



Spidex Vital

Your vital partner
in spider mite control

KOPPERT
BIOLOGICAL SYSTEMS

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Spidex Vital predatory mites are born to fight your spider mites. It gives you the best control over hotspots; building populations through faster growth, with increased egg laying capacity and proof of predation. Once the predatory mite has consumed several spider mites, the colour will gradually change to the characteristic red-orange colour.

It all started with Spidex at Koppert more than 50 years ago. From day one this predatory mite formed the foundation of our spider mite control. Over time it grew to be one of the most important products for our growers.

As the result of many years of research and fine-tuning, Spidex is now improved with a greater impact on spider mite control: Spidex Vital.

Spidex Vital gives you the following advantages:

- Improved hotspot control
- Improved egg laying capacity
- Proof of predation

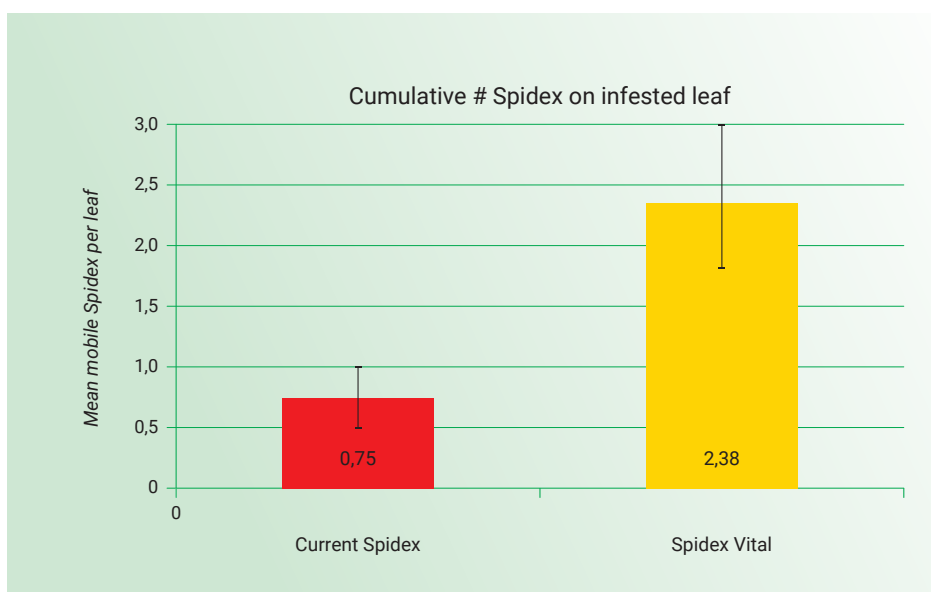
The following trials were set up:

1. Improved hotspot control: increased searching capacity

Trial setup: The trial was conducted on 1-metre tall cucumber plants. 2 rows of 6 plants each, placed in a walk-in cage. The last 2 plants in each row were infested with 50 mobile spider mites (red stars). 50 Spidex were released on the first plant of each row (yellow star) a week later.



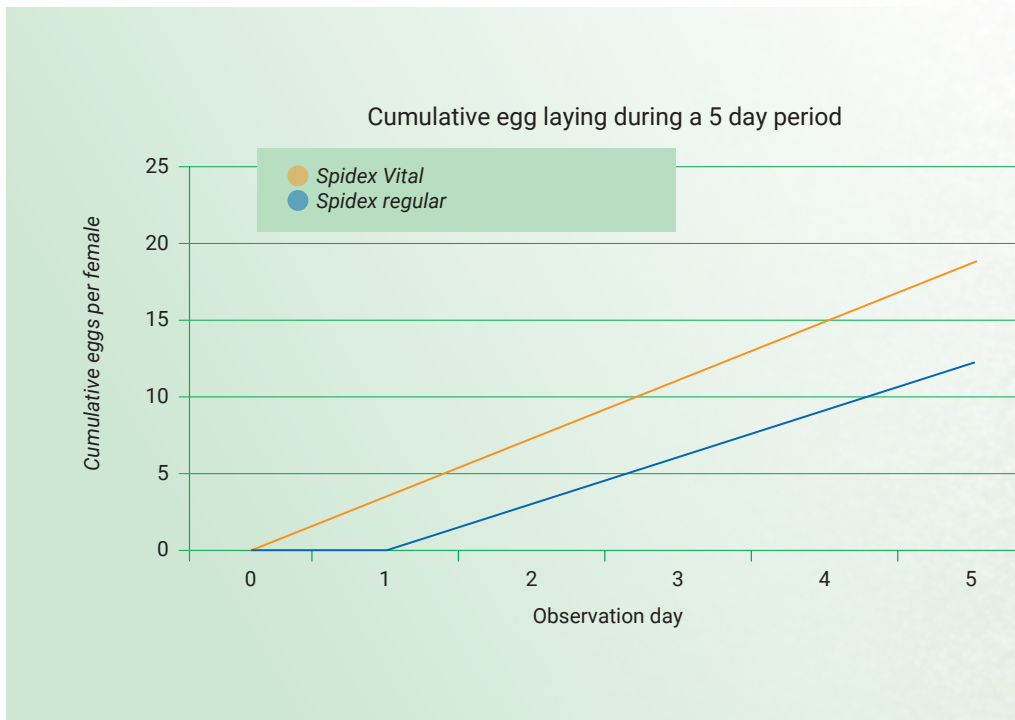
Results: a larger population of Spidex Vital reached the infested plants due to the fact that they had an energetic start and because more Phytoseiulus were capable of travelling the given distance. A more diverse population composition is present in a bottle of Spidex Vital, so when applied in hotspots, the adults are followed up by the growing nymphs. These factors combined give increased hotspot control. This has also been observed in the commercial field following feedback from several trial plots.



2. Improved egg laying capacity; faster and more eggs

Test setup: Under controlled conditions, deposited eggs of the adult Spidex Vital females were counted every day. This was carried out head to head with "regular" Spidex females and conformed to the standard used in the industry for 5 days in a row.

Results: The graph below shows the results of the collected data



Explanation: As Spidex Vital has continuous access to nutrition during mass production, the females of Spidex Vital already have enough energy to develop their eggs. As a result, they can immediately start laying eggs after release; whereas Spidex "regular" first needs to get its energy from spider mites in the field to develop the eggs. Because they start depositing eggs directly, they have an improved ability to lay more eggs in the same time frame.

3. Changes colour; Proof of predation

The characteristic orange/red colour of Spidex is caused by pigments that are present in spider mites. It is only after consumption of spider mites (nymphs and/or adults), that the pigments are absorbed and Spidex changes colour. The speed of colour change is dependent on the amount and stages of spider mites consumed, but in general takes 1 to 2 days. This change of colour therefore is a great visual confirmation that Spidex is on the job!



Before



After