Crop-Tech Consulting Inc.

2025 Beyond the Basics

5-part series on the 4R systems approach to soil tests, fertility, and nutrient management.

11 CEUs applied for

Session 1 12/2
- The Foundation of a Good Soil Test

Session 2 12/4
- Reading Between the Lines on Your Soil Test
- A Deep Dive into Phosphorus

Session 3 12/9
- Drilling Down on Calcium and pH
- Sifting out Lime Surprises

Session 4 12/11
- The ABCs of Potassium
- All Things Nitrogen

Session 5 12/16
- Understanding the Soil Ecosystem

Videos are released on Tuesdays and Thursdays

To Register :

⇒ Register at: https://www.croptechinc.com/BeyondTheBasics
⇒ You will receive an email with a username and password to log into the viewing site
⇒ Videos will be on a metered release at 12:01 AM on 12/2, 12/4, 12/9, 12/11, 12/16
⇒ You can submit questions on the viewing site and a Q & A video will be posted after 12/16 answering questions that were sent in that didn't already get answered.
⇒ Your log in and password will get you access to the material through January 16th, 2026.

Phone: 646-801-0591 Email: Events@CropTechConsulting.com Website: www.croptechinc.com

Beyond the Basics

Session 1 – Released: Tuesday, December 2, 2025

The Foundation of a Good Soil Test

⇒ Major schools of thought for how to pull samples and write recommendations
⇒ What method Crop-Tech uses and why
⇒ What the soil test can tell you
⇒ Why we build zones in a field, and how that plays into a systems approach
⇒ Using layers of data to build your zones (aerial, LiDAR, yield maps, soil lines)

⇒ The importance of knowing before making a recommendation:

* How the sample was pulled
* When the sample was pulled
* What lab ran the test, and what extraction method was used
* What units are the results reported in

Session 2 – Released: Thursday, December 4, 2025

Reading Between the Lines on Your Soil Test

⇒ How to read the values reported and how to interpret them to make the best management decisions regarding:
* Organic Matter
* Cation Exchange Capacity
* P1 and P2
* Base Saturation
* pH

A Deep Dive into Phosphorus

⇒ Availability in the soil, and the plant uptake process
⇒ What role it plays in the plant
⇒ Phosphorous tie-up and what that changes in terms of management
⇒ All things starter fertilizer

Beyond the Basics

Session 3 – Released: Tuesday, December 9, 2025

Drilling Down on Calcium and pH

- ⇒ Availability in the soil, and the plant uptake process
- ⇒ What role it plays in the plant
- ⇒ How to use the pH values on a soil test to decide when, how much, and what type of lime to apply
- ⇒ What can cause false or varying pH results

Sifting out Lime Surprises

- ⇒ How to evaluate a lime source
- ⇒ Vocabulary for understanding acronyms on a lime sample
- ⇒ How lime quality standards differ between states.
- ⇒ Why a good spread pattern matters and overcoming obstacles to achieve it.

Session 4 – Released: Thursday, December 11, 2025

The ABCs of Potassium

- ⇒ Availability in the soil and what affects it
- ⇒ Plant uptake process and what impedes it
- ⇒ What role it plays in the plant
- ⇒ What causes a K+ deficiency, how to identify it, and what it does to the plant
- ⇒ Effects of an abundance of K+ creating imbalances in the soil

All Things Nitrogen

- ⇒ Different sources: Ammonium Nitrogen (NH_4^+), Nitrite (NO_2^-), Nitrate (NO_3^-)
- ⇒ The conversion process between the different forms, and factors that influence it
- ⇒ What source the soil microbes like best, and what the plants use most efficiently
- ⇒ How and when to protect against volatilization and leaching
- ⇒ Nitrogen Extenders
- ⇒ Illinois Soil Nitrogen Test (ISNT) and how we use it to variable rate Nitrogen
- ⇒ VRT Nitrogen and it's affect on soil health and organic matter

Beyond the Basics

Session 5 –Released: Tuesday, December 16, 2025

Understanding the Soil Ecosystem

⇒ Examining soil microbes' role in growing a crop
- Heterotrophs vs autotrophs
- Bacteria and fungi, small particles with big roles
- Stages of organic matter
- The carbon cycle and the importance of the carbon to nitrogen ratio
- Nutrient cycling-what is involved and when do you see returns

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