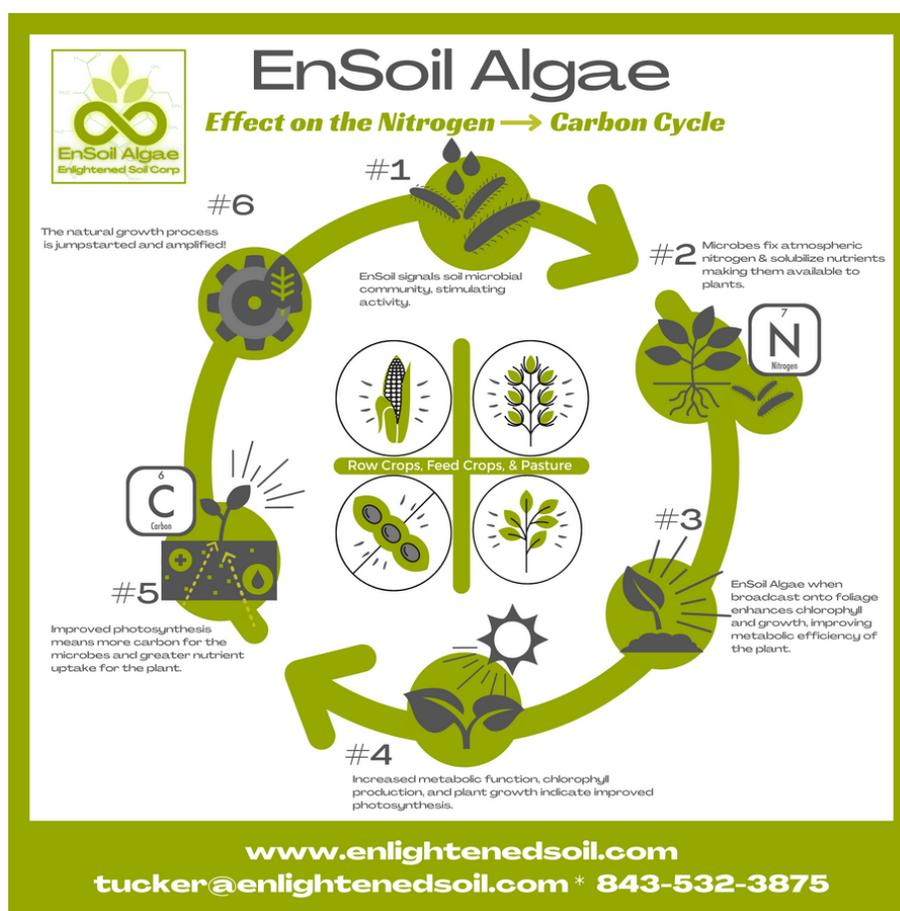


How EnSoil Algae Works

EnSoil Algae (*C. vulgaris*) releases signaling molecules (auxins, cytokinins, and others) that stimulate and grow microbial populations. This can be measure by:

- Haney Tests – soil respiration, water extractable carbon, water extractable nitrogen, and soil organic matter all improve with application of EnSoil Algae
- PLFA Tests– soil biomass is shown to increases after application of EnSoil Algae
- Biome Makers BeCrop tests show growth in microbial population, increase in species count, and variety and a balancing of bacterial/fungi ratios

EnSoil Algae enhances chlorophyll improving photosynthetic capacity. Improvement of photosynthetic capacity results in improved growth and color and greater exudation of carbon to the soil which now houses a stimulated, growing microbial community.



[Reference chlorophyll academic study here.](#)



How EnSoil Algae Works



EnSoil Algae improves nutrient uptake, stress adaptation, and plant health.

- Plant tissue analysis consistently show better nutrient values for both macro and micro-nutrients in crops treated with EnSoil Algae. We believe the algae improves metabolic function and is serving to increase utilization of nutrients in the plant.
- Healthy microbial populations more effectively solubilize bound up nutrient in the soil making it available for plant uptake.
- Fungal communities in the soil act as nutrient scouts extending the plants capacity to find nutrients well beyond the roots
- Academic studies have demonstrated a significant increase in production of enzymes related to abiotic stress adaptation such as drought and salinity when *C. vulgaris* is applied. [Link](#)
- BiomeMakers BeCrop reports consistently show improvement in stress adaption function where EnSoil Alage has been applied.



How EnSoil Algae Works

EnSoil Algae reduces need for synthetic inputs while improving yields.

- EnSoil Algae clients can attest to a significant reduction in synthetic inputs as a result of EnSoil Algae applications. References are available.
- University trials clearly demonstrate EnSoil Algae to be as effective as NPK for growing crops

Fields treated with EnSoil Algae show less disease and weed pressure.

- On farm observation consistently indicates healthier, more vigorous plants with less disease and weed pressure where EnSoil Algae is applied. References are available

EnSoil Algae works because we have developed a growing process that allows algae to live in the dark. Green algae and other plants are autotrophic: they make their own food with photosynthesis, without consuming organic material. Animals and bacteria are heterotrophic: we eat other organic material. Algae are capable of heterotrophic metabolism, and we have developed a new growing process that induces *Chlorella vulgaris* to consume organic material and continue growing in the dark, while using photosynthesis in the light. This development allows EnSoil Algae to live in dark storage for the length of a growing season, at least 4 months.

There are other bio-stimulants on the market, many of them algae extracts. Our experience and published research show that live *Chlorella vulgaris* has benefits that haven't been demonstrated with extracts. At this time EnSoil is the only live algae that is commercially available.

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