

Louisiana



SWEET POTATO NEWS

Summer 2025

Vol. 20 No. 1

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2025 LOUISIANA SWEETPOTATO MIDSEASON REPORT

Dr. Cole Gregorie, LSU AgCenter Sweet Potato Specialist

From Wet to Watchful: Louisiana Sweetpotato Season Settles In. Like last season, May brought exceptionally wet conditions that delayed planting for some growers. Fortunately, this year's rains extended into June, allowing later plantings to establish successfully under favorable conditions. While July and August have been drier, overall conditions remain positive across the state, and most reports indicate that the crop is progressing well. However, additional timely rains may be needed to finish the season strong.

Acreage for 2025 is expected to remain steady at around 5,500 acres statewide. With planting complete and crop development looking promising, growers are cautiously optimistic. Thanks to the well-timed rainfall, irrigation inputs have been significantly reduced this season. In the southern part of the state, early harvest reports have been positive. The remainder of the state is expected to begin harvesting in the coming weeks. The hope is that the improved early-season conditions will translate into better yields and quality at harvest.

Meanwhile, the LSU AgCenter has wrapped up its foundation seed planting and will soon begin harvesting the earliest portion of its crop, along with research plots across the state. These efforts will provide valuable insights into crop performance and help guide future production strategies.

As the crop enters the later part of the growing season, producers are now focused on, scouting for insect activity as cucumber beetle pressure has been high, around the state. Growers should aim to integrate as many modes of action as possible during their in-season insecticide applications. With continued vigilance and cooperative weather, Louisiana's sweetpotato season is shaping up to be a promising one.



Avoyelles sweetpotatoes in Mer Rouge, LA.

US Sweet Potato Council Engages Top Labor and Administration Representatives in D.C.,

Kay S. Rentzel, NCPN Sweet Potato Coordinator

A few weeks ago, the US Sweet Potato Council Board of Directors met in Washington DC for their Mid-Year Meeting and high-level meetings with the Administration officials at the Department of Labor (DOL), US Department of Agriculture (USDA) and the White House office staff.



Your industry leaders, Caleb Englert, US Sweet Potato Council President (Mississippi); Sarah Alvernaz, US Sweet Potato Council Vice-President (California); Thomas Joyner, Nash Produce (North Carolina); and Board of Director Advisors, Michelle Grainger, NC; Lorin Harvey, MS; and Rene Simon, LA; advocated on behalf of the entire sweet potato industry. Additional industry representatives included Anna Rhinewalt, MS, and Justin Ferguson, MS Farm Bureau.

Meetings were held with Trump Administration senior advisors for:

- Labor – reiterated the escalating costs of labor to the farming operation and lack of local/domestic workforce, requested revisions to the USDA Farm Labor Survey used to calculate AEWR, and expressed thanks to the administration for recognizing the value of ag workers and offered assistance in establishing revised or new labor initiatives;

- Food Safety policy and Make America Healthy Again initiative – highlighted the need to eliminate the use of doubt and fear with consumers on the safety of our nation's food production based on unscientific and outlier studies that feed the false narrative, and discussed how limiting production aids for weed and pest management results in crop yield declines, while causing continual surges in input costs;
- Farm Bill – emphasized the importance of on-going research funding availability for specialty crop producers, encouraged the continuation of conservation programs, and enhanced support of the safety net programs for farm operations;
- Marketing and regulatory programs – requested consideration for AMS fresh sweet potato purchase of the 2025 crop; and
- Trade – discussed the impact of trade tariffs and foreign imports of processed product to our domestic industry.

Follow-up discussions are scheduled for Executive Director, Kay Rentzel, who continues working with federal agencies to ensure sweet potato producers remain central to the issues facing them.

Sweetpotato Variety Update: Avoyelles, LSU AgCenter: Sweetpotato Breeding Program

Dr. Don LaBonte, LSU AgCenter Sweetpotato Breeder

Sweetpotato varieties all have their quirks. I wish they would all behave the same but that's just not going to happen! Avoyelles (18-100) is a good example. Yes, pre sprouting is a definite or plants beds just don't deliver. We also found that it has to be treated gently when bedded. It has acceptability to soft rot so you really need to avoid dropping the storage roots in the hoppers. Gently placing the roots into beds will greatly reduce this breakdown. We saw mixed results this spring - very solid beds when a careful approach was taken. Yes, not ideal however, that earliness is a big deal. A South Louisiana producer harvested 700 plus bushels per acre crop at the end of July!

Graduate Student Highlight from Plant Pathology,

Dr. Imana Power, LSU AgCenter Plant Pathology

Clayton Blake placed second in the LSU AgCenter Department of Plant Pathology Graduate Student Competition with his presentation “**Hyperspectral image analysis: Utilizing sweetpotato potyviruses for image-based pathogen detection**”. Clayton presented updates on his research during the Plant Health 2025 meeting of the American Phytopathological Society. Clayton’s research is part of the CleanSEED project aimed at using hyper-spectral imaging to detect symptomless virus-infected sweetpotato in the field. This is done by generating hyperspectral image libraries of healthy plants and plants infected with the sweet potato feathery mottle virus (SPFMV), as well as machine learning (ML) models capable of detection.



Graduate Student Mr. Clayton Blake

Healthy and infected plants were imaged at critical developmental stages. These images were used to develop preprocessing procedures, including masking and noise reduction. Clayton has identified models that can detect sweetpotato plants infected with SPSMV, but still asymptomatic, with 85% accuracy.

Aphids, ever present vectors of sweetpotato viruses: a CleanSEED update.

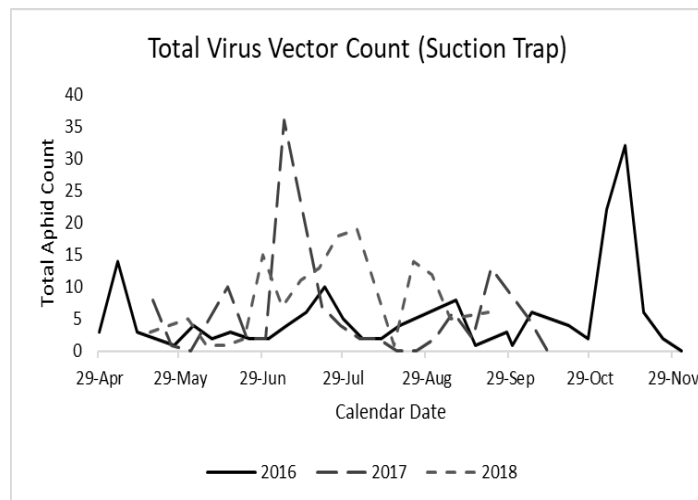
Dr. Jeff A. Davis, Professor and Entomologist

Reuel Pablo, Graduate Student

Dr. Imana Power, LSU AgCenter Plant Pathology

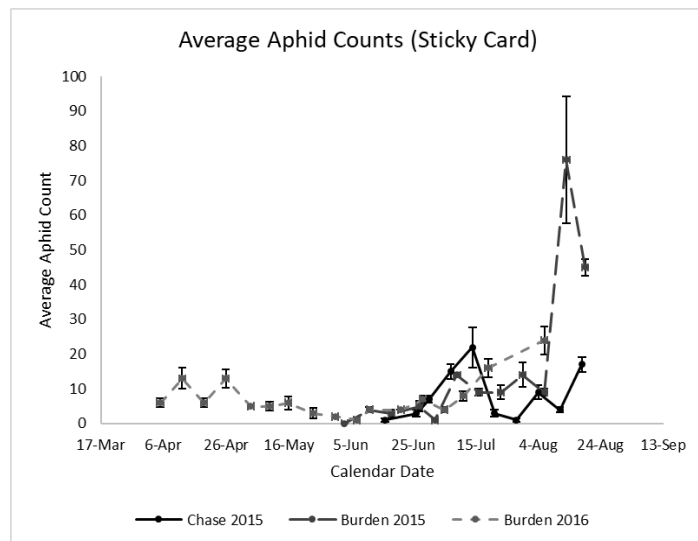
The most important sweetpotato viruses in Louisiana include sweetpotato feathery mottle virus, sweetpotato virus G, sweetpotato virus C, and sweetpotato virus 2. All four viruses can co-occur within a single storage root and can result in up to 40% yield loss. Aphids transmit these

viruses quickly when probing on vines and leaves. Unfortunately, aphids are present in Louisiana throughout the sweetpotato growing season (Fig 1). Using a section trap that samples flying aphids 30 ft above the ground, we found aphids moving throughout the area during the entire growing season. This means viruses can be transmitted throughout the entire growing season as well.



Aphids caught in suction trap in Chase, LA.

In addition, previous work by the LSU AgCenter has shown the period of late July to early September to be particularly active aphid time (Fig. 2). This coincides with higher virus titer levels, creating a perfect storm for plant virus transmission by aphid vectors. What can producers do?



Aphid counts in sweetpotato fields using sticky cards.

Keeping sweetpotatoes virus free is a year-long process that currently relies on two main tactics; virus tested seed and

weedy-host removal. It begins with purchasing and bedding certified virus tested clean seed, removing the primary virus inoculum source. Next, keeping your field and fencerows weed-free prevents secondary virus inoculum from entering the field through weedy hosts such as *Ipomoea hederacea* (ivy-leaved morning glory), *I. cordatotriloba* (tievine), *I. lacunosa* (white morning glory), and *Jacquemontia tamnifolia* (hairy clustervine). Without virus inoculum, aphids cannot acquire and transmit viruses.

Are there alternative control tactics? Part of the research being conducted by the LSU AgCenter through the CleanSEED grant is addressing this question. Under the direction of Drs. Jeff Davis and Imana Power, graduate student Reuel Pablo is testing alternate control methods focused on soybean crop borders, crop oils, and kaolin clay (Fig. 3). The soybean crop border arrests aphid flight, causing the aphid to land on the soybean and probe. Since soybeans are not a host for sweetpotato viruses, when aphids probe on the soybean, they lose the virus particles, and when the aphids move to the sweetpotato and probe again, the aphid is virus-free and does not transmit. Oils prevent aphids from acquiring viruses and deter aphids from probing. Kaolin clay deters aphid landing. Combining all these tactics into a single management plan, with knowledge of when aphids are landing within sweetpotato fields, has the potential to reduce virus transmission, keeping sweetpotatoes virus free.



Soybeans surrounding sweetpotato sprayed with oil or kaolin clay.

In summary, aphid vectors of sweetpotato viruses are present year-round but landing rates increase during the latter half of the growing season when virus titers are higher. To reduce the chance of virus infection in your crop, remove virus inoculum by planting virus-tested clean seed

and removing weedy virus hosts. Results from studies using alternative control methods such as crop oils, kaolin clay, and crop borders will be available soon. In the meantime, begin trying out these sustainable integrated pest management methods to see which works best on your farm.

Loss of a Beloved Team Member, Mr. Jeff Murray

Research Associate

Department of Entomology, LSU AgCenter



It is with heavy heart and deep sadness that I announce the passing of Mr. M. Jeff Murray. Mr. Jeff was a long-time research associate with the Department of Entomology at the LSU AgCenter. He

worked for thirty-five years on sweetpotato. Originally from Massachusetts with a B.A. in anthropology and an M.A. in geography, he joined the department in 1990 when he began working with Dr. Larry Rolston on sweetpotato breeding, IPM of sweetpotato weevil, and on taxonomic catalogs for several families of Hemiptera. From 1994 until 2012, he worked in sweetpotato IPM, particularly chemical control of root feeding insects with Drs. Abner Hammond Jr. and Rick Story. In 2012, he joined the Davis Lab and has worked on multiple soybean and sweetpotato IPM projects. Many of you had the pleasure of knowing him. Jeff was jovial, kind, and always willing to do anything for anyone. He will be greatly missed as a colleague and a friend.

Sweet Potato Award Winners:

Faculty:

Dr. Arthur Villordon: was recently awarded the Floyd S. Edmiston, SR. Professorship in Agriculture and Natural Resource Management. This is a very well-deserved award that highlights the year of work that has supported the Louisiana and worldwide Sweet Potato Industry.



Student:

Marissa B. Barbosa: Placed second in the scholars Ignite competition at the 2025 ASHS Meeting in New Orleans with her presentation: **Modeling the Timing of Sweetpotato Storage Root Initiation and Initial Bulking Stages**



Lisa Arce: Placed first in the PhD Student Competition at the 2025 National Sweetpotato Collaborators Meeting with her presentation: **Genotype Reveal: Variation in Nitrate and Phosphate Signaling Responses Highlight Sweetpotato Cultivar Differences During the Onset of Storage Root Formation**



Mae Ann Bravo: Placed second in the PhD Student Competition at the 2025 National Sweetpotato Collaborators Meeting with her presentation: **Variation in Root Architectural Adaptations in Putatively Low- and High Lead-Accumulating Sweetpotato Cultivars**



Upcoming Events:

LSU AgCenter Sweet Potato Research Station **2025 Field Tour** **August 13** *Hosted by LSU AgCenter*

Sweet Potato Research Station
130 Sweet Potato Rd.
Chase, LA 71324
Registration: 7:45 a.m.
Field Tours: 8:15 - 10:30 am

Sponsored by  **Black Gold**
FARMS

2026 Sweet Potato National Convention



Summer Recipe

Sweet Potato Poutine

Louisiana is a leader in the production of Sweet Potato Fries. Upgrade your comfort food this season with this game changer.

Ingredients:

- 2 3 tablespoons vegetable oil, divided
- 1 cup chopped smoked sausage
- ½ cup chopped tasso
- ⅓ cup diced white onion
- 1 clove garlic, minced
- 1 tablespoon tomato paste
- 6 tablespoons all-purpose flour
- 4 cups beef broth
- 1 tablespoon Worcestershire sauce
- 1 tablespoon Creole seasoning
- Sweet Potato Fries (recipe follows)
- 1 (5-ounce) package cheese curds
- Garnish: chopped fresh parsley, ground black pepper

Sweet Potato Fries

- 2 pounds sweet potatoes of your favorite prepared sweetpotato fries

Instructions:

1. In a 12-inch cast-iron skillet, heat 1 tablespoon oil over medium heat. Add sausage, and cook, stirring occasionally, until lightly browned, about 5 minutes.

Remove sausage using a slotted spoon, reserving drippings in skillet.

2. Add tasso and onion to skillet; cook over medium heat, stirring occasionally, until onions are soft and lightly browned, about 3 minutes. Add garlic and tomato paste, and cook, stirring constantly, until fragrant, about 1 minute.
3. Add remaining 2 tablespoons oil to tasso mixture. Sprinkle flour on top, and whisk until combined.
4. Add half of broth, whisking constantly and scraping bottom of skillet with a wooden spoon. Add sausage, Worcestershire, Creole seasoning, and remaining broth. Bring to boil over medium-high heat, stirring constantly; cook, stirring constantly, until thickened, 1 to 2 minutes. Serve warm over Sweet Potato Fries. Top with cheese curds. Garnish with parsley and pepper, if desired.

Serving Size: 4



For more information, contact the LSU AgCenter Sweet Potato Research Station
P.O. Box 120 | Chase, LA 71324 | Phone: 318-435-2155 | Cole Gregorie 318-680-9833 or Myrl Sistrunk 318-267-6712
Office Hours: Monday – Friday 7:30 a.m. – 4:30 p.m.

The LSU AgCenter and LSU provides equal opportunities in employment and programs.

For more information, visit the [LSU AgCenter website](https://www.lsuagcenter.com).