



Manage worms to improve wool yield and quality

- Worms reduce wool growth and quality
- Worms limit feed intake and divert nutrients away from wool
- Manage worms to prevent wool loss due to worms

Worms and wool quality

With continued strong wool prices, many producers are paying greater attention to increasing wool yields and quality. While genetics and well-managed nutrition are the main drivers of a quality wool bale, it is important to ensure that gastrointestinal worms do not unthread the quality or potential yield. Depending on the level of control, worm infections over the year can:

- Reduce wool cut by over 1 kg per sheep;
- Reduce fibre diameter;
- Increase the number of tender fleeces, and;
- Reduce staple length¹.

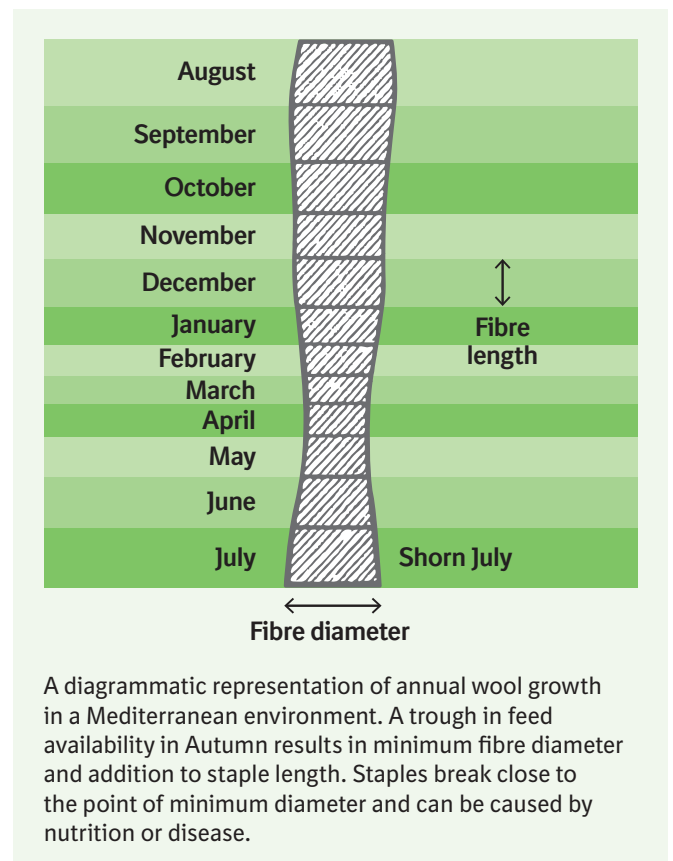
How worms affect wool

Parasitised sheep have their wool growth affected in two main ways.

First, parasitised sheep have reduced feed intake. It is well documented that limiting nutrition in sheep reduces fibre diameter and staple strength. We can often see the effects of nutrition caused by the season or lambing

on wool production. Unfortunately, a significant worm burden can also reduce feed intake by 10 to 30% and accounts for the majority of production loss we see².

Second, the nutrients the sheep does consume are allocated differently within a parasitised sheep. To produce wool, sheep need to allocate protein, particularly sulphur amino acids, to this purpose. In parasitised sheep, the immune system also requires increased amounts of sulphur amino acids.



These components of protein are now for a better description, in competition. Unfortunately, the immune system is prioritised and wool production is reduced. Both the black scour worm and brown scour worm have been shown to limit sulphur amino acids available to wool production. This limitation reduces staple growth, strength and diameter, and wool value.

Unfortunately, drenching sheep suffering from parasitism doesn't allow an immediate recovery and return to optimal wool production. When sheep are drenched, their liveweight gain can recover quickly. However, the effect of worms on wool growth can be prolonged. In one study, sheep were infected for nine weeks and then treated. Greasy wool growth during infection was reduced by 19% and in the three weeks after treatment was reduced by an average of 31% compared to uninfected sheep, highlighting the prolonged depression in wool growth following treatment for a worm infection².

Managing worms for wool yield

Now that wool prices appear to be sustaining a fair reward in the market, it might be time to rethink how you control worms to ensure wool growth and quality. Below are some key activities that can be done to help manage worms and optimise wool growth.

Worm control in young sheep must be prioritised. Young sheep are most at risk of having reduced wool growth due to significant reductions in feed intake as they acquire immunity to worms. Extender Junior Capsules are a great way to get young Merino sheep up

and running. Providing 100 days' continuous protection from worms, they also prevent pasture contamination of worms susceptible to benzimidazole type drenches.

In ewes, it is important to maintain wool growth pre-lambing and during lactation when the physiological demands of supporting reproduction compete for precious nutrients with wool growth. During this period, ewes are more susceptible to worms and their effects. Unchecked infections in ewes also contribute to a greater risk of worm infection in young stock and their production potential. Dynamax Capsules remain an effective way of managing this key risk period of ewes from worm infection.

Throughout the year in all classes of stock, regular worm egg counts are an important monitoring tool. Using an effective drench when required will help limit suppression of wool growth. Also, ensuring good levels of nutrition reduces the effect of worms on wool production, particularly if the competition for sulphur amino acids is reduced.



Dynamax®, Extender® SeCo and Extender Junior® Controlled Release Capsules

- 100 day broad spectrum control against susceptible worms
- 100 day continuous prevention of pasture contamination from nematode eggs of susceptible parasites
- Providing peace of mind and saving you time and labour

For further information, please visit your local rural store, contact your local Boehringer Ingelheim Territory Manager, or call our Customer Care team on 1800 808 691.

References: 1. Lipson, M., et al. (1976) Some effects of various parasite populations in sheep on the processing performance of wool. *Wool Technology and Sheep Breeding*, 23, 18-20. 2. Kelly, G.A., et al. (2012) No loss of production due to larval challenge in sheep given continuous anthelmintic treatment via a controlled release capsule. *Veterinary Parasitology*, 183, 274-283.

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