

EnSoil Algae Increases Water Extractable Organic Carbon (WEOC), Phosphorus, Potassium, and Calcium in 2025 Iowa Corn Trial

Nutrients Before and After EnSoil Algae Application

Zone 2

| Treatment | WEOC (ppm) | Haney P (H3A) | Haney K (H3A) | Haney Ca (H3A) | Date of Test |
|---------------|------------|---------------|---------------|----------------|--------------|
| Before EnSoil | 180 | 5.6 | 38.7 | 801 | 6/9/2025 |
| After EnSoil | 221 | 11 | 45.3 | 897 | 7/18/2025 |

Zone 3

| Treatment | WEOC (ppm) | Haney P (H3A) | Haney K (H3A) | Haney Ca (H3A) | Date of Test |
|---------------|------------|---------------|---------------|----------------|--------------|
| Before EnSoil | 191 | 7.2 | 45.6 | 731 | 6/9/2025 |
| After EnSoil | 207 | 16.4 | 55.9 | 815 | 7/18/2025 |

EnSoil application led to clear increases in soil carbon and key plant-available nutrients, helping support healthier, more productive soils in just six weeks!

RESULTS: Soil testing before and after EnSoil application in two corn zones showed consistent, meaningful improvements across several key indicators of soil health. Both zones experienced notable increases in water extractable organic carbon (WEOC), which reflects a boost in the soil’s supply of easily accessible carbon for beneficial microbes.

In addition, the levels of plant-available phosphorus, potassium, and calcium all rose following EnSoil treatment, signaling improved nutrient availability for crops. These results suggest that just one application of EnSoil at 8 oz per acre can quickly enhance soil carbon and nutrient profiles—important steps for supporting healthy plant growth and more resilient, productive fields.



Trial Description: This set of data was collected by Guy Fishman, who submitted Haney Soil Tests before EnSoil application on 6/9/2025 and again on 7/18/2025 after EnSoil application.

Application Description: EnSoil was applied at a rate of 8 oz per acre.



Trial Design

Grower: Guy Fishman

Location: Aurelia, IA

Haney Soil Tests Submitted:

Before Treatment #1: 6/9/2025

After Treatment #2: 7/18/2025

EnSoil Algae Treatment:

- Before EnSoil = Untreated
- After EnSoil = Treated

Goal: To evaluate the impact of EnSoil application on soil health and nutrient availability using Haney Soil Test results.

More specifically, the trial aims to determine whether applying EnSoil at 8 oz per acre leads to measurable improvements in:

- Water Extractable Organic Carbon (WEOC)
- Plant-available phosphorus (P)
- Plant-available potassium (K)
- Plant-available calcium (Ca)

By comparing soil test results before and after EnSoil treatment, the trial seeks to demonstrate whether EnSoil can enhance soil carbon and nutrient levels, which are important for crop growth and soil microbial activity.

Measurements Taken:

Water Extractable Organic Carbon (WEOC, in ppm):

- Indicates the amount of easily accessible organic carbon in the soil, which supports nutrient cycling by soil microbes.

Haney Phosphorus (P, H3A extractable, in ppm):

- Measures plant-available phosphorus, which is crucial for crop growth and development.

Haney Potassium (K, H3A extractable, in ppm):

- Measures plant-available potassium, important for plant health and yield.

Haney Calcium (Ca, H3A extractable, in ppm):

- Measures plant-available calcium, which helps with plant structure and nutrient uptake.

These measurements were taken both before and after EnSoil application in two different corn zones to assess changes in soil health and nutrient availability.

