

Quarantine drenching – don't import resistant sheep worms

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Drench resistance in sheep worms is a major challenge for sheep producers in Australia and overseas.

There are two ways of getting drench-resistant worms onto your farm:

- breed your own, or
- import someone else's resistant worms.

This Primefact briefly addresses the second way.

Drench resistance in sheep worms in Australia is commonplace. The table below provides a thumbnail sketch of the current situation with particular reference to NSW.

In short, if you are buying sheep (or goats), there is a good chance you are importing resistant worms. These worms may be different from the strains your stock already have. To avoid importing resistant strains, a 'quarantine drench' strategy is essential.

- Treat sheep with any highly effective combination of three, preferably four, unrelated drenches, e.g. BZ + LEV + ML + other. For more information, contact your adviser. If ML resistance is suspected on the property from which the sheep were purchased, this is an additional reason to include naphthalophos (NAP) as one of the drench actives – along with BZ + LEV + ML – in the quarantine treatment.
- For the quarantine treatment, moxidectin may be the ML of choice given its higher potency.
- There are products on the market that make quarantine drenching easy. These include ready-

Table 1. Approx. % of Australian sheep farms with resistance¹

Drench or drench group	Barber's pole worm (<i>Haemonchus</i>)	'Scour' worms (<i>Trichostrongylus</i> and <i>Teladorsagia</i> (<i>Ostertagia</i>))
Benzimidazole (BZ, 'white')	>90%	90%
Levamisole (LEV, 'clear')	Up to 20%, and rising	80%
BZ/LEV combination	Similar to LEV	40-80% (varies by state)
Macrocyclic lactones (MLs, '-ectins') ²	70% (northern NSW)	0 – 70% (approx. 70 % of WA farms) (<i>Ostertagia</i>)
Naphthalophos	Rare	(variable efficacy; resistance rare)
Closantel (Active against barber's pole worm and liver fluke only)	80% (northern NSW, Qld) (Small number of cases of resistant liver fluke in Australia).	n/a (No efficacy).
Triclabendazole (Active against liver fluke only)	(Small number of cases of resistant liver fluke in Australia).	

¹Drench efficacy < 95%. ²MLs vary in potency. For more information, contact your adviser.

Sources: various, including NSW and Qld DPIs, WA Dept Agriculture (RB Besier and R Woodgate, pers comm), Veterinary Health Research, and JC Boray (pers comm).



made combinations of drenches and also drenches that can be mixed with other drenches, but follow the directions on the label.

- Consider whether you need to treat for liver fluke as well.
- Hold sheep for at least 24 hours after treatment – with access to water – before release onto contaminated pasture.

Most eggs, if not all, should pass out of the gastrointestinal tract in 24 hours.

Why contaminated pasture? This is to cover the worst-case situation where some resistant worms survive the quarantine treatment. The progeny from these surviving worms will be 'diluted' by 'home-bred' worms already present in numbers on the pasture.

- Ensure access to feed as well as water if NAP is used.
- If sheep are being imported onto a very clean area or farm – for example, destocked for a long period (several months or more) – then they should be withheld from pasture for 48 to 72 hours to make doubly sure that all worm eggs have passed through the gastrointestinal tract.

In consultation with your adviser, you may also wish to hold imported sheep in a small paddock until a faecal egg count 10 – 14 days after treatment confirms the success of the quarantine strategy.

For information on other health issues, see Primefact 464 *Buying sheep can be a health hazard*.

These are general recommendations only. For further information, consult your veterinarian or other professional adviser.

Publications available

For a complete list of NSW DPI Primefacts and Farm Enterprise Budgets on the Web, see the Web site: www.dpi.nsw.gov.au/primefacts.

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ISSN 1832-6668

Replaces Agnote DAI-257

Check for updates of this Primefact at:
www.dpi.nsw.gov.au/primefacts

Disclaimer: The information contained in this publication is based on knowledge and understanding at the time of writing (February 2007). However, because of advances in knowledge, users are reminded of the need to ensure that information upon which they rely is up to date and to check currency of the information with the appropriate officer of New South Wales Department of Primary Industries or the user's independent adviser.

Always read the label

Users of agricultural chemical products must always read the label and strictly comply with directions on the label. Users are not absolved from compliance with the directions on the label by reason of any statement made, or not made, in this publication.

Job number 7385