

Crop-Tech Consulting Inc.

2021 Winter Beyond the Basics

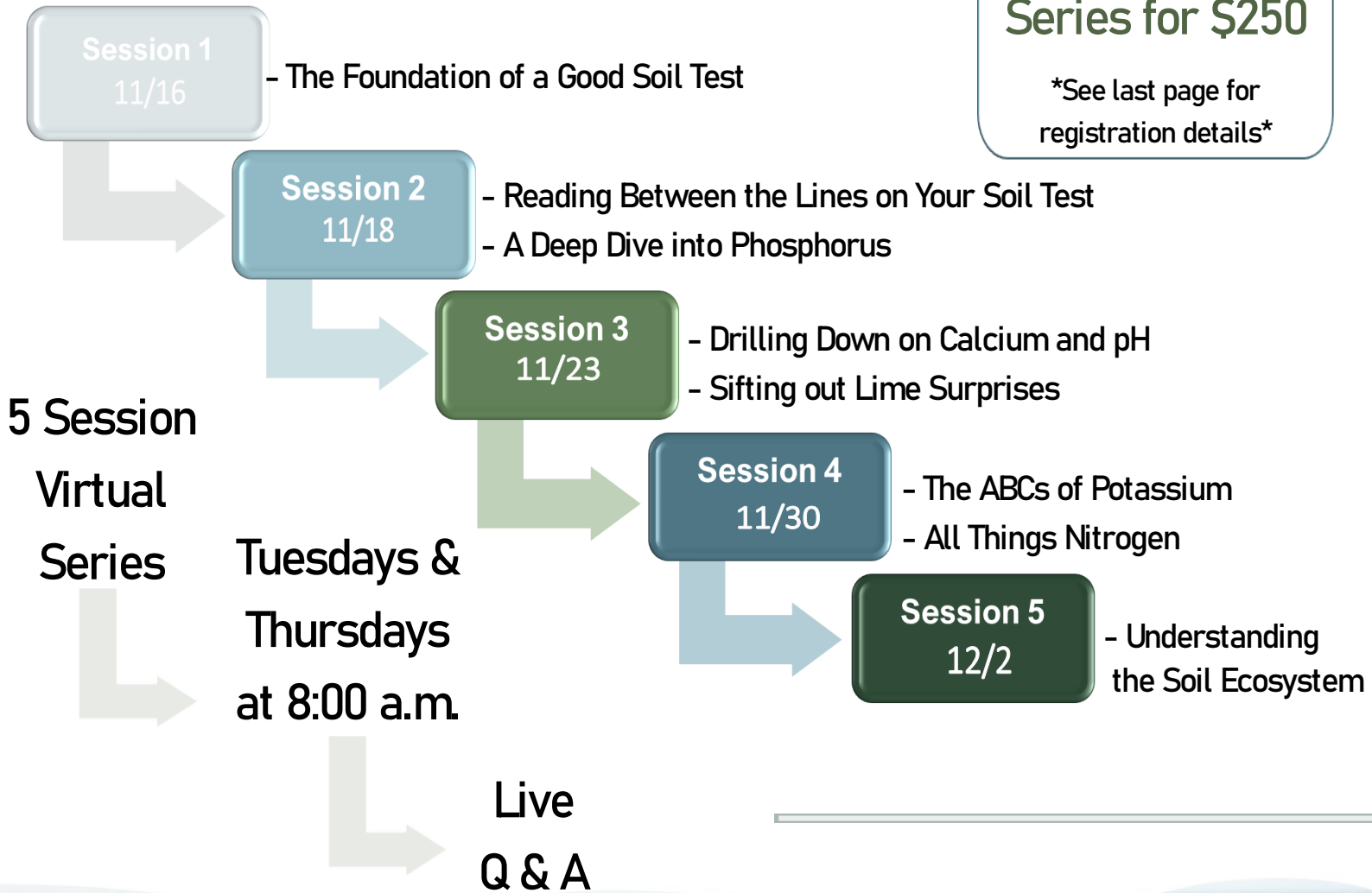
5-part series on the 4R systems approach to soil tests, fertility, and nutrient management.

15 CEUs
applied for

5 Session

Series for \$250

*See last page for
registration details*





Beyond the Basics



Session 1 –Tuesday, November 16, 2021

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

Each session will start at 8:00 a.m.
and, depending on Q and A,
will last around 3 hours



Session 2 –Thursday, November 18, 2021

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



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Session 3 –Tuesday, November 23, 2021

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.

No Session on Thursday, November 25th (Thanksgiving)



Session 4 –Tuesday, November 30, 2021

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

Live Q and A each session.
(No camera or microphone required)

All Things Nitrogen

- ⇒ Different sources: Ammonium Nitrogen (NH₄⁺), Nitrite (NO₂⁻), Nitrate (NO₃⁻)
- ⇒ 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

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Session 5 –Thursday, December 2, 2021


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

Details

 Sessions will be on Tuesday and Thursday starting on Tuesday, November 16th and will run for 2.5 weeks (11/16, 11/18, 11/23, [Skip Thanksgiving], 11/30, 12/2)


 Each session will start at 8:00 a.m. and, depending on the live Q and A, will last around 3 hours

 Each session will be posted by the next day for review, accessible to registrants via a password. Materials will be left up for two weeks following the last session (Material comes down December 16th)

 The virtual meeting will be on the WebinarJam platform. No camera or microphone needed. Attendees can submit typed questions during the meeting via the chat box.

To Register Visit:

crop-tech-consulting-inc.ticketleap.com/2021-beyond-the-basics/

 We are applying for 15 CEU credits for the series. There must be a registration for each person submitting a CCA number to the sign-in sheet. Per organization guidelines, those that watch it live can be included on the sign-in sheet. Those that watch the recording later can self-report the credits.

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