms). Research in lambs also showed it reduced bone density.

Their life cycle is longer than barbers pole worms (21 days compared to 17 days) and they require a temperature above 12 C and moisture (dew or rain) to complete it. They lay fewer eggs than barbers pole worms i.e. 100-200 compared to around 10,000 per female barbers pole worm. Therefore a worm egg count of 1000 eggs per gram means around Winter 2025

16,000 black scour worms are in the gut. This means if a southern state farm doesn't have barbers pole worms then drenching is needed at only 200 eggs per gram.

Trichostrongylus axei is a different worm and lives mainly in the 4<sup>th</sup> stomach. These worms can survive cold and dry condition and the larvae can live on pastures for up to 6 months. While mainly a problem of sheep & goats, it can affect cattle (although only calves show signs) and even horses.

One of the finding in herds being fed Bioworma is that the % of barbers pole worms drops dramatically after a year or two and the % of *Trichostrongylus* worms increases often to 100%. However signs of scouring in these herds on Bioworma are rare i.e. no scouring (diarrhoea) or clumped faecal pellets.

### Goitre

Goitre (swelling of the thyroid glands in the neck) can have 4 causes in goats:

1. Not enough iodine in the diet of pregnant does in

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some areas like the tableland of NSW or Tasmania, especially in wet years.

2. Goitrogenic pastures e.g. brassicas, kale, turnips etc or some clovers

3. Too much iodine in the diet causes goitre in foals

4. genetics (mainly South African Angoras)

Treatment needs to be via your veterinarian as it is "off label" so please pass on this information below:

- One of the many sheep drenches that also contain iodine and other minerals. Care must be taken as to the other minerals added and that goats will need more of the worm drench due to the rapid metabolism of the worm drench.
- drench pregnant does with this mixture- mix 20 grams potassium iodide with 1 litre of water and dose at the rate of 10ml per 20kg live weight and give at least 2 months before kidding and repeat 2 weeks before kidding. Source = " Goitre common throughout New Zealand" Thompson, K (1988) page 5 Goat Health & Production Vol 2 No 2 page 5

Iodised oil injections
("Lipiodol") was mentioned
as being available in New
Zealand by the K Thompson
article but not mentioned on

the APVMA website as being available in Australia. However there is an active ingredient approved but no commercial products apart from Hills dog and cat diets :

OR

 Dissolve 10 mg of potassium iodide in 1 litre of water and give ewes 28ml OR 10 mg of potassium iodate in 1L and give ewes 36ml as a drench. Source= "Goitre in newborn lambs" J W Plant

I would not use a multimineral injection in goats. I would also remove Himalayan salt licks as it is the salt that attracts goats to use the balanced mineral licks or loose minerals.

Treatment for affected kids to try although unlikely to be successful. Treat with dog thyroid tablets or 50 micrograms thyroxine given intramuscularly or 20 micrograms given intravenously. Alternatively you can drench with 20 mg potassium iodide.

## Do you use X, Threads or Tumbler?

See all my tweets at https://x.com/goatvet If you have decided to leave Twitter/X you can follow me on Bluesky, Tumblr, Youtube or Threads as goatvetoz.

#### Tannins

Tannins are found in the bark and leaves of trees and in woody plants. Plants evolved to try and deter herbivores from eating them (obviously didn't work for goats). Tannins are thought to have some effect on worms. Researchers looked at feeding the leaves of these trees to goats then dosed them with Haemonchus & Trichostrongylus larvae.: Acacia salicina, Acacia nilotica, Eucalyptus corymbia, Casuarina cunninghamiana and Eucalyptus drepanophylla.

They found that the worm egg counts dropped for goats fed the leaves of the first 3 tree but not the others. Worm counts on post mortems though were the same for all trees. See

https://eprints.jcu.edu.au/2 2991/

So feeding leaves to goats can help but won't kill worms.

A better option is to have goats grazing as they evolved in the middle east, i.e. mainly on shrubs and over very large areas.

