

Director, Chemical Review  
Australian Pesticides and Veterinary Medicines Authority  
PO Box 6182  
Kingston ACT 2604

Via email: [chemicalreview@apvma.gov.au](mailto:chemicalreview@apvma.gov.au)

29 June 2015

Dear Director, Chemical Review

**Re: Levamisole as a Priority Four on the Priority Candidate Review List (PCRL).**

Thank you for the opportunity to provide feedback on the issue of Levamisole's registration status and review.

WoolProducers Australia is the peak industry body for Australian wool growers, advocating for them, and a unified wool industry, in policy decisions at a national level. WoolProducers Australia is a representative, democratic organisation that is driven by grower feedback. Feedback was sought through State Farming Organisation members, three independently elected Directors, and an extended Animal Health and Welfare Board Committee that has the role of oversight on Health and Welfare levies for the sheep industry jointly with Sheepmeat Council of Australia.

This letter outlines the importance of Levamisole to sheep graziers and their serious concerns that registration for the use of Levamisole may be revoked when it is a very important part of their responsibilities as stewards for sheep health and welfare.

It should be highlighted that WoolProducers Australia received a higher than average response rate from growers on the issue of the review of Levamisole, emphasising the importance of this anthelmintic to industry – the tone of the responses we received was adamant that Levamisole remain available. We received emails, letters and phone calls from all sheep grazing states including Tasmania, New South Wales, Victoria, South Australia, Queensland and Western Australia.

Industry research bodies SheepCRC, Australian Wool Innovation, Meat and Livestock Australia have funded, developed and maintain tools (found at [wormboss.com.au](http://wormboss.com.au)) to enable growers to conduct a strategic approach to identification and management, and to minimise drench resistance. These resources are actively promoted by industry and are widely accepted as important tools as drench resistance is a major issue for industry.

Further to this, many farmers undertake mob drench resistance tests to determine the correct family of drench to use and confirm a high level of efficacy.

WPA supports growers monitoring faecal egg counts and most worm control programs advocate regular monitoring of worm egg counts before drenching to see if the burden is high enough to indicate that a drench is necessary. Egg counts identify which species are present and this assists in the correct selection of treatment.

Some discreet regions of Australia have noted reduced efficacy of Levamisole due to resistance. However, the reduced efficacy in some regions should not result in a blanket loss of Levamisole for all areas of Australia who, in significant numbers, are still able to use the product with high levels of efficacy.

Levamisole is rotated or used in combination with other drenches for sound results. Growers indicated they may 'rest' from using Levamisole for several seasons and come back to it in a rotation program to reduce the effects of resistance.

Drench practice varies according to the management of individual enterprises and also differs region to region. As an example of how some farmers use Levamisole, some enterprises will use it between other drenches, particularly in seasons like this last summer (in southern NSW), for quick action against Barber's Pole.

Levamisole is used with a very high success rate in Western Australia against Barber's Pole, as the parasite's resistance to the drench is extremely low.

The newly released Barbers Pole vaccination which is happily received by industry should not be viewed as an alternative to Levamisole. The vaccination is a welcome complement to the treatment and prevention of Barbers Pole. Each enterprise should be enabled to make that management decision according to their needs and practice.

Additionally, Levamisole is viewed as a hugely important drench for nematodirus. Nematodirus worms cause significant production loss in young animals. The use of Levamisole in weaners is an effective tool in worm management and delays the use of more expensive, newer-generation drenches. Anecdotally it is noted that grown sheep have a more developed immune system that is more resistant to nematodirus, as compared to nematodirus-infected weaners who once infected will soon begin scouring, cease weight gain and some will die if treatment is not carried out in a timely manner. Several growers reported they were of the understanding that there are no recorded cases of nematodirus species showing resistance to Levamisole as yet.

Currently, the trend is for industry advisors to suggest 'trail feeding' which increases the potential exposure to nematodirus. With the broad use of trail feeding, nematodirus will become a common issue and Levamisole will be an increasingly important means to address the issue.

Some regions reported that according to climatic conditions and timing of drenching, using Levamisole has the advantage of cheaply controlling nematodirus species and also avoiding extra exposure of the other classes of drench to the worm species that do not need control at that time of the year.

Concerns were made clear that if Levamisole had its registration revoked, the impost of having to move weaners to a newer generation drench, (at a higher cost) would result in an acceleration of resistance as compared to using Levamisole earlier in life.

Levamisole has a short with-holding period and export slaughter interval for growers whose businesses involve prime lambs.

Growers reported they liked being able to choose between a drench and an injection to guard against parasites.

Finally, despite the anecdotally noted resistance to Levamisole in other species such as Trichostrongylus, Ostertagia and Haemonchus when applied as a single drench, it still contributes significantly to effective winter worm control and to the deferral of build-up of drench resistance when included as part of a multi-drench mixture.

From our feedback, Levamisole is viewed as a cost effective broad spectrum drench and a valuable part of the 'tool box' to treat parasites on-farm.

It became clear during the gathering of feedback from growers that depending on region and production system, many growers had sophisticated programs and approaches to worm and drench management. Removing the availability of Levamisole as a registered product would inhibit grower's abilities to successfully manage the health and welfare of the flock. WPA strongly recommends that Levamisole be maintained as it is currently registered by the APVMA for use as a broad spectrum anthelmintic.

Thank you again for the opportunity to have the opinions and expertise of Australian growers heard on this matter.

Please feel free to contact me if further information is required.

Kind regards

Genevieve Morrow  
Policy Manager – Health and Welfare  
WoolProducers Australia

# WOOLPRODUCERS AUSTRALIA

WoolProducers Australia  
Locked Bag 9, Kingston ACT 2604  
NFF House, 14-16 Brisbane Avenue, Barton ACT 2600  
E [jhall@woolproducers.com.au](mailto:jhall@woolproducers.com.au)  
[www.woolproducers.com.au](http://www.woolproducers.com.au)  
A Member of the National Farmers Federation