Field trial
results

PRIMING

In the presence of *Red spider (Tetranychus urticae)* in strawberry

Priming

Objective

To evaluate the effectiveness of priming

in the presence of *Red spider* in strawberry

Material & methods

Location: Almonte (Huelva) - España

Crop: Strawberry, variety Calinda (protected)

Start of trial: February 14th

End of trial: March 19th

Material & methods

Nº of plants with Primtal RS for **TA and TB**: 25 leaves x 4 repetitions = 100 leaves per treatment

Type of application: drip irrigation

Application doses: **TA**: 2,5 l/ha

TB: 5 l/ha

Applications:

TA: 3 with 10 days intervals

TB: 3 with 10 days intervals

Evaluations dates: according to following table

Material & methods

TREATMENTS AT A RATE OF (2,5 l/ha) & B (5 l/ha) (3 applications with 10 days intervals)				
Date	Days after last application	Evaluation		Treatment
February 14th		Nº of total alive forms	Nº of eggs, alive larvae and adults Nº of leaves with presence of alive mites	Application
February 24th	10	Phytotoxicity Nº of total moving forms	Nº of eggs, alive larvae and adults Nº of leaves with presence of alive mites	Application
March 5th	10	Phytotoxicity Nº of total moving forms	II Nº of eggs, alive larvae and adults Nº of leaves with presence of alive mites	Application
March 11th	7	Phytotoxicity Nº of total moving forms	Nº de of eggs, alive larvae and adults Nº of leaves with presence of alive mites	Sampling
March 19th	15	Phytotoxicity Nº of total moving forms	Nº de of eggs, alive larvae and adults Nº of leaves with presence of alive mites	Sampling

Evaluated parameters

Number of eggs, alive larvae and adults

Number of total moving forms

Number of leaves with presence of alive mites

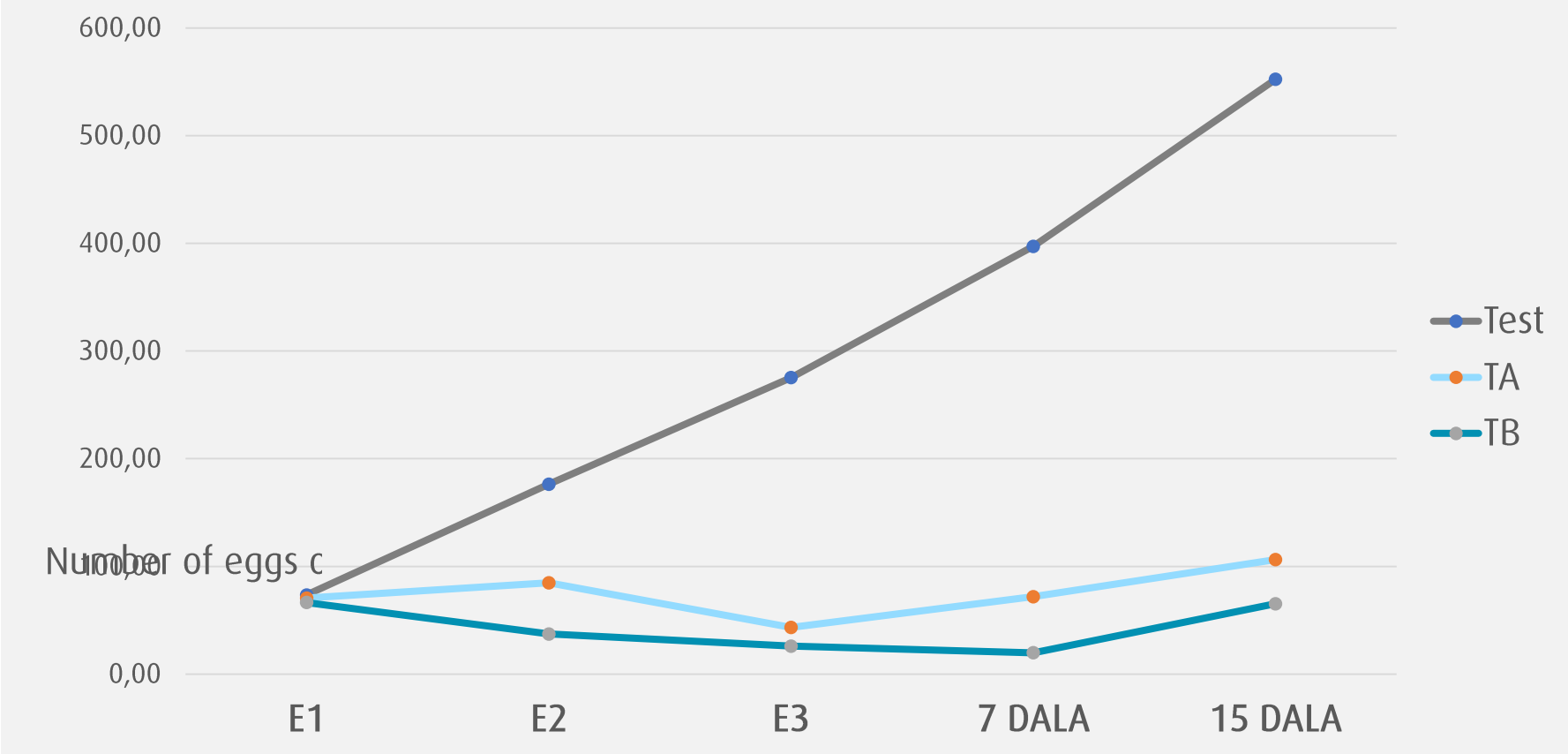
Phytotoxicity

Number of eggs

	Before first application	Before second application	Before third application	7 days after last application	15 days after last application
Test	73,55	176,30	275,37	397,16	552,34
Treatment A (2,5 l/ha)	70,60	84,77	43,34	71,85	106,34
Treatment B (5 l/ha)	66,58	37,20	25,95	19,88	65,29

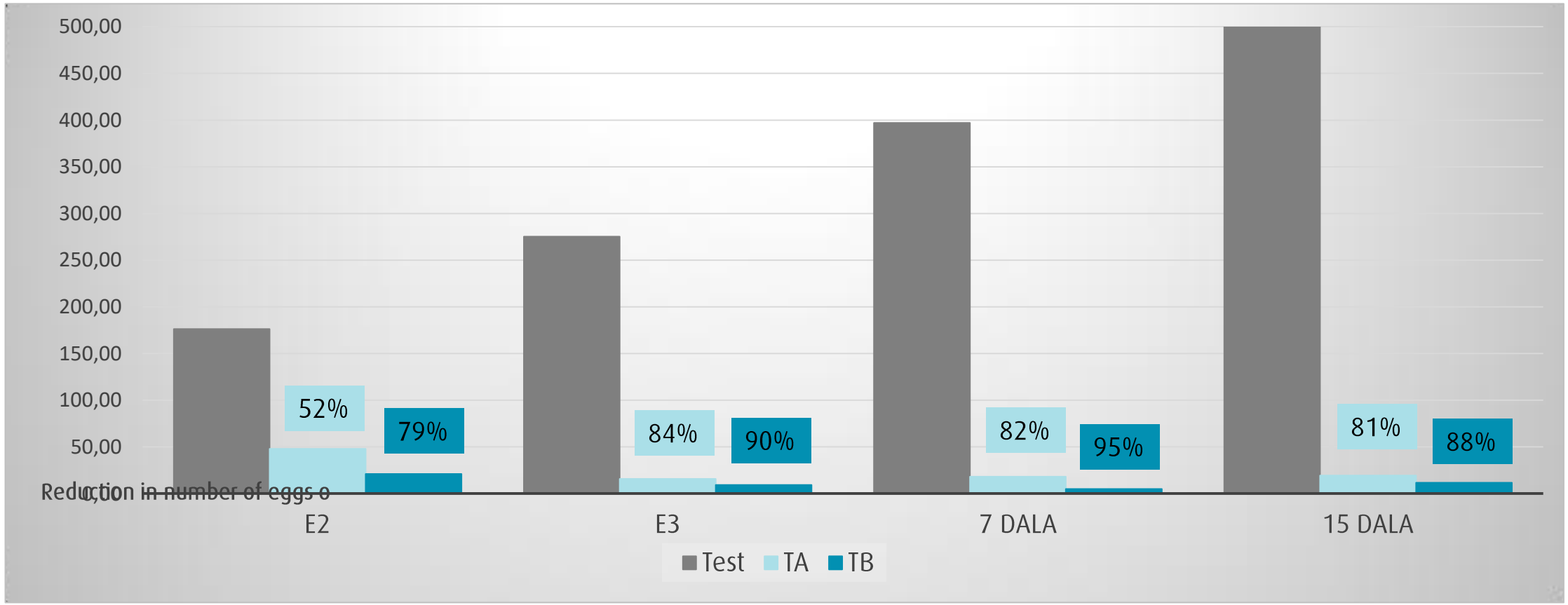
Table 1:
Number of *Red spider* eggs on leaves

Number of eggs



Graph 1: Number of *Red spider* eggs on leaves

Reduction in number of eggs (%)



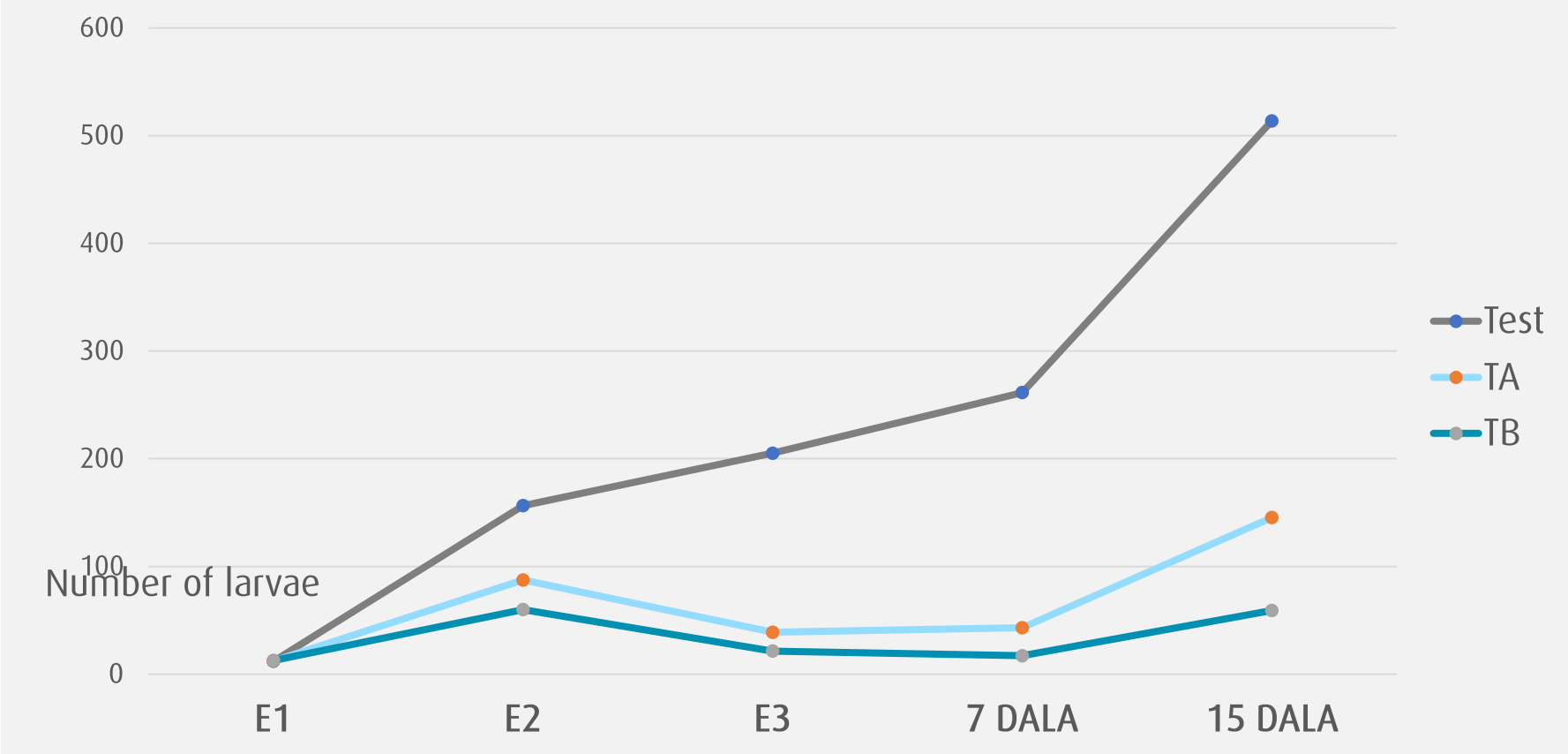
Graph 2: Reduction in number of *Red spider* eggs on leaves (%)

Number of larvae

	Before first application	Before second application	Before third application	7 days after last application	15 days after last application
Test	11,85	156,48	205,12	261,49	513,66
Treatment A (2,5 l/ha)	12,21	87,38	38,84	43,09	145,43
Treatment B (5 l/ha)	12,74	59,97	21,45	17,02	59,09

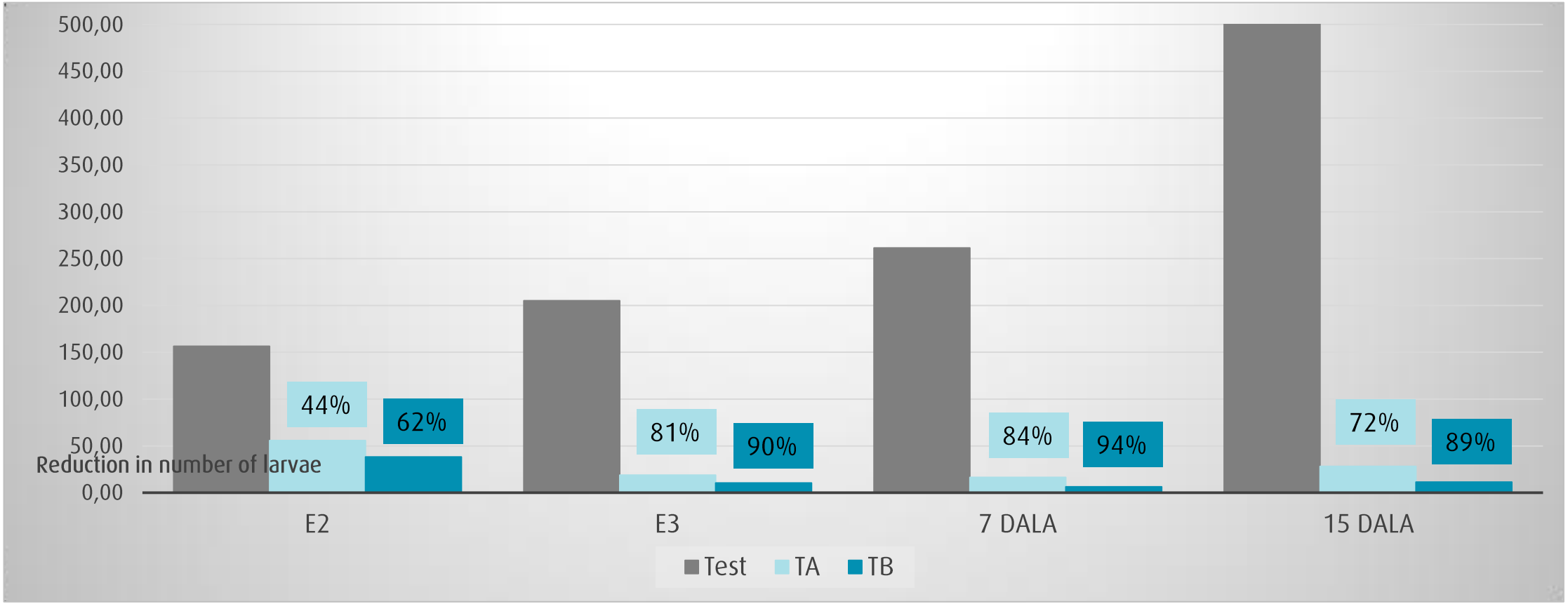
Table 2:
Number of *Red spider* alive larvae on leaves

Number of larvae



Graph 3: Number of *Red* spider alive larvae on leaves

Reduction in number of larvae (%)



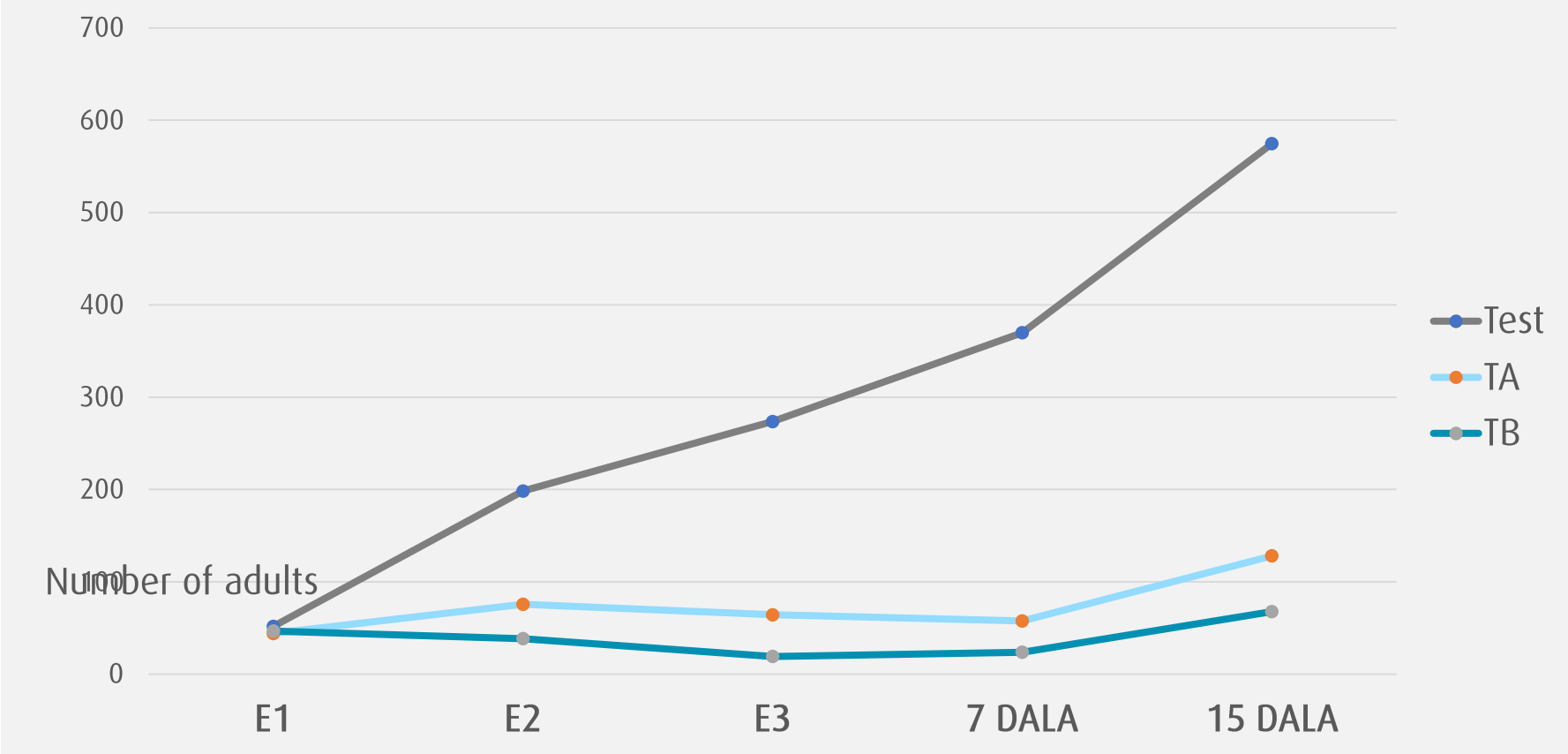
Graph 4: Reduction in number of *Red spider* alive larvae on leaves (%)

Number of adults

	Before first application	Before second application	Before third application	7 days after last application	15 days after last application
Test	51,69	198,28	273,57	369,83	574,67
Treatment A (2,5 l/ha)	44,09	75,65	64,22	57,57	128,15
Treatment B (5 l/ha)	46,71	38,45	19,17	23,75	67,71

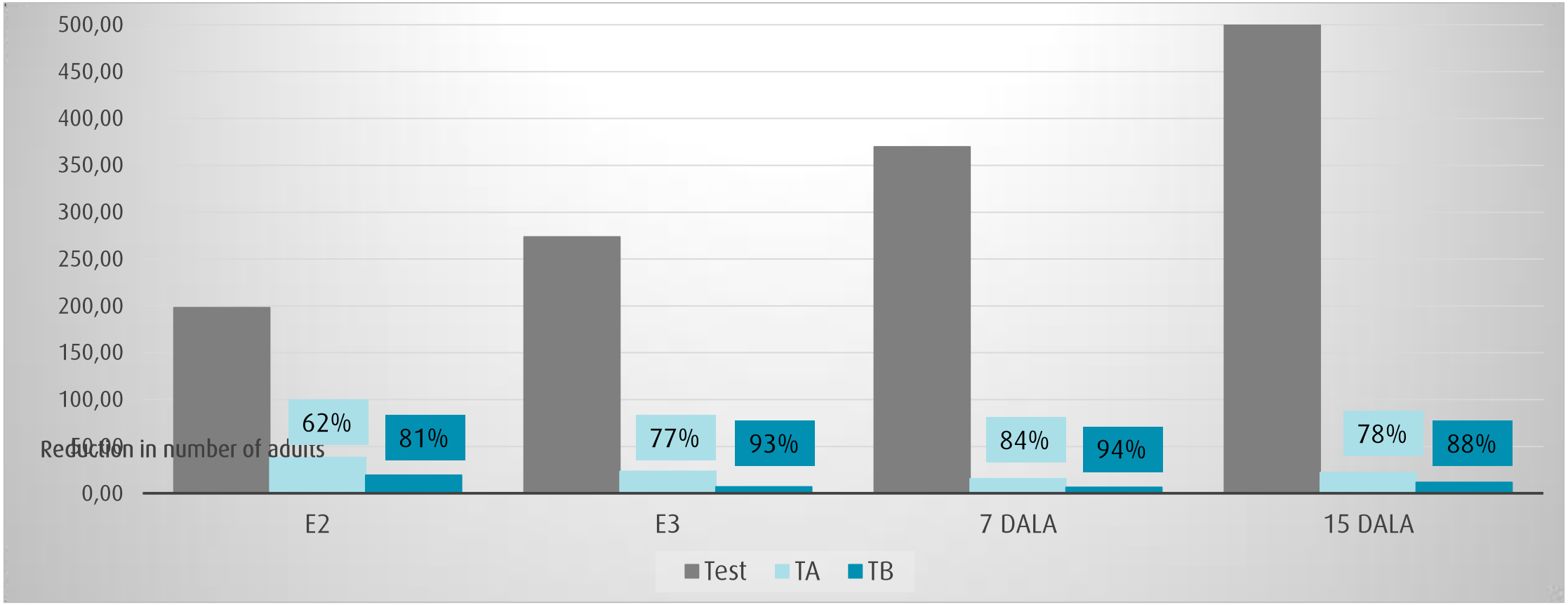
Table 3:
Number of *Red* spider alive adults on leaves

Number of adults



Graph 5: Number of *Red* spider alive adults on leaves

Reduction in number of adults (%)



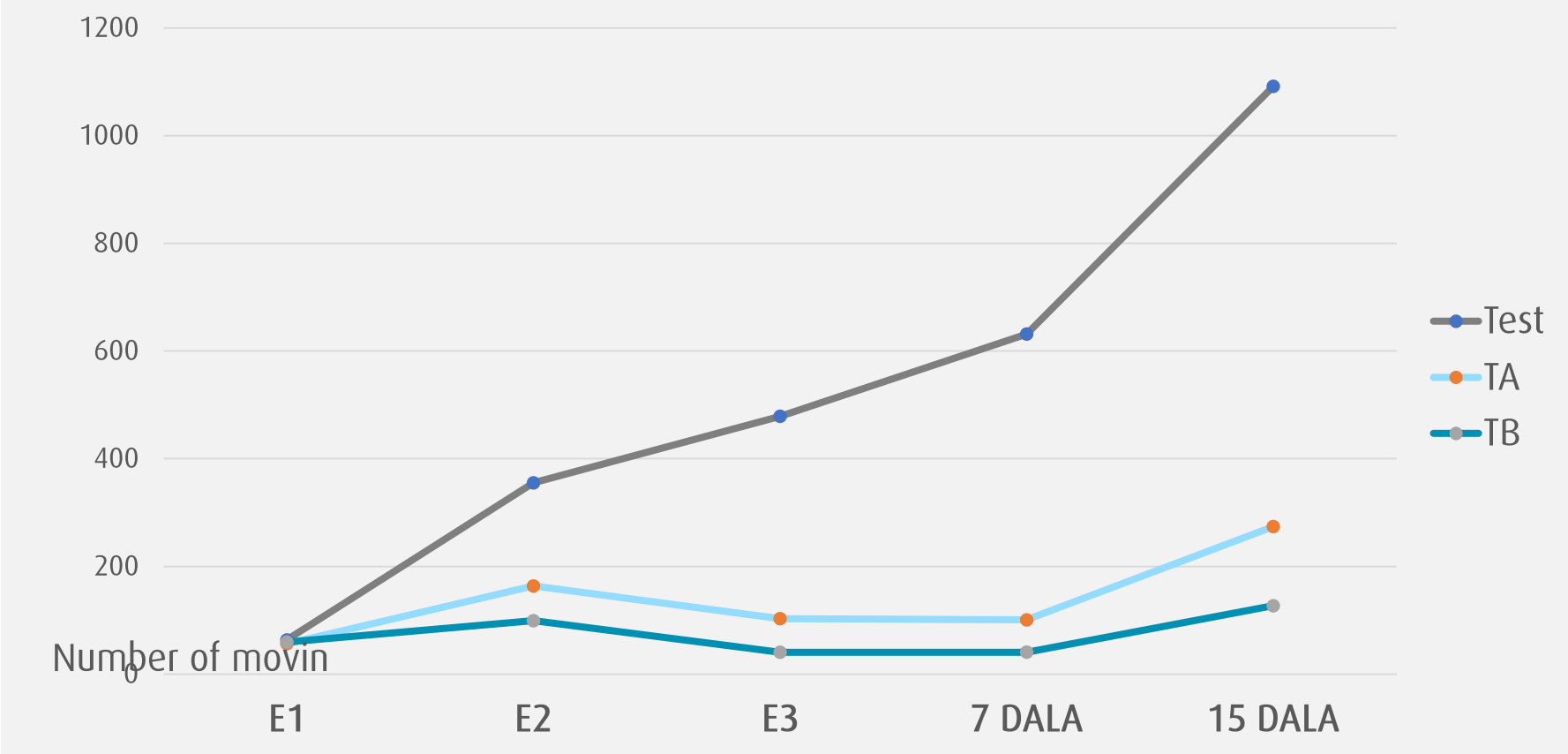
Graph 6: Reduction in number of *Red spider* alive adults on leaves (%)

Number of moving forms

	Before first application	Before second application	Before third application	7 days after last application	15 days after last application
Test	63,66	355,20	478,81	631,55	1.091,56
Treatment A (2,5 l/ha)	56,40	163,69	103,06	100,74	274,03
Treatment B (5 l/ha)	59,63	99,21	40,66	40,80	126,92

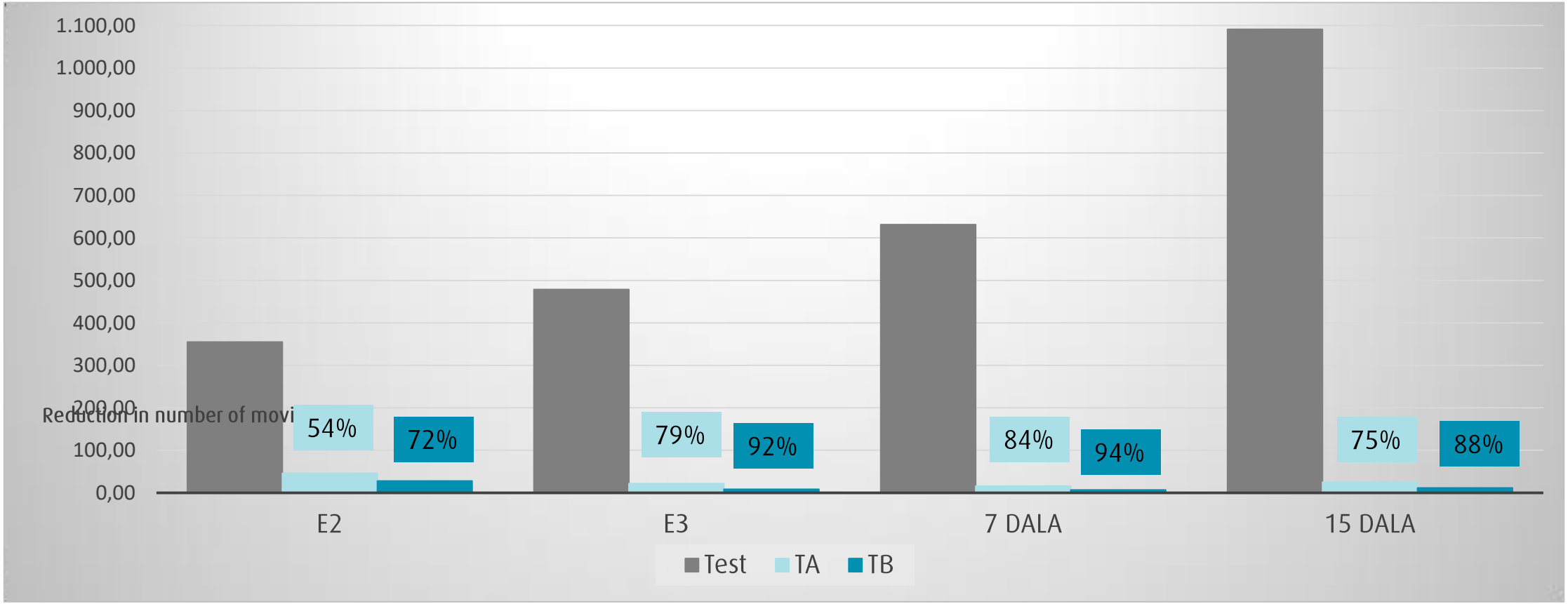
Table 4:
Number of *Red* spider alive moving forms (larvae+adults) on leaves

Number of moving forms



Graph 7: Number of *Red* spider alive moving forms (larvae+adults) on leaves

Reduction in number of moving forms (%)



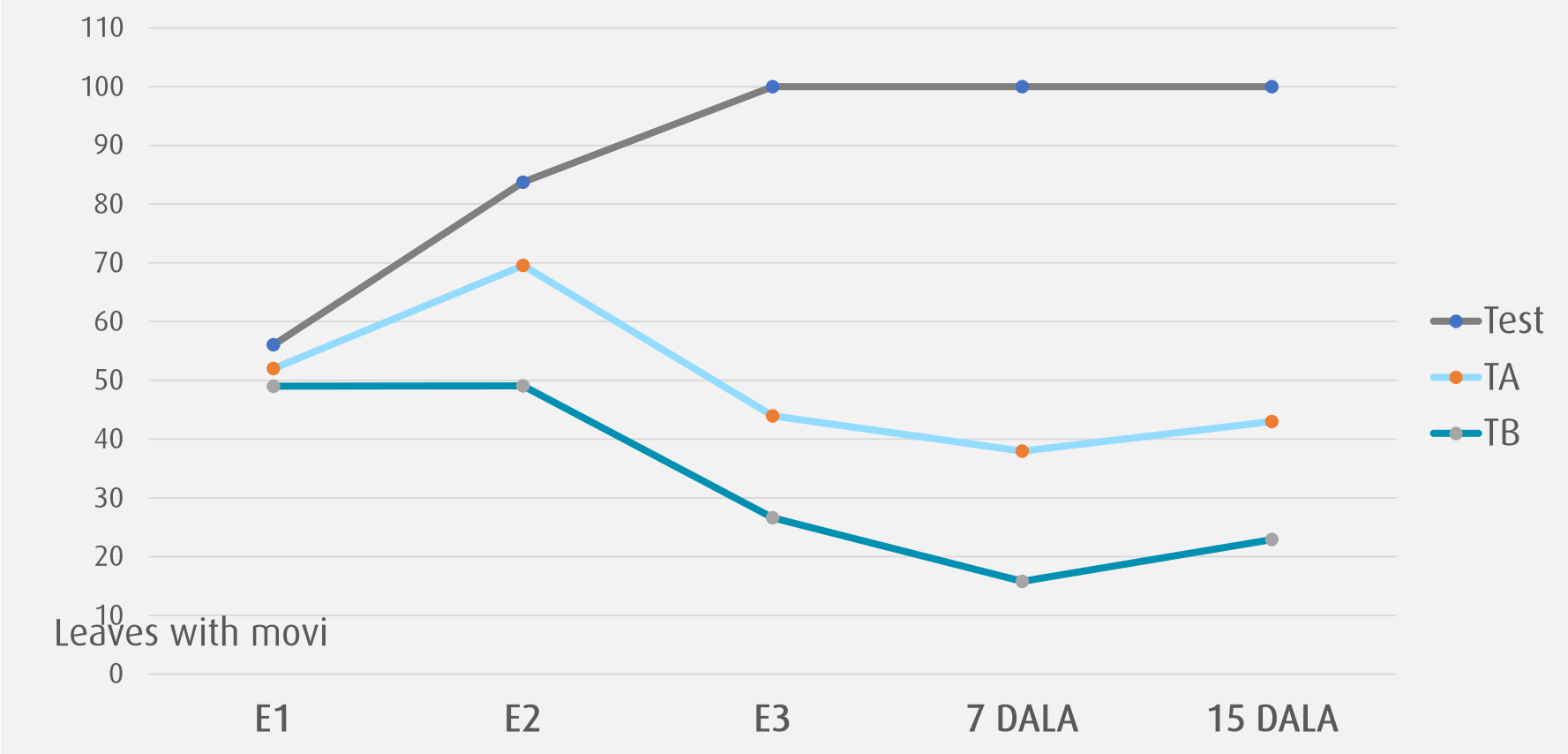
Graph 8: Reduction in number of *Red spider* alive moving forms (larvae+adults) on leaves (%)

Number of leaves with moving forms (%)

	Before first application	Before second application	Before third application	7 days after last application	15 days after last application
Test	56,04	83,74	100,00	100,00	100,00
Treatment A (2,5 l/ha)	52,02	69,58	43,95	37,97	43,00
Treatment B (5 l/ha)	49,00	49,07	26,62	15,79	22,92

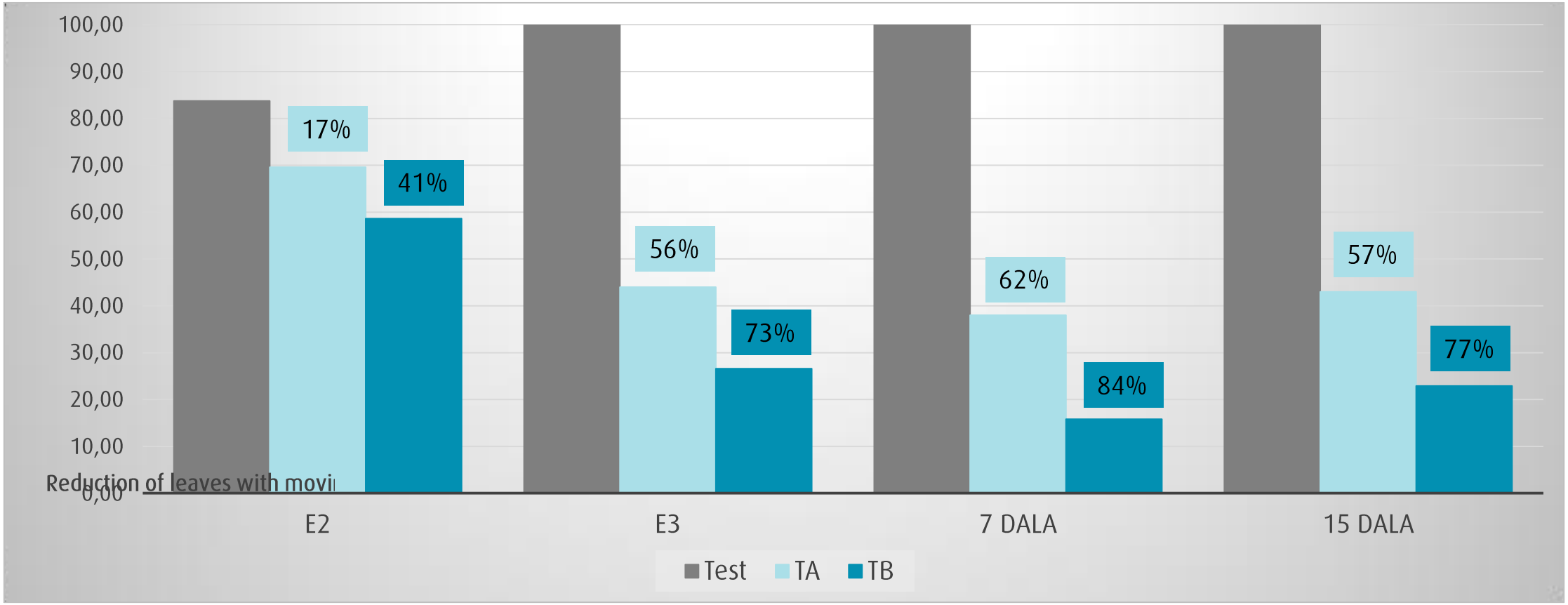
Tabla 5:
Leaves with *Red spider* alive moving forms (larvae+adults) (%)

Number of leaves with moving forms (%)



Graph 9: Leaves with *Red spider* alive moving forms (larvae+adults) *(%)*

Reduction in nr. of leaves with moving forms (%)



Graph 10: Reduction in number of leaves with *Red* spider alive moving forms (larvae+adults) (%)

Remarks

At no time were any symptoms of phytotoxicity or any other undesired effect observed.

The pest level during the trial ranged from moderate to moderate-high

Conclusions

Applying priming technology on strawberry we get:

Reduction in number of eggs per leaf

Reduction in number of larvae per leaf

Reduction in number of adults per leaf

Reduction in number of moving forms per leaf