

Lice Pen Studies with Tison Attack

Dr Sean Daly BVSc - Inovata Veterinary Specialist

Inovata®

In preparation for an application for a Lice claim, pen and field studies were carried out to demonstrate the efficacy of Tison Attack against lice in merino and crossbred sheep.

Waipawa Crossbred Pen Study

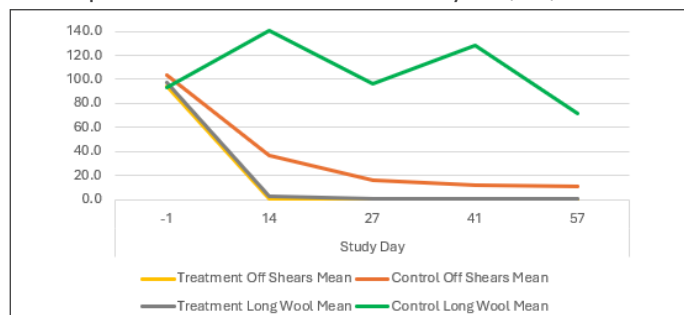
- 8 Crossbred sheep per treatment group
- Treatment and Control Groups for both long wool and off shears sheep
- Wool length mean 9.6cm prior to shearing/treatment
- Clinically significant natural lice infestation.

Lice counts over time:

	Wool Length	Treatment	n
Group 1	Off Shears	Tison Attack	8
Group 2	Off Shears	Control	8
Group 3	Long Wool	Tison Attack	8
Group 4	Long Wool	Control	8

The off-shears group were roughly shorn and treated immediately after shearing with one strip down the back line. The long wool group was treated with two spots 10cm apart in the middle of the back. All animals were treated to individual animal body weight.

Subsequent lice counts occurred on days 14, 27, 41 and 57.



Lice counts over time:

		Study Day				
Group	Treatment	-1	14	27	41	57
1	Off Shears Tison Attack	94.3	0.3	0	0	0
2	Off Shears Control	103.8	36.5	16.0	12.4	10.6
3	Long Wool Tison Attack	97.8	3.1	0.8	0.8	0.3
4	Long Wool Control	93.1	140.3	95.9	127.9	71.9

The lice counts over time also showed the impact of shearing for removing lice from the animal.

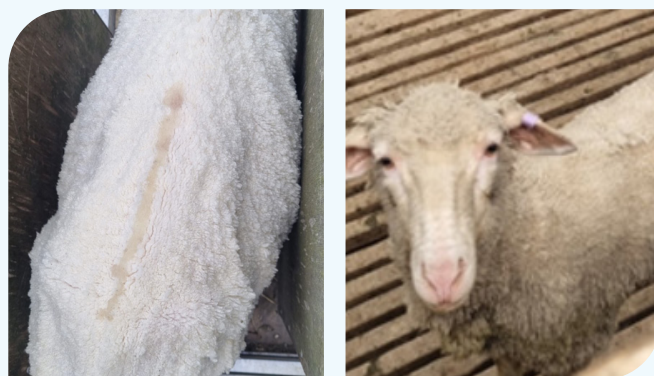
Efficacy over time:

		Study Day			
Treatment		14	27	41	57
Off Shears LCR		99.2%	100%	100%	100%
Long Wool LCR		97.9%	99.3%	99.4%	99.7%

The studies showed that Tison Attack was efficacious against sheep body louse in a variety of situations – long and short wool, crossbreds and merino sheep.

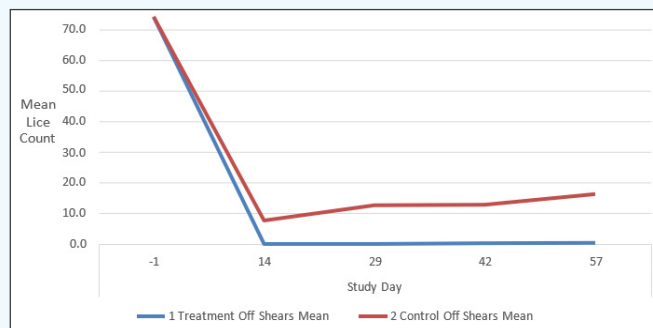
Merino Off-Shears Pen Study Cromwell/Oamaru

- 8 Merino sheep per treatment group
- Treated off shears as a pour on
- Lambs were shorn and treated in Cromwell before being transported to the final trial site in Oamaru.



A merino hogget treated off shears and a study animal before lice counting.

The sheep were shorn with a cover comb as is usual for winter shearing. The animals were treated as per label directions to individual animal body weight. Subsequent lice counts took place on days 14, 29, 42 and 57.



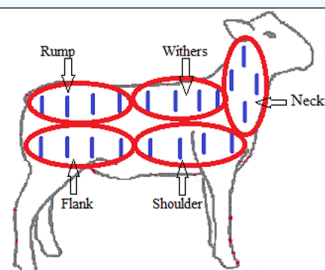
Lice counts over time:

		Study Day				
Group	Treatment	-1	14	29	42	57
1	Tison Attack	74.3	0	0	0.3	0.4
2	Control	74.1	7.6	12.6	12.8	16.3

Efficacy over time:

		Study Day			
Treatment		14	29	42	57
Lice Count Reduction		100%	100%	98.0%	97.7%

Distribution of counts for lice studies.



References: Daly S, Spot-on drenches in sheep for control of gastrointestinal parasites and lice, *Proceedings of the Sheep and Beef Cattle Veterinarians and the Deer Veterinarians Branches of the NZVA*, pp 7-18, Jul 2023. Daly S, A topical drench containing abamectin and levamisole for control of gastrointestinal parasites and lice, *Proceedings of the Sheep and Beef Cattle Veterinarians and the Deer Veterinarians Branches of the NZVA*, pp 1-23, Jun 2025.

Merino Lice & Worm Field Studies with Tison Attack

Dr Sean Daly BVSc - Inovata Veterinary Specialist

Inovata®

Merino Off-Shears Field Study Twizel

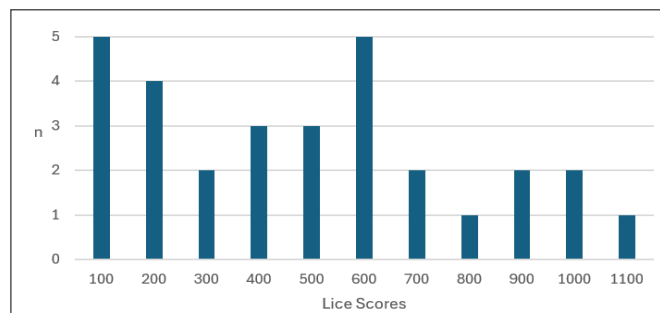
- 393 Mixed age, merino weathers and ewes
- 30 Tracer animals identified with lice scores >40
- Lice Score 87 – 1,059, mean 485
- Treated off shears as a pour-on
- Follow up lice counts conducted in tracer animals on days 28, 56 and 138
- On day 138 an extra 20 sheep were selected for lice counting in addition to the tracer animals.



An example of the study sheep before shearing and the lice infestations found.

The sheep were shorn with a cover comb as is usual for winter shearing. The animals were treated as per label directions to the weight of the heaviest animals in the flock.

Efficacy was excellent with no live lice found on the tracer animals or the extra animals counted on day 138.



Day -1/0 Lice Scores prior to shearing.

Lice counts over time:

Day 0	Day 28	Day 56	Day 138
485	0	0	0



Treating the sheep post shearing.

Efficacy in Merino Sheep off-shears was excellent with 100% efficacy at all post treatment time points out to Day 138.

Merino Off-Shears FECR Field Study 2022

- Six farms across the Maniototo, Waitaki Valley and Waimate areas
- Five farms treated on the day of shearing, one farm treated three days post shearing
- FECs taken pre-treatment and 13 or 14 days later
- Comparison with a positive control oral drench and Tison (a similar topical drench containing eprinomectin. ACVM No. A11955, Inovata Ltd).



A merino hogget treated off shears and study farm locations.



An example of the hoggets used in the study.

Efficacy was excellent across all farms except for one farm with severe double drench resistance (Farm D).

Gross Fecal Egg Count Efficacy by Farm:

