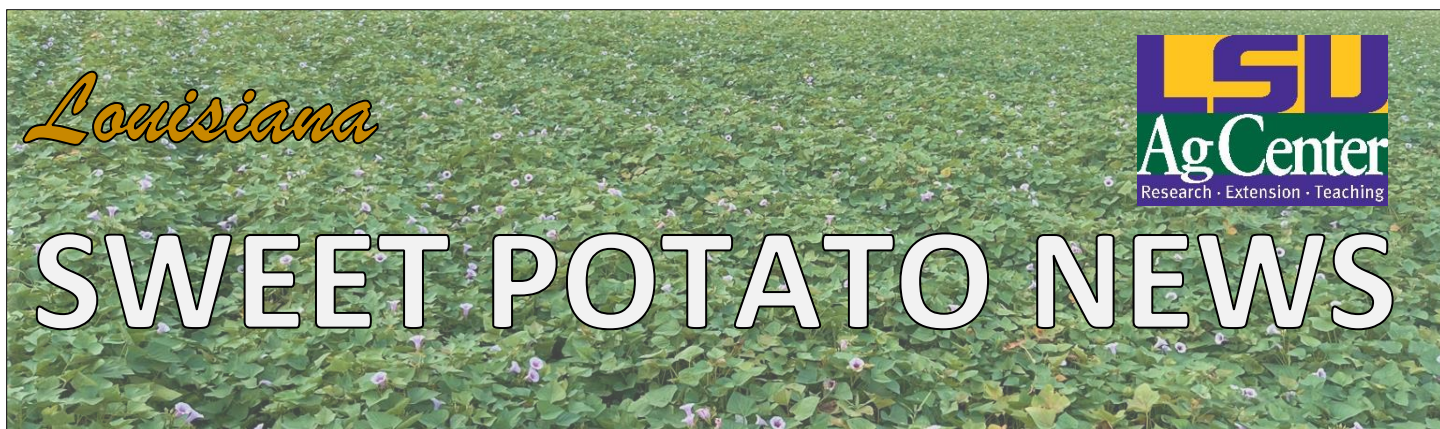




Summer 2024

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2024 LOUISIANA SWEETPOTATO MIDSEASON REPORT

Cole Gregorie, LSU AgCenter Sweet Potato Specialist

Night and Day: A double meaning for Louisiana sweetpotato producers. This spring proved to be very wet in Louisiana, with May rainfall exceeding nine inches across much of the state, and moist conditions persisting well into June. The excess moisture left many of our producers scrambling and working long days between rain events to get their crop planted.

"This season proved 180° contrast from that of last season, which saw extreme dry conditions during the drought" said producer Wayne Garber. He also stated that "It goes to show that you cannot plan next season based on the previous year, you have to take lessons from each year, but each year is unique."

Overall, despite the delay in planting, growers were initially thankful to have the extra moisture and due to their tireless efforts, 99% of the state's crop was still planted before the first day of summer (June 20th). Unfortunately, poor stand counts have been reported on the later planted portion of the crop likely due to dwindling bed slip quality and excess heat associated with June plantings.

Acreage planted this year looks to closely mimic that of 2023 which saw 5,400 harvested acres across the state. The 2023 crop had a \$91 million economic impact on the state, even after the trying season last year. While the acreage may remain the same, more favorable conditions will hopefully make for a more profitable crop and an increased economic impact this year.

The LSU AgCenter Sweet Potato team also looks to continue its busy year. Fresh off the heels of the Avoyelles variety release, the LSU AgCenter Sweet Potato Research Station is now setting its focus on celebrating its 75th anniversary at the 2024 Sweet Potato field day on August 29th in Chase, La.



NCPN Working for Sustainable Sweet Potato Production

Kay S. Rentzel, NCPN Sweet Potato Coordinator

The Members of the National Clean Plant Network (NCPN) Sweet Potato Tier 2 committee met in North Carolina to review and discuss industry needs for the future of the nation's sweet potato industry. The network works to protect U.S. agriculture by maintaining the health of planting stock for sweet potatoes. While run by the USDA, the committee includes scientists, educators, regulators, *certified seed growers and commercial sweet potato growers.*

It all starts with quality seed that yields the world's finest sweet potatoes. Sweet Potato growers are committed to producing healthy, flavorful, top-quality sweet potatoes for America and the consumers across the globe. Through the outreach of the NCPN, commercial growers are given the economic confidence to increase all input levels in a constant effort to reach for greater financial returns per acre. The ultimate result is this, the cleaner the seed, the less virus you'll have, and the more saleable product you'll have for the market.



NCPN Tier II meeting in Raleigh, NC

In addition to discussion of the program and ways to impact the future through program improvements, Christie Almeyda, NCSU MPRU and host of the meeting, scheduled multiple opportunities to share various elements of the

North Carolina Sweet Potato industry through field tours including Jones Farms, Clinton Research Center, Scott Farms and the NCSU MPRU Center.

75 Years of Breeding Excellence, LSU AgCenter: Sweetpotato Breeding Program *Dr. Don LaBonte, LSU AgCenter Sweetpotato Breeder*

The development of today's high-yielding, delicious sweetpotato varieties began in Louisiana more than 75 years ago. Dr. Julian C. Miller and others at the Louisiana Agricultural Experiment Station discovered how to induce flowering and seed set by trellising sweetpotato vines onto fences. They found that this straightforward technique stressed the plant and caused it to flower. This created a world of opportunity to develop new varieties for the industry by genetic recombination. A fast-paced effort ensued to collect sweetpotato varieties from throughout the world and to make as many crosses between them as possible. Many of the varieties resisted flowering, and just a handful of seed was produced. Ever so slowly, however, new varieties arose to replace the varieties from the Caribbean, which had little or no disease resistance, poor and erratic yield, and muted orange flesh.

We are still at it! The benchmark Beauregard variety developed by Dr. Larry Rolston in the mid 1980's moved sweetpotato production into modern times with consistent high yields and a smooth attractive skin. This single release transformed the Louisiana industry overnight and returned profit to growers. The quest has not ended. More varieties have been released like Orleans – a variety similar to Beauregard, but with a better shape. Sweetpotato use has also diversified, and this has put additional challenges on the breeding program. The processing sector has also grown exponentially, and Louisiana is home to the only processing plant dedicated to French fry production. Bayou Belle was released to service this industry with high yield and favorable processing characteristics. Others have been released to service niche white flesh markets like the popular Japanese variety, Murasaki. The latest is Avoyelles released this year. A variety with high yield and desirable earliness – a sweetpotato that can be harvested weeks earlier than most others.



Sweetpotato varieties released by the LSU AgCenter have improved not only the Louisiana sweetpotato industry but sweetpotato production around the world. Today's researchers still use the nursery started by Miller years ago on the LSU campus in Baton Rouge. The breeding program builds on a legacy of methodical progress toward developing the perfect sweet potato.

Postharvest: Disease Pressure and Prevention

Dr. Imana Power, LSU AgCenter Plant Pathology

We are currently embarking on a project looking to identify and quantify problematic post-harvest diseases present in our Louisiana sweetpotato storage and packing facilities.

We are excited that many of our producers/packers have opted to participate in this project. Their involvement will enable us to conduct a thorough survey of disease presence.

With a clearer understanding of the pathogens present, we will build upon the previous research of Dr. Chris Clark and Dr. Wanna Kaluwasha to update the best management practices for facility sanitation and storage root protection.

Given the recent reduction in chemical options, we are hopeful that this research will present viable alternatives that ensure the integrity of the crop throughout storage.

Update: Weed Management

Dr. Donnie Miller, Professor and Weed Scientist

With a limited arsenal of chemical options available to sweetpotato producers for effective weed management, it is essential that cultural practices such as cultivar selection be evaluated as a possible deterrent to negative impacts from weed pests. Past research with respect to cultivar-weed interactions is limited and restricted to older cultivars or cultivars not commonly grown in Louisiana. As more recent cultivars have been developed and commercialized, research is being conducted within the LSU AgCenter sweetpotato weed management program to evaluate their response to weed interference. Cultivars 'Bayou Belle', 'Evangeline', 'Avoyelles', and 'Orleans' will be maintained weed-free for periods of 2, 3, 4, 5, or 6 weeks after transplanting then allowed to infest with a natural weed population for the remainder of the growing season. A weed-free and weedy season-long treatment will be included for comparison. Measurements of weed counts, and cultivar growth will be recorded at various intervals. It is hopeful that this research will allow determinations to be made on weed suppression by differing cultivar growth habit and morphology as well as critical weed free periods to maximize yield for each cultivar and provide valuable information for producers when determining cultivar selection.

Sweet Potato Award Winners

Student:

Marissa B. Barbosa: Placed second in the 2024 LSU Graduate Research Conference, Agriculture division, with her presentation: **Declining Phosphorus Availability Increases *Sucrose Synthase* Activity and Storage Root Formation in Sweetpotato cv Beauregard**



Sweet Facts!

- Sweet potatoes are considered a **Superfood!**
 - “**Superfood**” - means that a food is purported to have benefits to health due to either its nutrient content or other molecules it contains such as antioxidants. (These are also commonly called “functional foods” in scientific literature.)
- Sweet potatoes are **Fat-free** and **cholesterol-free**
- They have only 130 calories per serving
- They are a **good source of fiber** – 3.9 grams
- Sweet potatoes are one of the best sources of **beta-carotene**.
- They are, per serving (one medium sweet potato), an excellent source of:
 - Vitamin A – 7860 IU
 - Vitamin C – 29.51 mg
 - Potassium – 265.2 mg
 - Folate – 18.2 mg
 - Calcium – 28.6 mg
- Per capita consumption for sweet potatoes has increased from 4 to 6 pounds per person (approximately 67%) from 2000 – 2024.

* Have you had your Sweet Potato Today?

Upcoming Events

LSU AgCenter Sweet Potato Research Station **2024 Field Day** **August 29**

Hosted by LSU AgCenter

Sweet Potato Research Station
130 Sweet Potato Rd.
Chase, LA 71324
Registration: 8:30 a.m.
Field Tours: 9 a.m.

Sponsored meal to follow



LSU AgCenter Sweetpotato Growers Meeting

Dec. 5th at the LSU AgCenter Scott Center
212 Macon Ridge Road Winnsboro, LA 71295

- **Winter Sweetpotato Commission Meeting:**
Morning
- **Annual Sweetpotato Association Meeting:**
Following Commission Meeting
- **Advisory Committee Meeting:**
Luncheon
- **AgCenter Research Updates:**
Afternoon

2025 Sweet Potato National Convention



**63RD NATIONAL CONVENTION OF THE
US SWEET POTATO COUNCIL**

January 19 - 21, 2025

**Westin Savannah Harbor Golf Resort and Spa
Savannah, GA**



See attached flyer for more information!

Summer Recipe

Sweet Potato Sliders

Sweet Potato Sliders are a nutrient-dense way to get your burger fix! Roasted sweet potato slices act as a gluten-free bun alternative, and you can pile on your favorite burger toppings for an easy meal.

Ingredients:

- 2 large sweet potatoes (*as wide as possible*)

BURGERS

- 1 pound lean ground beef
- 1 cup cooked brown lentils
- 1 teaspoon fine sea salt
- ¼ teaspoon garlic powder

OPTIONAL TOPPINGS

- Condiments
- romaine lettuce, sliced tomatoes, or red onion

Instructions:

1. Preheat the oven to 400°F and line 2 large baking sheets with parchment paper. Slice the sweet potatoes into ¼-inch thick rounds, making roughly 24 slices, then arrange them on the parchment-lined pan. Bake until the slices are easily pierced with a fork, about 20 to 25 minutes. (Don't flip them; it's easier to hold the burgers if one side is dry.)

2. While the sweet potato slices are cooking, combine the ground beef, lentils, salt, and garlic powder in a large bowl. Stir well to mix, then use a ¼ cup to scoop the

mixture. Flatten the patty between your hands, making it a ½-inch thick and roughly as wide as your sweet potato slices, then transfer to a plate. Repeat with the remaining meat, forming roughly 12 patties.

3. Heat a large skillet over medium-high heat, then spray with cooking spray to help prevent sticking. Cook 4 burger patties at a time (or however many will fit in the pan) and flip after roughly 3 to 4 minutes. Cook the other side until the centers are fully cooked through; you can check the temperature with a meat thermometer to make sure it reaches 160°F. Repeat with the remaining patties until they are all cooked.

4. When the sweet potatoes are tender, arrange a slice on a plate and top it with one of the cooked burgers. Add any toppings you love, then place another sweet potato slice on top. (Let the dry side face the outside of the burger for easily handling) Serve warm right away.

Serving Size: 6



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).



Celebrating 75 years of Research and Service
August 29, 2024

Sweet Potato Research Station, 130 Sweet Potato Rd. Chase, LA 71324

Registration: 8:30 a.m. Field Tours: 9 a.m.

Sponsored meal provided by:  **LambWeston**
SEEING POSSIBILITIES IN POTATOES

Featured Topics:

- Advanced Lines in the LSU AgCenter Sweetpotato Breeding Program
- Performance of Varieties Exposed to Prolonged Early Season Saturated Soils
- Nematode Management in Sweetpotato
- Weed Management Issues
- Clean SEED update: Reducing Virus Infection with Crop Borders
- Industry and Crop Updates
- Spray Drone Demonstration

For more information or ADA accommodations, contact the LSU AgCenter Sweet Potato Research Station
Research Coordinator Tara Smith, tsmith@agcenter.lsu.edu (318) 557-9501 or
Sweet Potato Specialist, Cole Gregorie, cgregorie@agcenter.lsu.edu (318) 680-9833

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