

Control Poultry Red Mites (*Dermanyssus gallinae*)

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Predatory mites



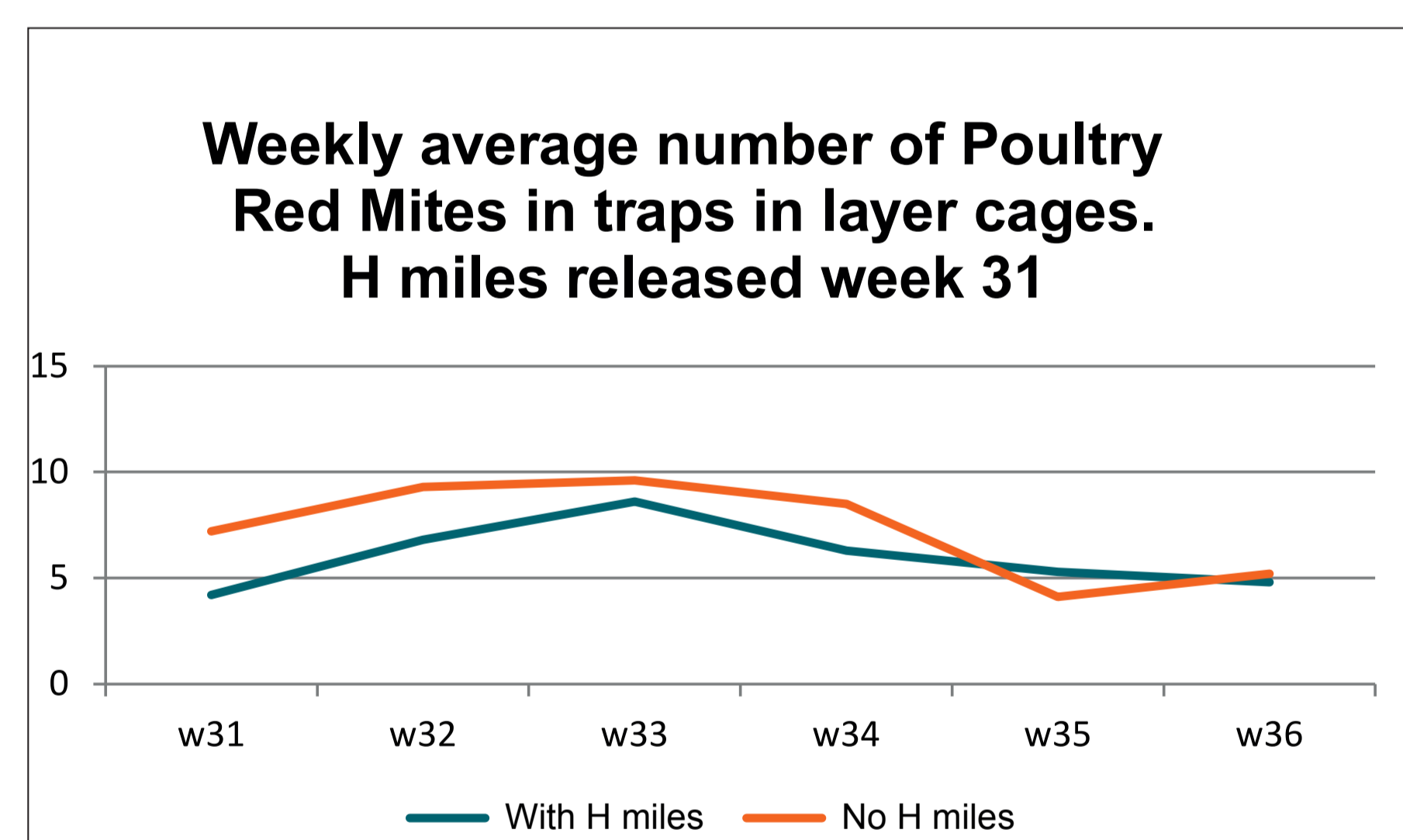
One predatory mite + five *D. gallinae*, five days, 10 repeats

Predatory mite	Dead <i>D. gallinae</i>	Live <i>D. gallinae</i>
M robustulus	30	20
H aculeifer	25	25
H miles	23	27
Control	0	50

Differences in PRM mortality were not statistically significant

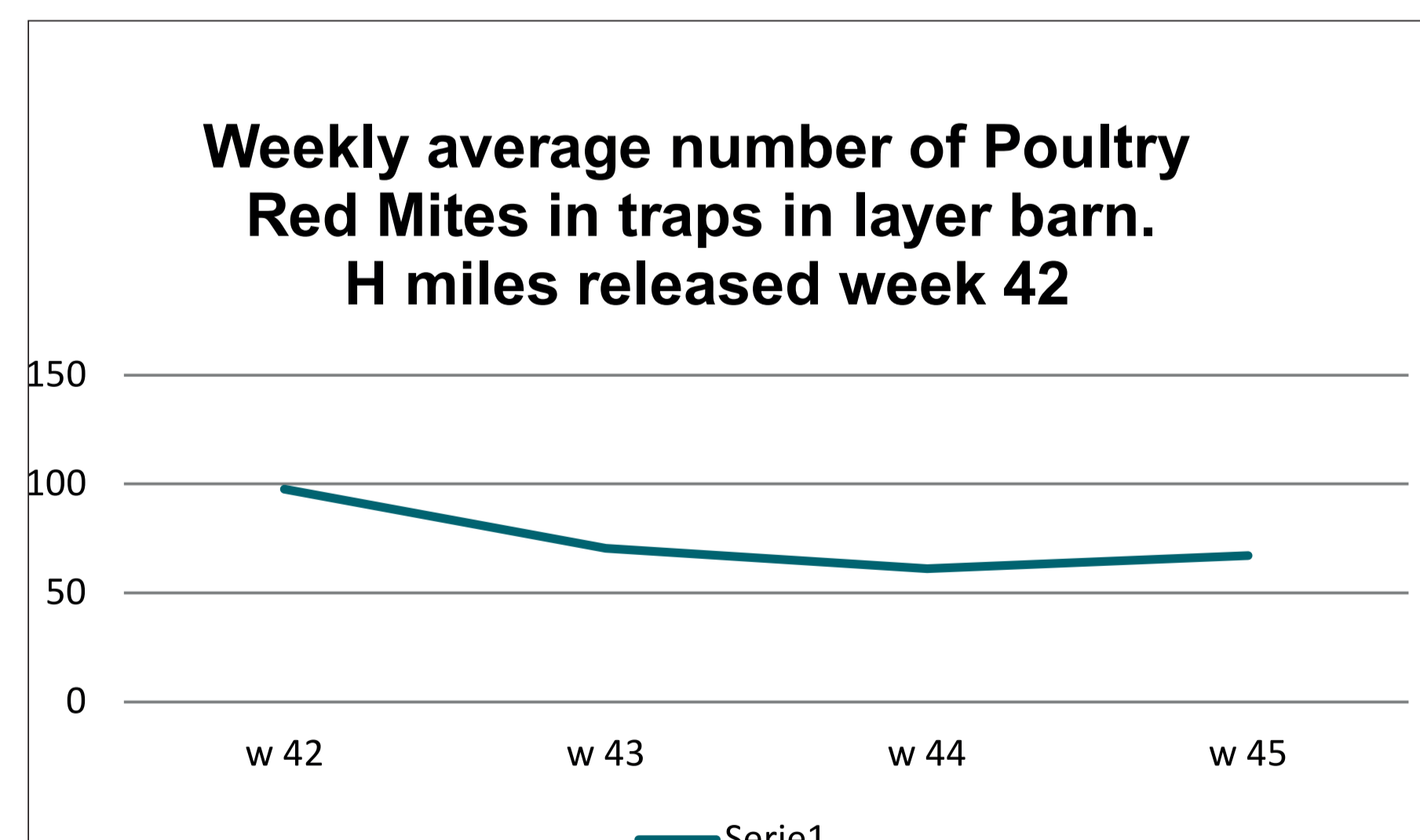
Cage layers

Predatory mites were released in the sand trays of 10 cages, 25.000 H miles in each cage. Mites were monitored weekly by carton traps. The cages had a long history of PRM infestation.



Barn egg layers

Predatory mites were released in the nests, 25.000 H miles in each of 20 nests. 125.000 H miles were slow-released in the bedding. Mites were monitored weekly by carton traps. The barn had a large population of PRMs at the time of release.



Laboratory testing



Three types of desiccating dusts were arranged in rings PRMs were placed in the center and observed during 10 hours

	Staldren®	Staldren green®*	Hemexcide®
Dead	1	1	5
Immobilised	12	0	13
Escaped	20	29	15
N	33	30	33

*Not recommended by the company for RPM control

Conclusion

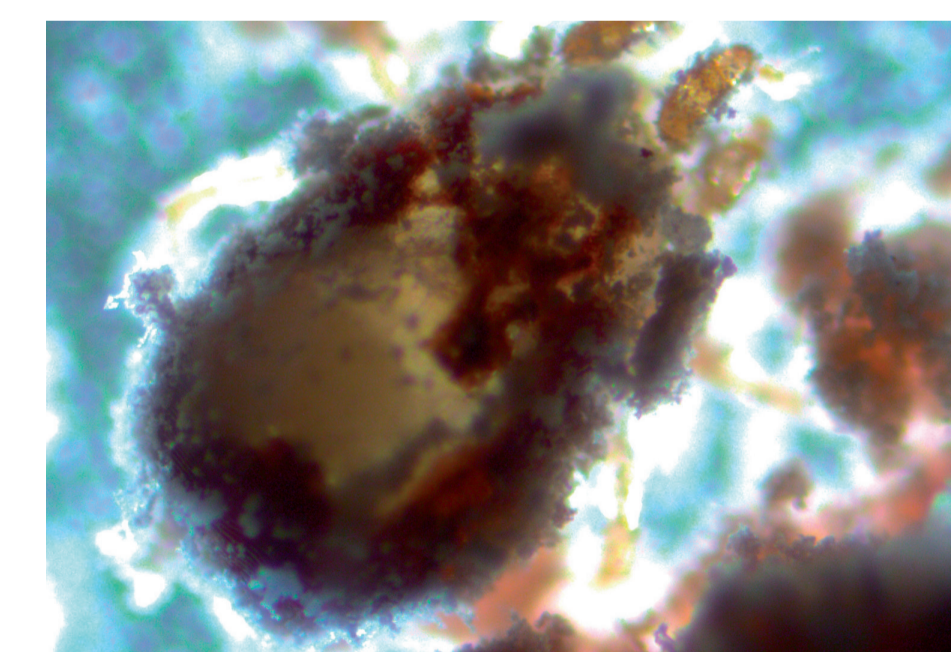
Staldren® and Hemexcide® immobilized some of the PRMs, but a large proportion of the PRMs were able to escape from the layer of desiccating dust.

Field trials

Staldren® was used to cover inventory and floors in an empty cage layer house before placing new hens. The poultry house had a history of PRM infestation, and had been treated with insecticides after removal of the previous flock. After 6 weeks PRMs were visible on the inventory.

Spraying was repeated twice with two weeks interval. The poultry house was then dry cleaned, and PRMs became a serious problem, leading to treatment with Elector® 4 months after placement.

Spraying with Staldren® was reinstated at weekly intervals. This seems to keep the number of PRMs at an acceptable level, where live PRMs are found in very low numbers during the daily inspections.



Conclusion and recommendation

Predatory mites show potential when the number of predatory mites matches the number of PRMs
Desiccating dusts may be efficient against PRMs but should be applied on the mites at relevant time intervals

Further field trials are needed, focusing on

- Numbers and timing of placement of predatory mites
- Methods for precise delivery of desiccating dust where PRMs are present in the production system