
SynTech Research
SUCCESS STORIES USING STIMBLUE+
STRAWBERRY CULTIVATION
kelp blue
STIM BLUE+

ABOUT THE TRIAL

TRIAL CONDUCTED BY
SynTech Research

LOCATION OF TRIAL

SPAIN
Alicante

SEASON

JUN – NOV 2025

MACROCYSTIS VS ECKLONIA
*with seed treatment in greenhouse

TRIAL TYPE

YOUNG DEVELOPMENT

+42%
greater soil area coverage

+6%
more roots per plant

YOUNG DEVELOPMENT OF STRAWBERRIES

- Young strawberry plants in CEA systems face several challenges during early development, especially related to root establishment, water management, nutrient balance and overall plant uniformity.[1] Their shallow root systems make them highly sensitive to substrate conditions and irrigation practices, where even minor inconsistencies in moisture can restrict root growth and limit nutrient uptake.[2]

- These inconsistencies can affect early canopy development, as inadequate water or nutrient supply reduces photosynthetic capacity and slows vegetative growth. These early limitations often lead to variability between plants, as differences in root function and shoot growth persist, ultimately impacting crop uniformity and overall productivity.[1]

- Seaweed-based biostimulants have been demonstrated as a solution for growers, supporting young strawberries' root system architecture, enhancing nutrient uptake and boosting stress tolerance.[3,4,5]

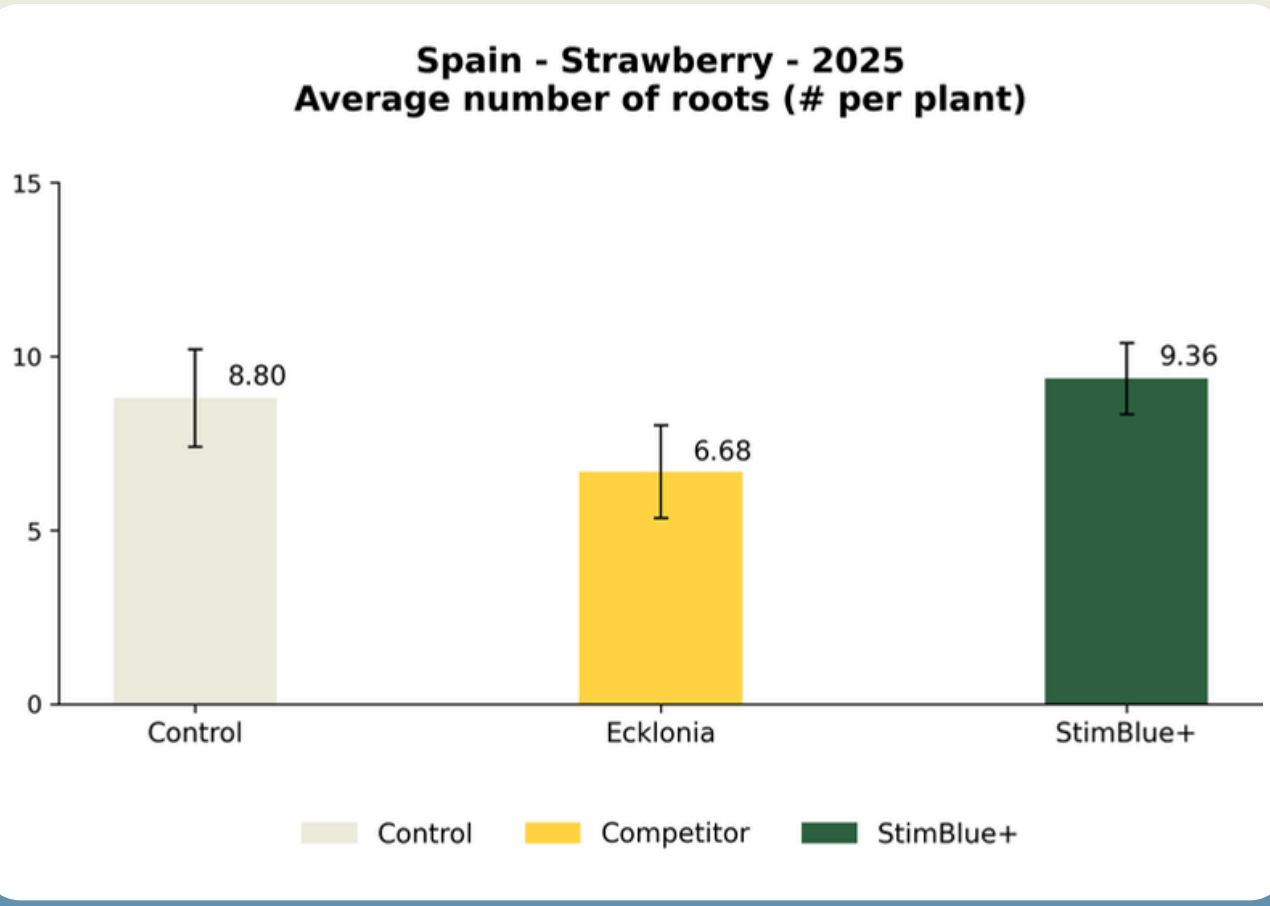
- Together with SynTech, we conducted a trial to assess the efficacy of StimBlue+ on improving the young development of strawberry plants compared to an untreated control and an Ecklonia-based competitor. In a greenhouse system in the south of Spain, seeds were first soaked in a 4% biostimulant solution for 10 hours and planted 4 days later in an artificial substrate. Two subsequent applications at a dosage of 2 L/ha were made 12 and 16 days after planting.

RESULTS EXPLAINED

ENHANCED ROOT ESTABLISHMENT

Strawberries treated with StimBlue+ showed +6% more roots per plant on average vs control and +40% vs Ecklonia.

Strawberries have a relatively shallow root system, with most roots concentrated in the top 15 cm (6 inches) of soil. A greater number of active root tips improves the plant's ability to take up water and nutrients and supports rapid establishment after planting.[1] Well-developed roots also help the plant better tolerate environmental stress and provide a strong basis for consistent fruit production.[6]



Average number of roots per plant per treatment was assessed 60 days after planting (Nov 11, 2025).

INCREASED SEEDLING LENGTH & VIGOUR

StimBlue+ strawberries showed accelerated seedling growth, supporting faster and more uniform plant establishment.

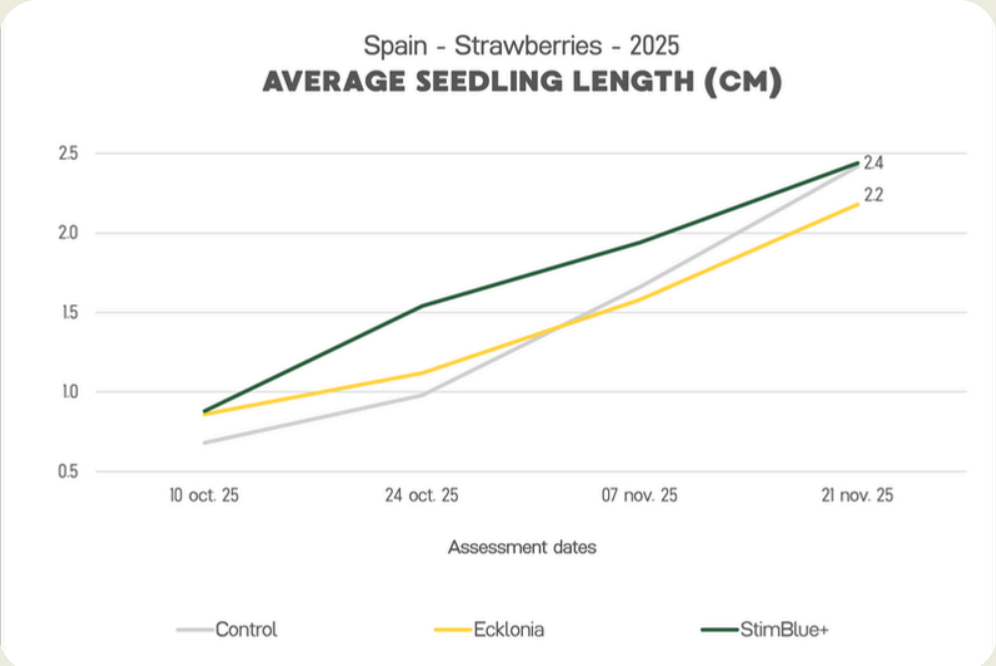
CONTROL

ECKLONIA

STIMBLUE+

Seedlings with greater length typically develop a larger canopy of trifoliate leaves. The increased leaf area enhances photosynthetic capacity, supplying more assimilates to support root growth, crown development and subsequent fruiting. Greater early vegetative growth is also associated with a more rapid transition from establishment to the reproductive phase, leading to earlier and potentially more consistent yield.

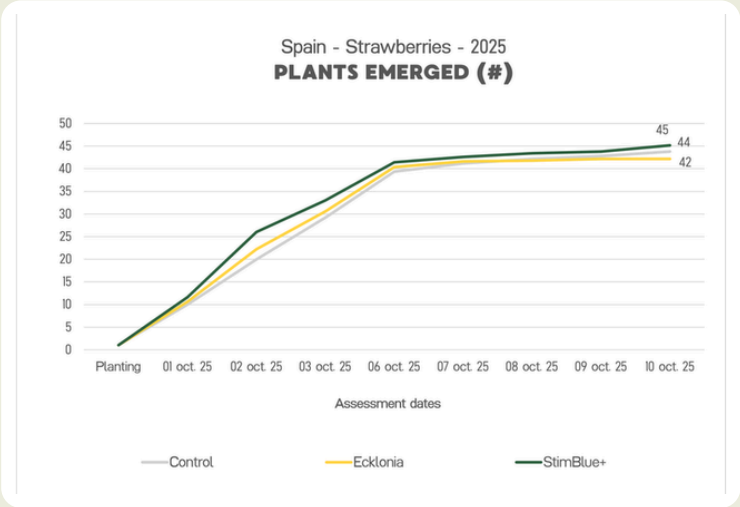
Photos: Seedling length per treatment 60 days after planting



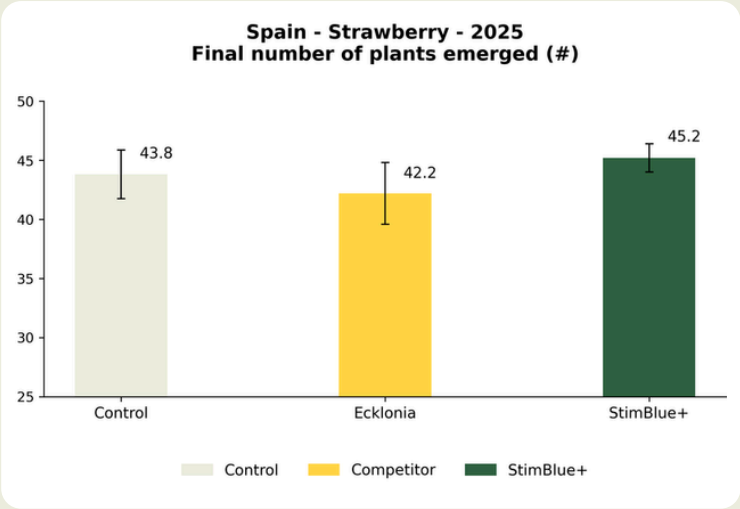
ACCELERATED PLANT EMERGENCE

StimBlue+ showed significantly faster plant emergence and canopy closure, leading to the most emerged plants at final assessment.

As a result of enhanced root and early shoot growth, plants treated with StimBlue+ showed more rapid emergence and earlier canopy closure. Increased ground cover has been associated with reduced light interception at the soil surface, which limits weed germination and early weed growth, while also contributing to improved soil moisture conservation and more efficient use of available resources.[1]



60 days after planting, StimBlue+ showed +3% more plants emerged vs control and +7% more plants emerged vs Ecklonia.

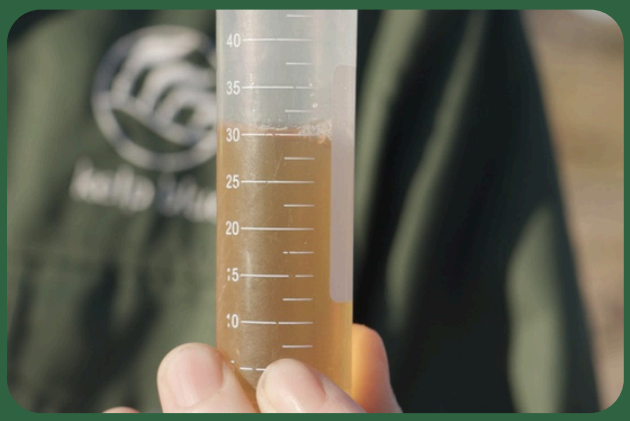


StimBlue+ showed a final germination percentage of 90.4%, whereas the control showed 87.6% and Ecklonia showed 84.4%

APPLICATIONS FOR EARLY DEVELOPMENT

- First application: soak seeds for 10 hours (4% v/v) 4-days before planting
- Second application: foliar spray at first leaft emerging | BBCH10
- Third application: foliar spray at third leaf developed | BBCH13

*This approach ensures the plants receive support at critical growth stages.
The results are based on StimBlue+ suggested application rates and calendars



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ABOUT
STIMBLUE+

StimBlue+ is a biostimulant made from 100% cultivated Giant Kelp (Macrocystis Pyrifera), and has shown to be a great solution for the development of young strawberry plants in CEA systems. The trial data suggest that it offers measurable, significant improvements in the accelerated and uniform establishment of young strawberries.

We plant kelp forests around the globe to boost the health and biodiversity of the oceans while locking away CO2 and producing products to offer sustainable alternatives to help transition agriculture to more sustainable practices.

FIND MORE INFORMATION

https://www.kelp.blue/us/field-trial/strawberry


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