TIMERITE®: it's now available for everyone

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Redlegged earth mite (RLEM) has been a major pest of pastures in southern Australia since its introduction from South Africa in 1927. However, since the release of TIMERITE® in 1999, thousands of farmers have had a new weapon to fight the scourge of this mite and reap the benefits.

TIMERITE® is an information package that was developed by CSIRO and Australian Wool Innovation Ltd to predict the date of onset of diapause and, hence, the optimal time to control RLEM in pastures with a single spray in spring.

RLEMs are active in pastures for about 6 months during the cold, wet months of the year; diapause eggs are produced in spring while the mites are still active. These protected eggs survive the hot, dry summer inside the cadavers of the adult female mites on the soil surface. Insecticides do not kill RLEM eggs, so a single spray in spring after the mites have stopped laying winter eggs on pasture and just before the diapause eggs are produced is recommended. Controlling mites in this period prevents the production of oversummering eggs and thus the emergence of mites the following autumn.

Since its release in 1999, the TIMERITE® package has been well received and implemented by farmers across the southern agricultural region, and the prediction model has proved to be exceptionally robust. Farmers who are using TIMERITE® have reported profits of up to $55/ha in sprayed paddocks. Until now, the package has only been available to farmers in the winter-dominant rainfall regions of southern Australia where RLEM is distributed.

In the last 3 years, the emphasis of the CSIRO team has been to predict the date for the eastern limit of the mite distribution in New South Wales, Victoria, and Tasmania where we have had difficulty calculating some parameters of the model due to summer rainfall. Testing of the prediction has now been carried out at 31 sites in these areas; and as a result of these trials, we can now provide optimal spray dates for all regions of Australia where RLEMs are present.

At most of the trial sites (77%), the actual date of 90% diapause was within 7 days of the predicted date. At the remainder of the sites, the actual date of 90% diapause was always later than the predicted date (range 8 to 29 days). Mite control in autumn (measured as the difference in numbers between sprayed and unsprayed areas) 8 months after a single spring spray was over 90% at the majority of sites. There was no evidence that control was lower when the date of diapause was later than predicted. In separate trials, it has been shown that, if spraying is carried out earlier than the optimal spray date, farmers still achieve effective control of RLEM provided a systemic, residual insecticide is used. Spraying late always resulted in poor control the following autumn.

These results show that spring spray dates can now be provided for all areas where RLEMs are present, resulting in effective mite control the following autumn. If you had trouble getting a date for your area before, try again.

Over the next 12 months, a final package incorporating information accumulated for all RLEM areas will be developed and launched at field days in South Australia, New South Wales, Victoria, and Tasmania. In the mean time, the TIMERITE® spray date specific to your property along with the information package can be obtained from the Kondinin Group by phoning 1800 63 0011.

Acknowledgment

The author acknowledges Australian Wool Innovation Limited and the many farmers who participated in field trials to produce the data for the package.