

Bayside Farms

Jay Lane - Elizabeth City, NC

Jay Lane farms 1600+ acres of corn and soybean and is focused on improving soil biology and implementing regenerative management practices as a means of improving his farm's profitability. Jay recognizes improving soil health, production increases, and reducing synthetic inputs all go together. This is Jay's 3rd consecutive year using EnSoil Algae™ and getting materially significant gains. The farm has reduced applied N 45 lbs on corn, and uses no fertilizer on beans.

On average, over three very different growing seasons, the total amount of viable pods on the top three nodes of the soybean plants doubled. In one trial the algae treated soybeans showed a 33 bushel advantage over untreated.



This EnSoil Algae™-treated soybean plant is maturing faster than untreated soybeans. It's nodulating at its second trifoliate, already fixing its own nitrogen!

Soybeans:

- 2023: 13 bu/acre increase (treated vs. untreated) with EnSoil Algae™ and an additional \$175.24/acre. Applied In-furrow, V8, R1.
- 2024: 13 bu/acre increase (treated vs. untreated) with EnSoil Algae™ with 89% ROI on a \$12/acre cost of algae.
- 3rd year in a row with no fertilizer use, and with improved macroindexes on fertility and available NPK. Soil testing indicates that soil biologicals are flourishing.



Soybeans: tops of plants are bigger, better uniformity, excellent color, no spotting, no insect pressure and no insecticide use.

In corn, I can cut out about \$70/acre in fertilizer cost and maintain yield with 2 applications of EnSoil Algae™. On fertilized corn, I am getting at least a 25 bushel increase in yield, achieving a 1050% ROI.

Corn:

- 2023: 26 bu/acre increase (treated vs. untreated) with EnSoil Algae™, see below (two 25-acre EnSoil Algae™-treated fields, in between 25 acres as a control with no EnSoil Algae™- all of 75 acres of corn got 43 units of N)
- 2024: 27 bu/acre increase (treated vs. untreated) with EnSoil Algae™

My average corn ear was often two more rows around than the untreated corn. In side by sides, there was an average 1.55 rows around increase. In some cases there was no count difference but the kernel depth was greater.



The lighter tint on the control field (no EnSoil Algae™) in the middle shows a nitrogen deficiency at V10 and was corrected with additional synthetic nitrogen (2023).

My available phosphorus is lower with added P fertilizer, but higher where I have algae and no fertilizer.