Field trial
results

PRIMING
In the presence of *Red Spider* in mandarin crop

Objectives

To evaluate the effectiveness of Priming

in the presence of Red Spider on mandarin

Material and methods

Location: **Coria del Río (Sevilla) – Spain**

Crop: **Citrus (Mandarin), Orogrande variety**

Soil texture: **Silty clay loam**

Plantation age: **19 years old**

Material and methods

Number of priming plants for T2: 5 trees per elementary plot x 4 repetitions = 20 trees

Number of priming plants for T3: 5 trees per elementary plot x 4 repetitions = 20 trees

Number of Test plants: 5 trees per elementary plot x 4 repetitions = 20 trees

Type of application: root

Dosage of application:

T2: 2,5 l/ha

T3: 5,0 l/ha

Application dates: June 30th and July 10th

Evaluation dates: July 10th, 17th and 25th

Material and methods

Nº	Date	Days after last application	Application/Evaluation	Temp. (ºC)	HR (%)	BBCH
1	30 June		Application	26,8	81,1	74
2	10 July	10	Application/Evaluation	34,6	95	74
3	17 July	7	Evaluation	36,2	88,5	74
4	25 July	15	Evaluation	33,4	95,3	74

Field Sketches

Location: Coria del Río   **Province:** Sevilla

Crop: Mandarin   **Variety:** Orogrande   **Type of application:** Root

Plot size: 5 x 4m   **Number of plants:** 20   **Number of replicates:** 4

2	1	3	1	3	2
3	2	1	2	1	3
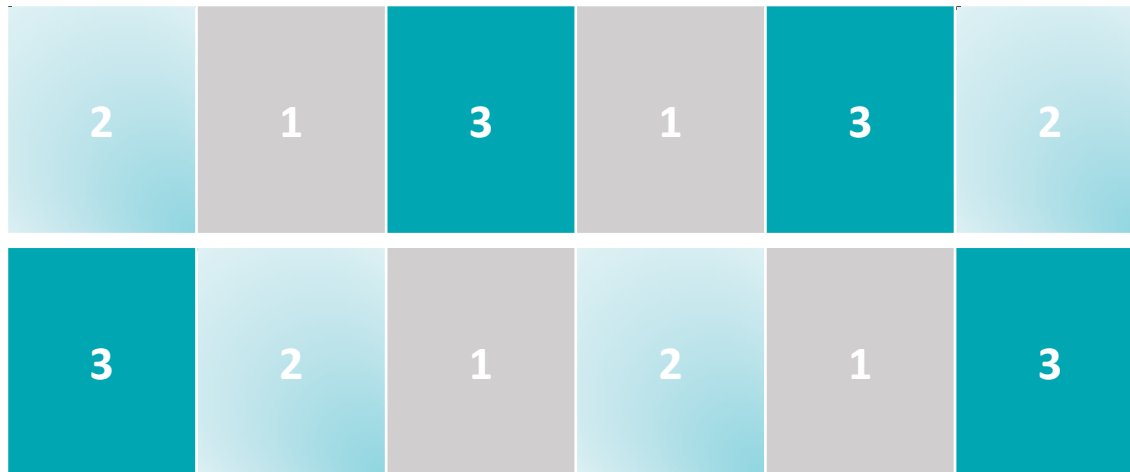
☐ Test

☐ Priming 2,5 l/ha

☐ Priming 5,0 l/ha

Evaluated parameters

- Number of eggs

- Number of alive larvae

- Number of alive adults

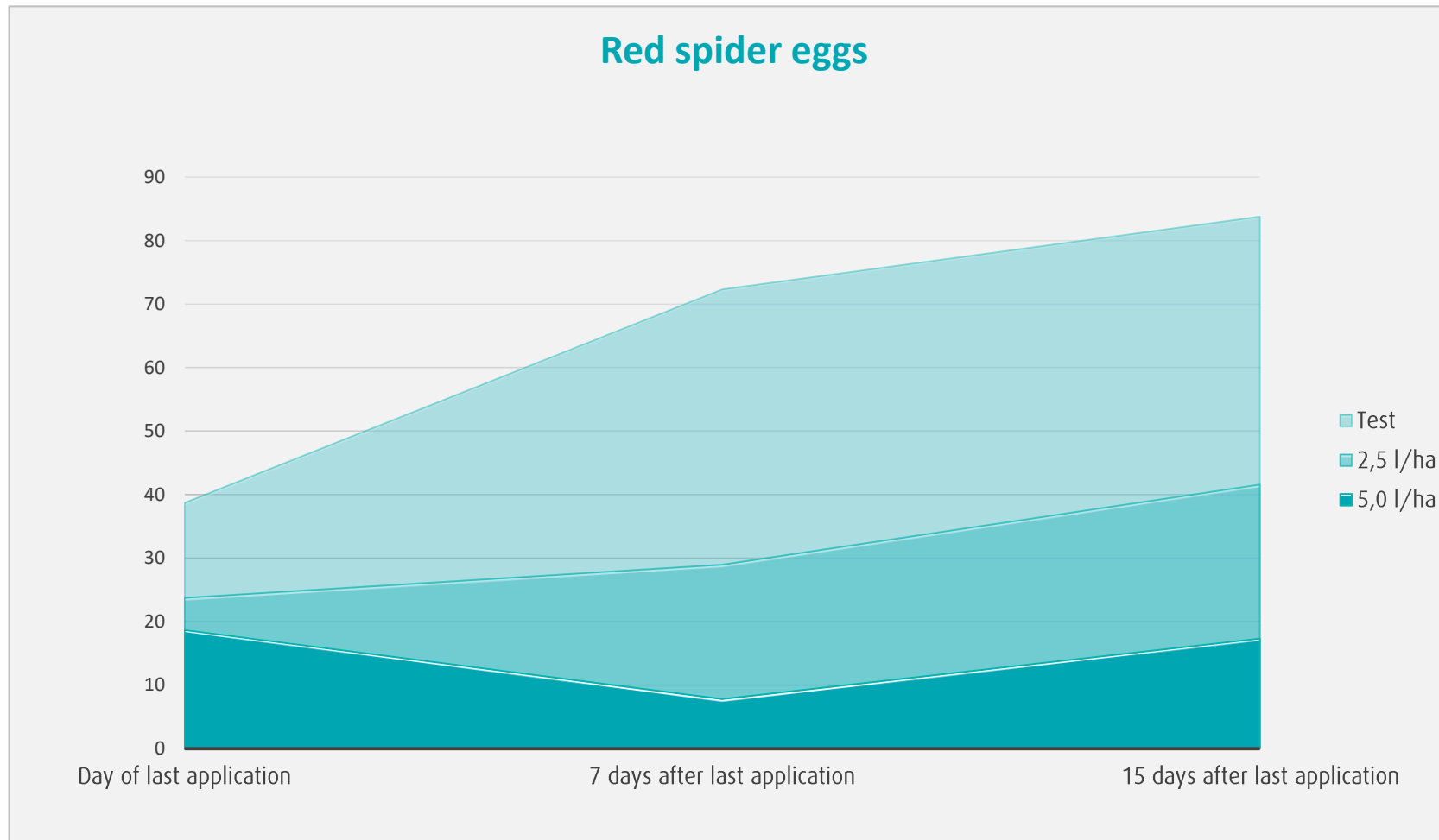## Results: No. eggs

	Day of last application	7 Days after last application	15 Days after last application
Test	38,69	72,31	83,77
2,5 l/ha	23,73	28,96	41,57
5,0 l/ha	18,66	7,79	17,32

Table 1:
Average number of Red Spider eggs

Priming

Results: Red spider eggs

Red spider eggs

Results: No. eggs

39%

52%

60%

90%

50%

80%

Test

2,5 l/ha

5,0 l/ha

DLA

7 DALA
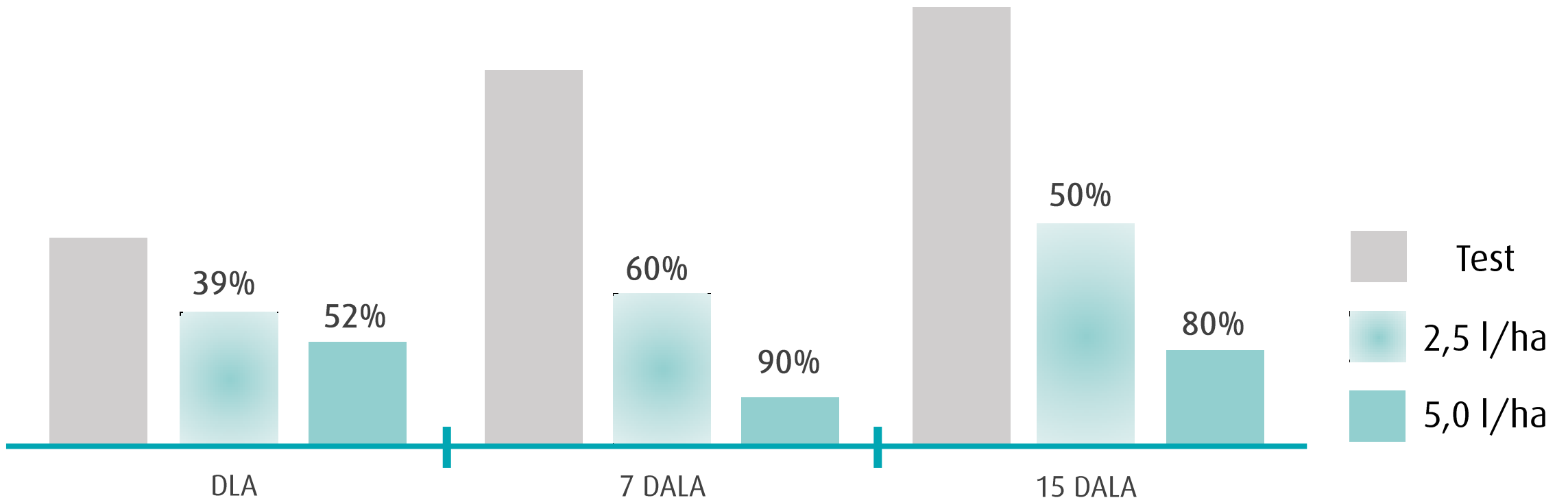
15 DALA

Graph 4:
% reduction in No. of Red Spider eggs

DLA: Day of last application
DALA: Days after last application

Results: No. larvae

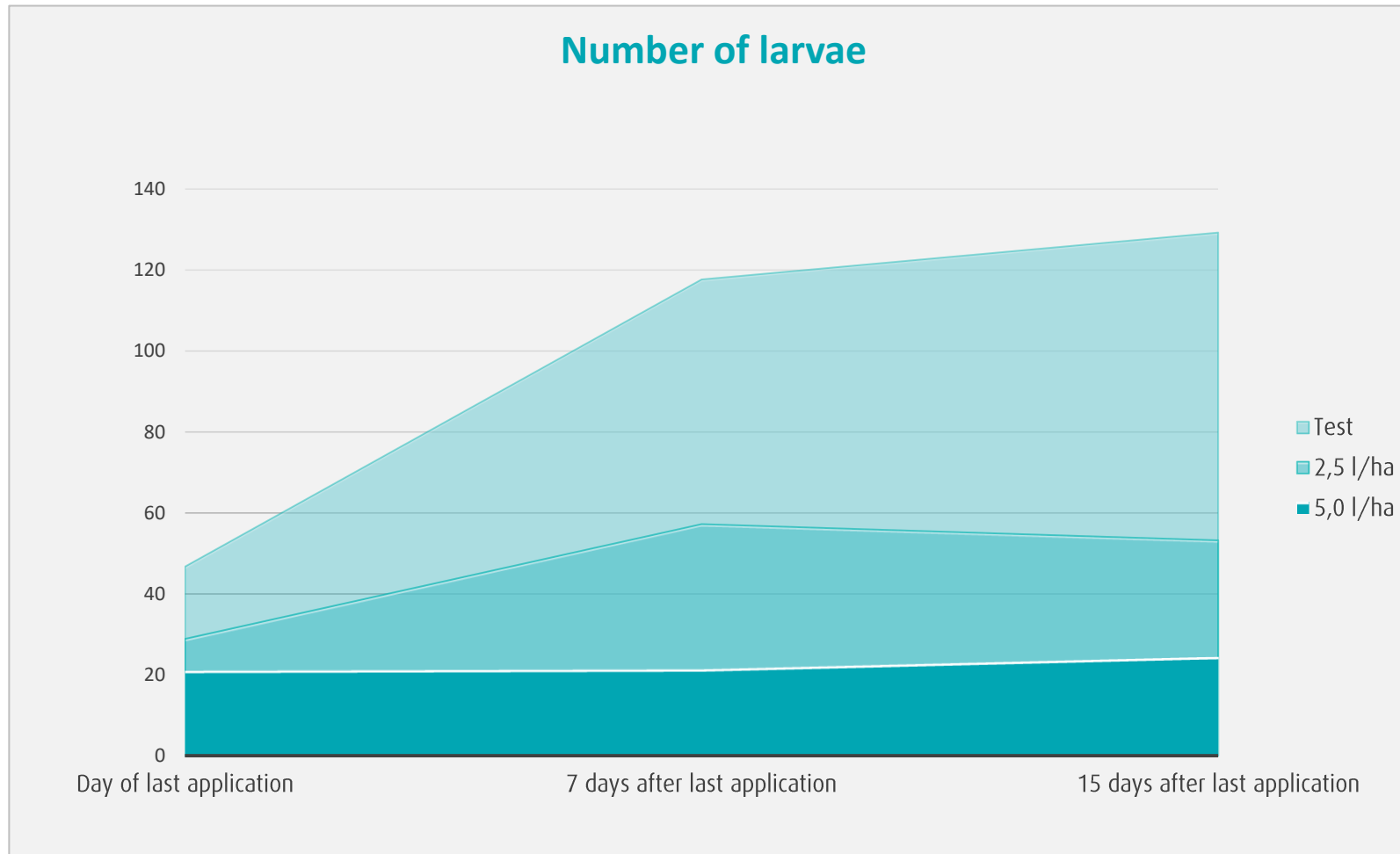|	Day of last application	7 Days after last application	15 Days after last application
Test	46,74	117,68	129,27
2,5 l/ha	28,88	57,23	53,23
5,0 l/ha	20,89	21,25	24,32

Table 2:
Average number of Red Spider alive larvae

Results: No. of larvae

Number of larvae

Legend: Test, 2,5 l/ha, 5,0 l/ha

X-axis: Day of last application | 7 days after last application | 15 days after last application

Y-axis: 0, 20, 40, 60, 80, 100, 120, 140

Priming

Results: No. larvae

Test

2,5 l/ha

5,0 l/ha

DLA   7 DALA   15 DALA

38%   55%   51%   82%   59%   81%
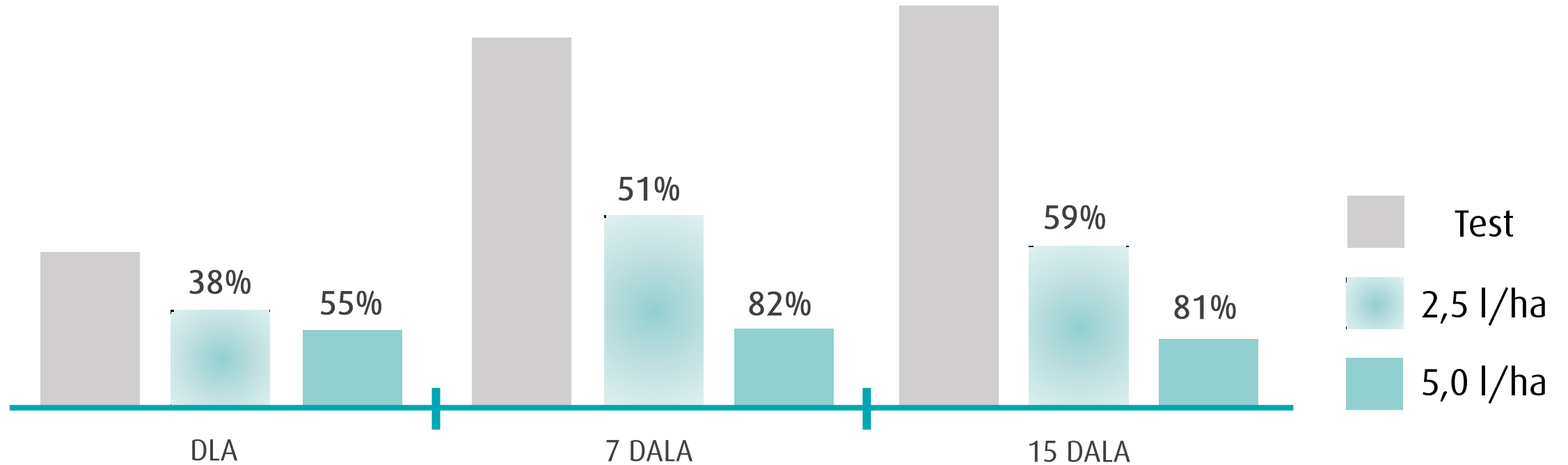
Graph 8:
% reduction in No. of Red Spider alive larvae

DLA: Day of last application
DALA: Days after last application

Priming

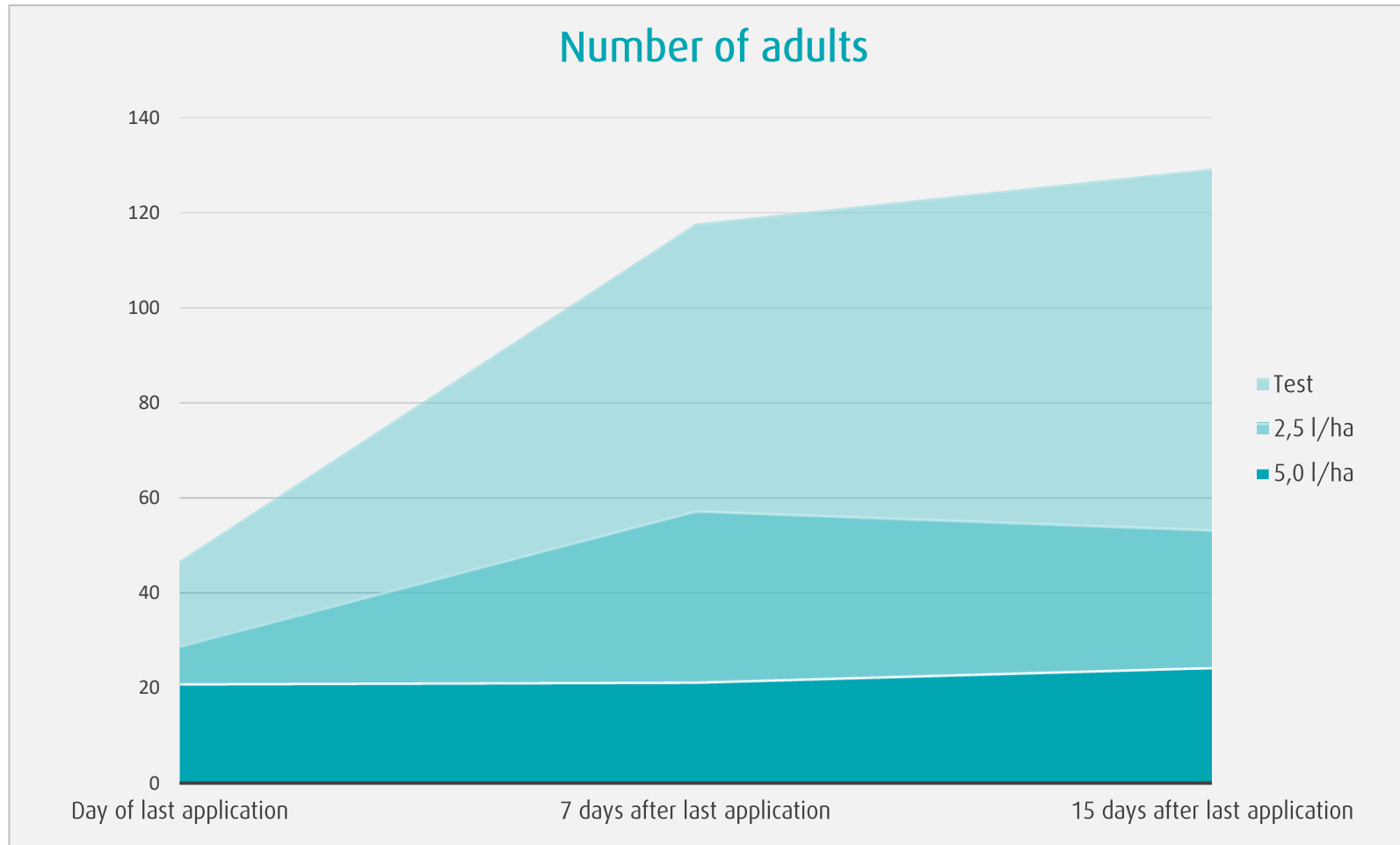## Results: No. adults

	Day of last application	7 Days after last application	15 Days after last application
Test	60,66	64,22	87,65
2,5 l/ha	26,11	27,18	38,20
5,0 l/ha	12,59	13,44	24,48

Table 3:
Average of Red Spider alive adults

Priming

Results: No. of adults

Number of adults

Legend:
- Test
- 2,5 l/ha
- 5,0 l/ha

X-axis: Day of last application | 7 days after last application | 15 days after last application

Y-axis: 0, 20, 40, 60, 80, 100, 120, 140

Results: No. adults

Test

2,5 l/ha

5,0 l/ha

57%

79%

58%

79%

56%

72%

DLA

7 DALA

15 DALA
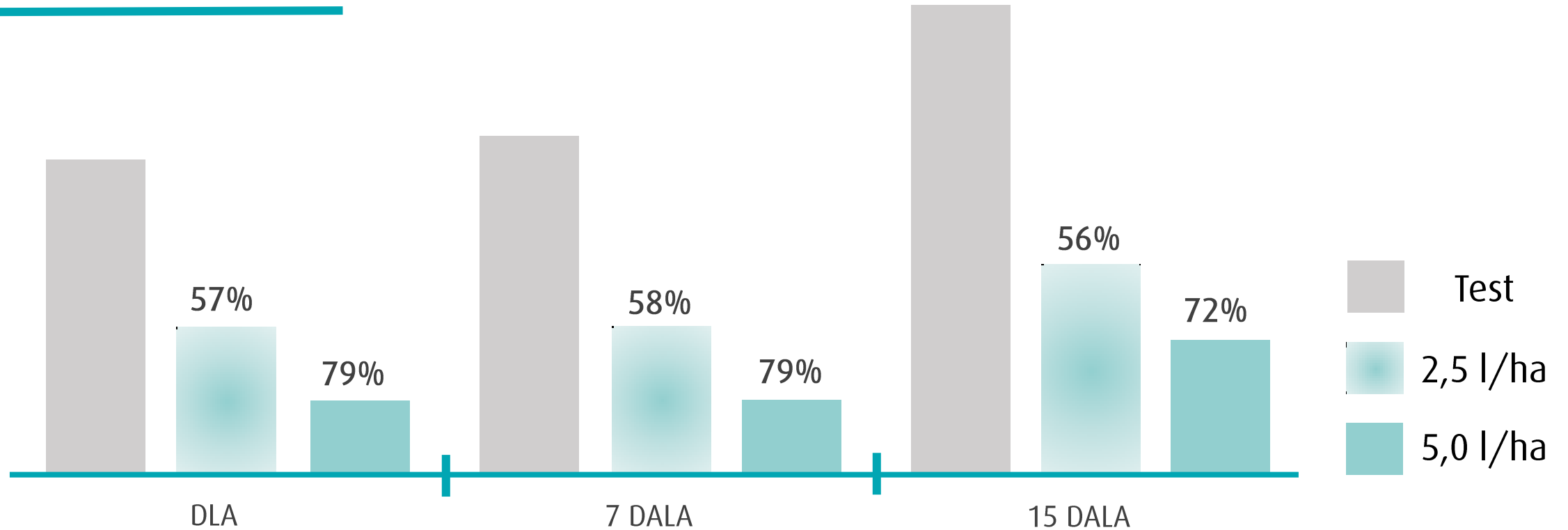
Graph 12:
% reduction in No. of Red Spider alive adults

DLA: Day of last application
DALA: Days after last application

Conclusions

Applying priming technology in mandarin we get:

Reduction of number of eggs, larvae and adults of Red Spider