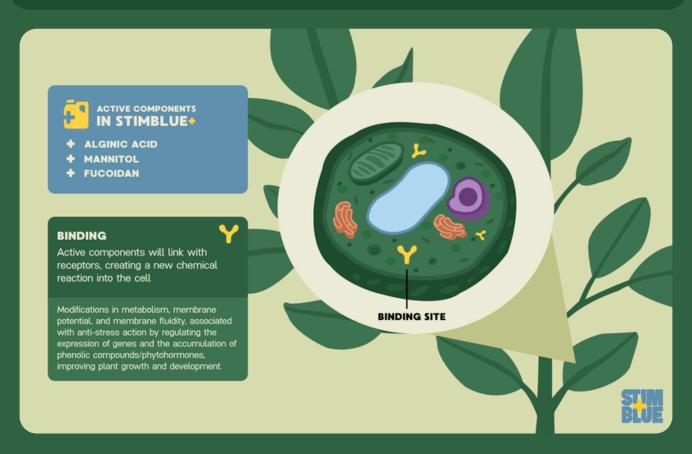


STIMBLUE+

StimBlue+ is a biostimulant made from 100% cultivated Giant Kelp (Macrocystis pyrifera).

Giant Kelp is known for its possession of high quantities of compounds with bioactive properties, fast growth, and CO2 absorption and retention capacity. Seaweed and its extracts are valuable sustainable inputs in agriculture farming, promoting seed germination, plant growth, root development, and stress tolerance in plants.



StimBlue+ suitable for use in Organic Agriculture conforming to the annexes of the European regulation (EU) 2018/848, (EU) 2021/1165 and American Regulation NOP (National Organic Program).

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MAIZE CULTIVATION

Maize (corn) is one of the world's leading staple cereals alongside wheat and rice, reaching a record of 1.23 billion metric tonnes produced in 2023.³ Together, these three crops account for 42% of the world's food in calories.⁴ Maize is a multipurpose crop, serving various sectors beyond food, ranging from biofuels to animal feed.⁴ The global area for maize production spans 193.7 million hectares, achieving an average yield of 5.75 tonnes/ha.⁵ The United States leads in global maize production at 31%, followed by China (24%), Brazil (11%), the EU (5%), and Argentina (4%) and Africa collectively contributes around 8% of global output, with South Africa, Nigeria and Ethiopia among its top producers.³

Maize is often cultivated in well-drained, medium-textured soil, such as loam or silty clay loam, warming up quickly in the spring, promoting better germination and a longer growing season.⁶ Maize growers worldwide face the interconnected challenges of pests and diseases, soil fertility decline, water and climate stress and post-harvest losses, all compounded by rising input costs, resistance to control methods and unequal access to improved seeds and technology. For example, high temperatures and rain deficits in recent years have negatively impacted maize yields in southern-central and eastern Europe, stunting biomass accumulation and shortening the grain-filling period of summer crops.⁷

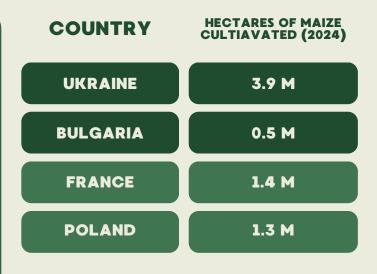
STIMBLUE+ ON MAIZE

Across various trials on maize, StimBlue+ has been shown to promote plant development and productivity, showing bigger grains, taller plants and greater yields. These results demonstrate how StimBlue+ can support farmers in reducing their fertiliser use by 30% without compromising yields. Continue reading to learn how StimBlue+ can support maize cultivation across various locations.

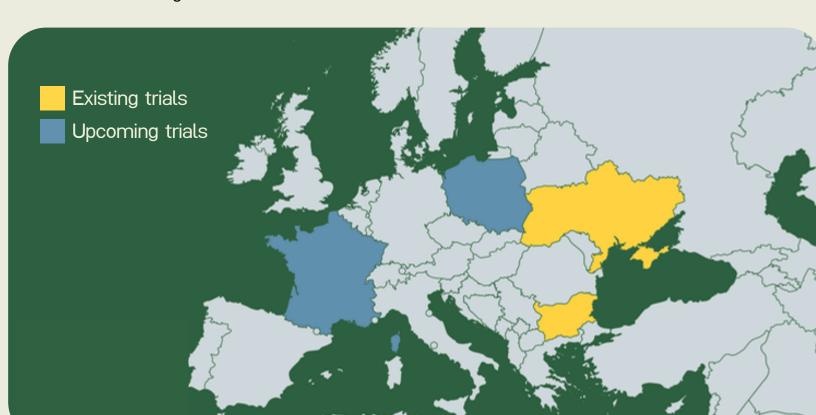


FIELD TRIAL SUMMARY

As of 2025, StimBlue+ has been trialed in Ukraine and Bulgaria and is currently being trialed in Poland and France. Field trials assess StimBlue+ compared to standard cultivation practices (control) and a leading seaweed-based biostimulant competitors using Ascophyllum nodosum or Ecklonia maxima.



The impact of Europe's maize sector goes beyond its volumes. The majority of European maize is used as animal feed (silage and grain), making it essential for the continent's dairy, beef and pork industries. In Western Europe, particularly France, maize yields are among the highest globally due to advanced agronomy and mechanization. Between 2020 and 2025, average production in the EU reached +8.8 million ha and +62 million tonnes with an average yield of 7.06 tonnes/ha.8 Within the EU, France, Poland, Romania and Hungary lead maize production, with Ukraine and Russia as significant contributors outside of the EU.9



SUGGESTED APPLICATION

For optimal results: apply 2-3 applications of StimBlue+ at 1 L/ha.

Application conditions: In the morning or late in the day, during nonsunny or humid weather.

FIRST APPLICATION

Apply 1 L/ha of StimBlue+ to the soil during the sowing process (apply to the seeds in the furrow using a 20 cm or 25 cm nozzle, before covering with soil) | BBCH00.

SECOND APPLICATION

Apply StimBlue+ foliarly at a rate of 1 L/ha, diluted at 0.2-2% in a water tank | F//BBCH25-30 stage - early tillering.

Optional: In case of anticipated stress (e.g., heat wave, drought, hail): apply 1 L/ha of StimBlue+ 3-4 days before the event.





UKRAINE 2024



LOCATION OF TRIALS



SEASON

APR - OCT 2024

SOIL TYPE

CLAY LOAM

CLIMATE

Temperate - no dry season, hot



MACROCYSTIS VS ECKLONIA

TRIALS

Standard conditions + fertiliser reduction

-30%

fertiliser reduction while retaining yield

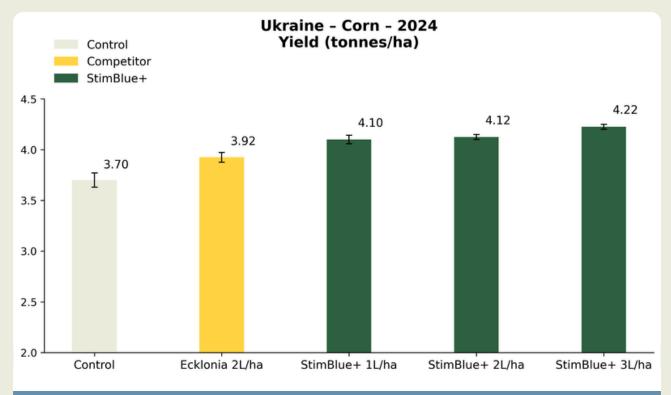
+11-14%

increased yield per hectare

HIGHER YIELDS

Higher yields for maize growers mean higher output per hectare, translating to lower input costs (e..g, fertiliser) per hectare and higher revenues. Biostimulants have distinct effects depending on the crop, soil, climate, and more. By assessing StimBlue+ against a control and a leading Ecklonia-based competitor, we can evaluate the effectiveness of our Macrocystis-based biostimulant for boosting yields in this specific context.

- ♣ In all three trials, plots treated with StimBlue+ at 1, 2 and 4 L/ha showed higher yield compared to the control and competitor. These differences were statistically significant.
- In the standard trial, StimBlue+ yielded between +11-14% per hectare compared to control and between 4-8% per hectare compared to the competitor. This means that StimBlue+ generated an additional 0.5-1 ton per hectare, leading to an extra +\$60-80 ha/tonne of maize at the current evaluation*.



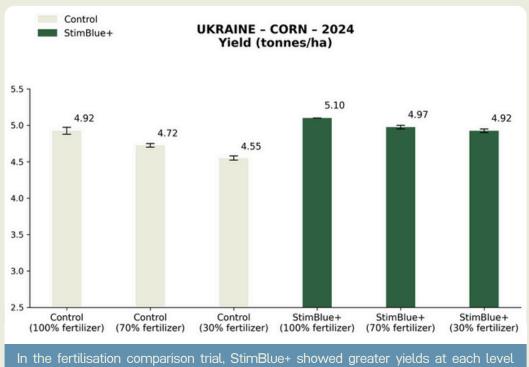
In the standard trial, StimBlue+ generated consistently higher yields compared to both the control and competitor.

^{*} Economic evaluation of the treatments were calculated according to a farm gate price of \$255/tonne.¹⁰

HIGHER YIELDS

at different levels of fertilisation

Positive results were also seen in the trials with different fertilisation levels. For all levels of fertilization (100% fertilizer, 70% fertilizer and 30%) fertiliser), applying StimBlue+ showed a positive trend. Positive differences are more evident as the use of fertiliser is reduced, highlighting the biostimulants' positive effects in the presence of a stressor.



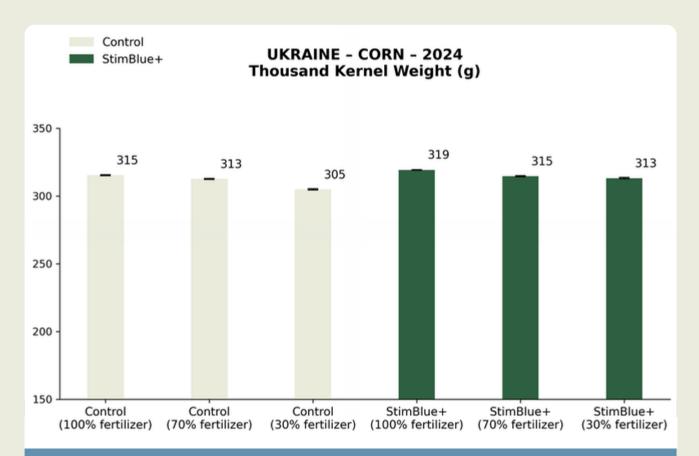
of fertilisation (100%, 70%, and 30%).

IELD DIFFERENCES BETWEEN PLO	TS
100% fertilizer & StimBlue+ (vs. 100% fertilizer)	+4%
70% fertilizer & StimBlue+ (vs. 70% fertilizer)	+6%
30% fertilizer & StimBlue+ (vs. 30% fertilizer)	+8%

With increasing regulations across Europe to mitigate nitrate pollution from agricultural fertiliser use, these results demonstrate how StimBlue+ can support farmers in reducing their fertiliser use without compromising yields.

THOUSAND KERNEL WEIGHT

- Furthermore, plots treated with StimBlue+ showed between 0.6% and 2.7% greater thousand kernels weight (TKW), with ± 2 and 4 grams per 1000 kernels.
- TKW is the weight, in grams, of 1,000 seeds. The bigger the seeds, the higher the TKW. By knowing the weight of a thousand kernels, farmers can calculate the optimal sowing rate and avoid risks of over/underplanting, leading to competition for nutrients/moisture, and unnecessary costs.



In the fertilisation comparison trial, StimBlue+ showed increased thousand kernel weight at each level of fertilisation (100%, 70%, and 30%).

BULGARIA 2024



LOCATION OF TRIALS



BULGARIA



SEASON

APR - SEP 2024



MACROCYSTIS VS ECKLONIA

CLIMATE

Temperate - no dry season, hot

+\$125

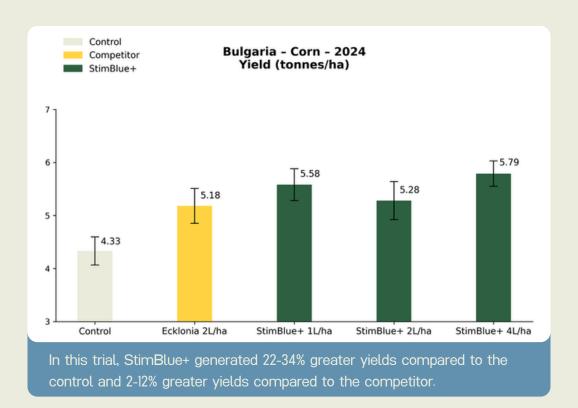
increased economic returns

+14-29%

increased yield per hectare

HIGHER YIELDS

- Across all three trials conducted, the application of StimBlue+ at 1, 2, and 4
 L/ha increased yields by +14-34% compared to control.
- At just 1 L/ha, StimBlue+ yielded an increase of +14-29% (+\$125-285/ha)* compared to control.

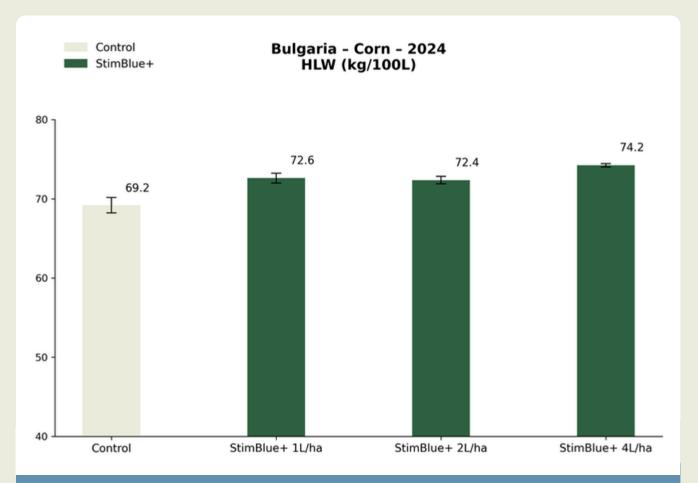


Maize yields are correlated with seed weight and kernel density. Therefore, these results demonstrate how StimBlue+ can boost maize yields by increasing seed weight and kernel density. Keep reading to learn more about what this study reveals about these indicators.

^{*} Economic evaluation of the treatments were calculated according to a farm gate price of \$255/tonne.10

HECTOLITER WEIGHT

- Plants treated with StimBlue+ showed a consistent positive trend in hectoliter weight, compared to control, with an increase between +2-3%.
- The Hectoliter Weight (HLW) was measured by Sagea as a basic evaluation of maize quality, measuring how tightly kernels are packed. Generally, a higher HLW indicates higher kernel density, and, as a result, dry matter. The higher the HLW, the more a farmer may be paid for maize bushels.

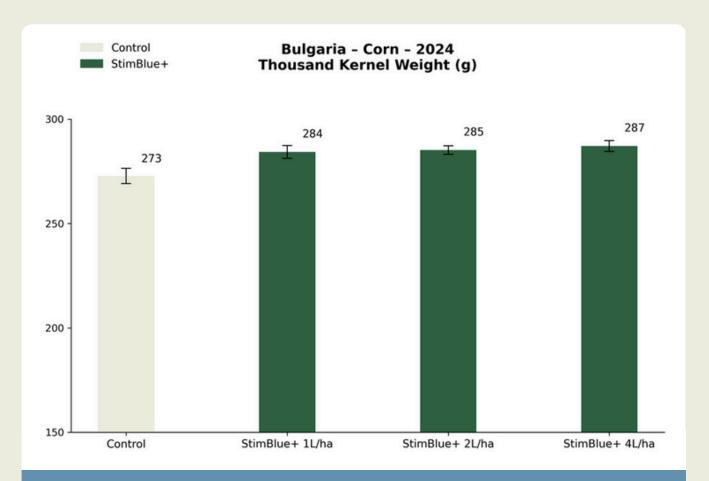


Plots treated with StimBlue+ showed a consistent positive trend compared to control with an increase between +2-3%.

BIGGER SEEDS

TKW is the weight, in grams, of 1,000 seeds. The bigger the seeds, the the higher the TKW. By knowing the weight of a thousand kernels, farmers can calculate the optimal seeding rate and avoid risks of over/underplanting, leading to competition for nutrients/moisture, and unnecessary costs.

At harvest, plots treated with StimBlue+ consistently showed a higher thousand kernel weight (TKW) for the different trials compared to the untreated plots by 4% to 5%.



Plots treated with StimBlue+ showed consistently higher TKW compared to control (4-5%).

HIGHER YIELD, MORE \$

COUNTRY

YIELD*

ECONOMIC RETURNS/HA*

UKRAINE

+11%

+\$100

BULGARIA

+21%

+\$228



*Yield: Average % yield increase per hectare across all trials at a dosage of 1 L/ha. *Economic returns/ha: Average increase in economic returns per hectare in USD across all trials at a dosage of 1 L/ha.

TESTIMONIALS



"The [maize] crop stayed green throughout. The crop was visibly healthy and resilient, despite the dry growing season. Even under stress, they kept photosynthesizing and growing - something you could clearly see just by looking at the field."

DAVID RAEY

Arable crops farmer in the United Kingdom



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ABOUT STIMBLUE*

StimBlue+ is a biostimulant made from 100% cultivated Giant Kelp (Macrocystis pyrifera), has shown to be a great solution for maize cultivation. The trial data suggests that it offers measurable, significant economic benefits, with greater yield and bigger seeds.

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.





