CRC FOR SHEEP INDUSTRY INNOVATION

NEWS RELEASE

SHEEP CRC

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Worm control options costed

New research has found producer costs for drenching and sheep worm control have been previously underestimated, prompting a call to overhaul management practices.

A three-year Sheep CRC-funded project carried out by Postgraduate researcher Gareth Kelly estimated that worms on farms with typical poor worm control practices in summer rainfall areas were costing farmers $11 per breeding ewe based on 2010 valuations.

This was almost double the cost of $5.80/head on farms using good integrated pest management (IPM) strategies.

Mr Kelly said the estimated cost of worms on typical farms was much higher than previously estimated and reflected greater loss of production costs from higher meat, wool and replacement ewe prices in recent years compared to relatively unchanged sheep worm treatment costs of about $1.25/head.

His project also highlighted that 40 per cent of drenches used in high rainfall areas were ineffective.

Mr Kelly said some drenching programs were a vortex of wasted drenches, money, time and labour, did not control sheep intestinal worms and led to greater worm resistance to drenches.

His investigation into the cost of worms to Merino enterprises in NSW's New England region involved two years of field trials comparing 'typical', 'IPM' and 'worm free' worm control treatments, followed by economic modelling and validation.

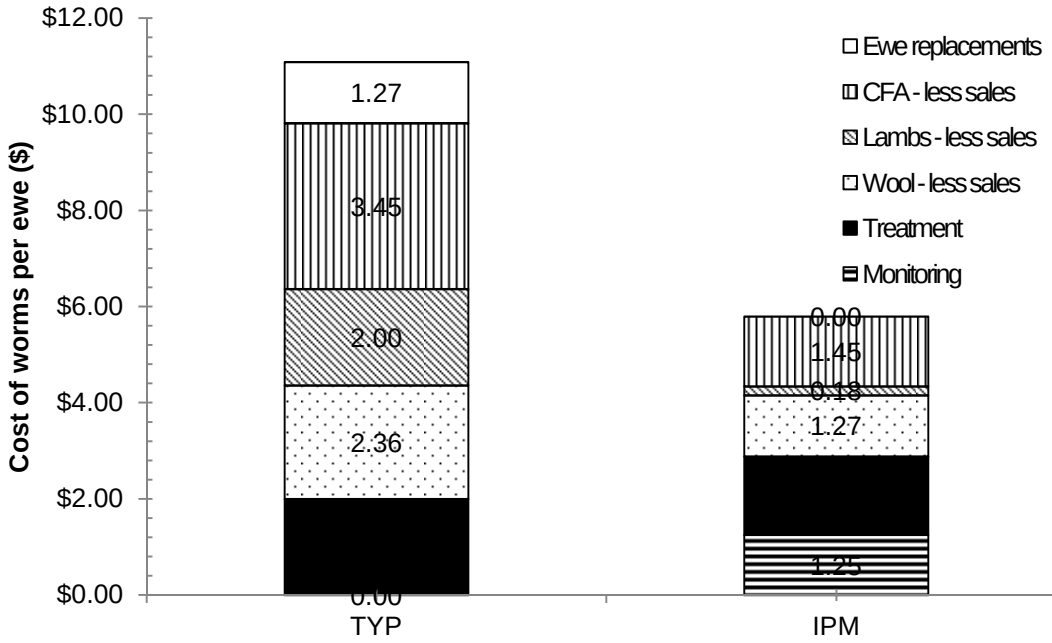

FIGURE: The cost of treatment and lost production due to worms based on measurements on farms using typical (TYP) or integrated (IPM) worm control practices modelled using average 2010 prices. Total cost of worms is the sum of treatment, monitoring costs, reduced sales of cast for age stock (CFA), wool and lambs.

The CRC for Sheep Industry Innovation is co-funded under the Commonwealth Government's Cooperative Research Centres Program

In the 'typically managed' sheep flocks, there was no drench resistance testing or faecal worm egg count monitoring and flocks were not managed to reduce pasture contamination, which directly translates into production losses and mortalities.

Mr Kelly said an integrated pest management, or IPM, approach was the most economical solution to controlling sheep worms and he hoped his research would drive a wider use of better practices in high rainfall areas.

"Integrated control measures centre on prevention, detection and treatment of worm infections and lead to less use of anthelmintic treatments, fewer animal mortalities and higher wool and meat production," he said.

Mr Kelly said the main preventative measure was to prepare spring lambing paddocks by reducing worm burdens, either by keeping sheep off these paddocks or grazing them with cattle during autumn.

He said frequent worm egg count monitoring during the year indicated the extent of worm burdens and allowed farmers to treat at specific thresholds. This detection strategy also helped to prevent further infections by keeping worm numbers low.

Mr Kelly said it is important to use effective chemical treatments, undertake drench testing and rotate chemicals. "Even though this IPM strategy means a farmer might spend some more on detection, the research shows this is likely to be just up to a maximum of $1.25/head," he said.

"This small investment not only pays for itself by reducing drench and stock replacement costs, but has a 4-fold return through increased sale quantities of meat and wool."

Mr Kelly said the time was right for farmers to adopt IPM measures to maximise the longevity and effectiveness of the recently released new drench chemical -monepantel.

"This is a new class of anthelminic available to industry; alongside practice changes to monitor worm burdens and drench resistance status, and adopt new grazing strategies, farmers will be able to make the most of it for years to come," he said.

"We can't quantify how many producers are still using 'typical' worm control measures, but we do know there is room for huge improvement.

"Adopting IPM will clearly generate higher profits, improve animal welfare, cut mortality rates and slow down worm resistance to drenches – a win-win."

The research component of Mr Kelly's Postdoctoral tenure has now concluded and the Sheep CRC plans to extend his research information to farmers across Australia.