



# Corn & Soybean News

February 2021

Volume 3 Issue 1

## Considerations for Soybean Planting in Kentucky



**Figure 1.** Soybean seedlings at VE (emergence) growth stage.

**I**n general, to maximize the chances of successful soybean establishment and the best chances for maximum yield, conditions at planting and following should be:

- Soil temperatures to be and remain at 50°F or greater
- Low risk for killing freeze from the soybean 'crook' stage to VC (vegetative cotyledon) stage

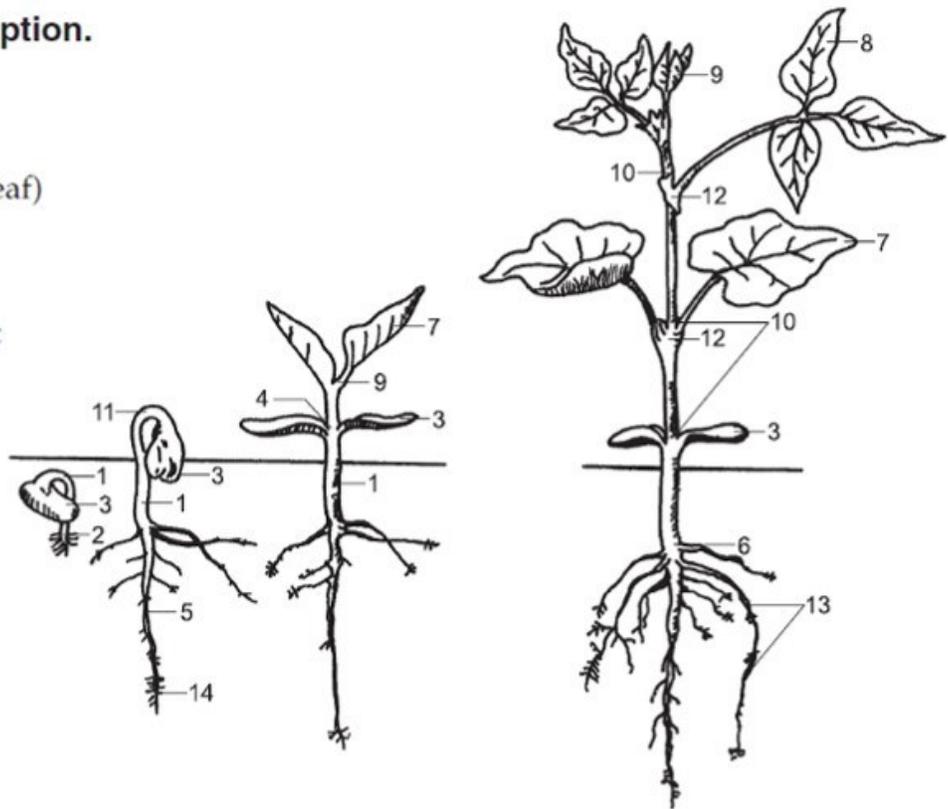
Additional considerations when soybean are planted into soils that are less than about 60°F:

- Know the vigor of each seed lot
  - Several laboratories offer such testing including University of Kentucky's Regulatory Services (<http://www.rs.uky.edu/regulatory/seed/service/TestDescriptions.php>)
  - Seed planted into cool conditions MUST have a high vigor or there could be problems with stand establishment
  - Never use a seed lot with "low" vigor when soils are and will remain between about 50 and 60°F
- Use seed treatments
- Plant about 1.5 to 2" deep (but never more than 2")
- Increase seeding rate to off-set additional stand losses that can occur
  - Limited research has shown up to about 25% stand loss with early planting dates
- If the field has a history of Sudden Death Syndrome (caused by *Fusarium virguliforme*)
  - Select a resistant soybean variety
  - Utilize seed treatment known to be effective at controlling SDS
  - But do not delay planting
- Inoculate seed with *Bradyrhizobium japonicum* if the field
  - was saturated for extended periods of time within the past year
  - has a history of poor nodulation
  - has not grown soybean within the last three to five years

**Figure 2.** Image depicting the 'crook' growth stage (second from left). Source: <https://www.ag.ndsu.edu/crops/dry-bean-articles/stages-of-development>.

**Figure 1. Plant description.**

1. Hypocotyl
2. Radicle
3. Cotyledon (simple leaf)
4. Cotyledonary node
5. Tap root
6. Lateral (branch) root
7. First true leaf (unifoliolate)
8. Trifoliolate leaflet
9. Terminal bud
10. Axillary buds
11. Hypocotyl arch
12. Nodes (point of leaf attachment)
13. Nodules
14. Root hairs





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# Kentucky Irrigation Workshop

## February 18, 2021 9-11am (cst)

### TOPICS

#### **Crop Water Demands & When to Irrigate**

Dr. Montse Salmeron

#### **How Soil Dynamics & Variability Determine When to Irrigate**

Dr. Ole Wendroth

#### **When the Kentucky Climate Makes Irrigation Most Likely**

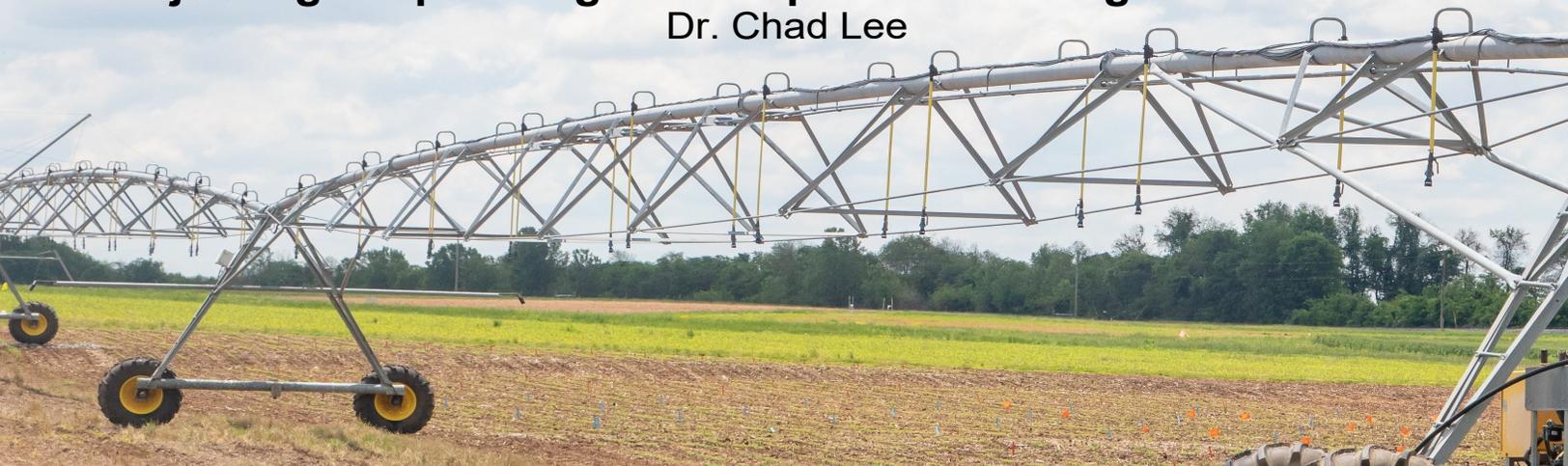
Matt Dixon

#### **How Irrigation Affects Corn Canopy Temperature**

Dr. Carrie Knott

#### **Adjusting Crop Management Options with Irrigation**

Dr. Chad Lee



### Pre-registration required:

<https://uky.zoom.us/meeting/register/tZMtde-ppjkoGdZk5aEnG7awvj9ROmXTa3gi>

Or go to: <https://www.kygrains.info/events> and click on "Virtual Irrigation Workshop"

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**Grain and Forage Center of Excellence**



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Disabilities  
accommodated  
with prior notification.



# MO-KY Soybean Cyst Nematode Webinar Series

**S**oybean cyst nematode (SCN) is the most damaging pathogen of soybean in Kentucky and across the U.S. This pathogen can cause yield losses even though no above-ground symptoms may be apparent.

A three-part webinar series conducted by Dr. Kaitlyn Bissonette (University of Missouri) and Dr. Carl Bradley (University of Kentucky) is coming in February. Each webinar will last 1 hour and will start at 12:00 PM CST. Continuing education units will be available for Certified Crop Advisers and Kentucky Pesticide Applicators.

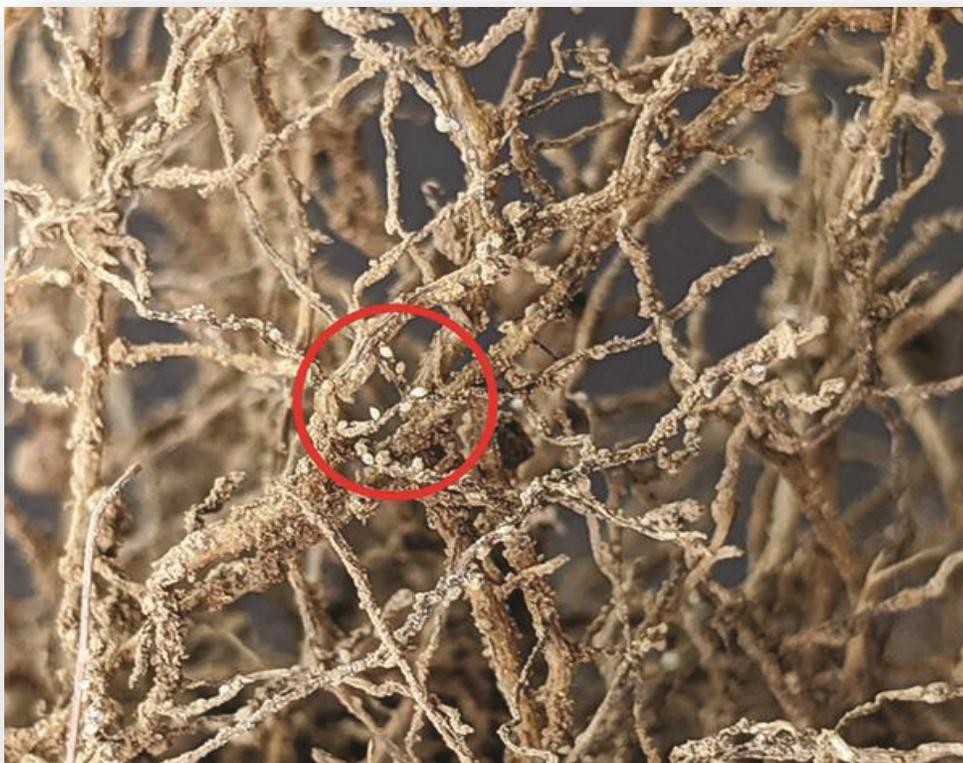


Photo by Carl Bradley, UK extension plant pathologist

**Registration for each webinar is required.**

Below is the title of each webinar, along with the link to register for each individual webinar:

**Part 1 – February 11, 2021 (12:00-1:00 PM CST)**

Soybean Cyst Nematode Basics and Distribution

Register for Part 1 at: [https://zoom.us/webinar/register/WN\\_mfHUvAkwSHCts2X5AFBU8w](https://zoom.us/webinar/register/WN_mfHUvAkwSHCts2X5AFBU8w)

**Part 2 – February 18, 2021 (12:00-1:00 PM CST)**

Soybean Cyst Nematode Management: Variety Resistance and Crop Rotation

Register for Part 2 at: [https://zoom.us/webinar/register/WN\\_3uoRUzAeQcOHqxCbWmXtow](https://zoom.us/webinar/register/WN_3uoRUzAeQcOHqxCbWmXtow)

**Part 3 – February 25, 2021 (12:00-1:00 PM CST)**

Soybean Cyst Nematode Management: Seed Treatments and Sampling

Register for Part 3 at: [https://zoom.us/webinar/register/WN\\_A2tRdecwSV2g1hdDsz1t6A](https://zoom.us/webinar/register/WN_A2tRdecwSV2g1hdDsz1t6A)



# 2021 IPM Training School Virtual Meeting March 10, 2021 Program

## Field Crops Session- Morning

<b>8:15</b>	<b>Welcome-</b> Dr. Ric Bessin
<b>8:30</b>	<b>Management of important foliar soybean diseases in Kentucky</b> Dr. Carl Bradley, University of Kentucky
<b>9:00</b>	<b>Studies on three beetle pests in Soybeans</b> Dr. Raul Villanueva, University of Kentucky
<b>9:30</b>	<b>Break</b>
<b>9:45</b>	<b>Phosphorus fertility for row crop production</b> Dr. Edwin Ritchey, University of Kentucky
<b>10:15</b>	<b>Tackling herbicide resistant weeds now and into the future</b> Dr. Travis Legleiter, University of Kentucky
<b>10:45</b>	<b>Soybean Production Update</b> Dr. Carrie Knot, University of Kentucky

## Horticulture Session- Afternoon

<b>1:00</b>	<b>5 simple steps for reducing nursery weed control costs</b> Dr. Chris Marble, University of Florida
<b>1:30</b>	<b>Fungicides 2021: Resistance and rainfastness</b> Dr. Nicole Gauthier, University of Kentucky
<b>2:00</b>	<b>Teaming up with the good bugs</b> Dr. Jonathan Larson, University of Kentucky
<b>2:30</b>	<b>Break</b>
<b>2:45</b>	<b>Wildlife damage control in fruit and vegetable production systems</b> Dr. Matthew Springer, University of Kentucky
<b>3:15</b>	<b>Water management: Irrigation management, monitoring, efficiencies</b> Dr. Win Dunwell, University of Kentucky

### CEUs

**Pesticide Applicator:** 4 CEUs in specific categories (1A, 10 and 12); **Certified Crop Adviser:** Integrated Pest Management: 4; Soil and Water Management: 0.5; Nutrient Management: 0.5

Online pre-registration: [https://uky.zoom.us/meeting/register/tZctc-yqqTMsh9ABPo\\_ac25xGS7IUZAJkL\\_p](https://uky.zoom.us/meeting/register/tZctc-yqqTMsh9ABPo_ac25xGS7IUZAJkL_p)



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# Useful Resources



<http://wheatscience.ca.uky.edu/home>



<http://kentuckypestnews.wordpress.com/>

## Crops Marketing and Management Update

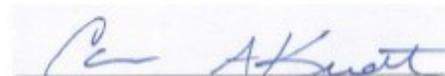


## Upcoming Events



<u>Date</u>	<u>Event</u>
2/18/2021	Kentucky Irrigation Workshop
2/18/2021	Soybean Cyst Nematode Management: Variety Resistance & Crop Rotation
2/25/2021	Soybean Cyst Nematode Management: Seed Treatments & Sampling
3/10/2021	IPM Training School
5/11/2021	2021 Wheat Field Day

  
Chad Lee, Extension Grain Crops Specialist

  
Carrie Knott, Extension Grain Crops Specialist

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