

UC Cooperative Extension • 2145 Wardrobe Ave. • Merced, CA 95341
(209) 385-7403 FAX (209) 722-8856 • <http://cemerced.ucdavis.edu>



IN THIS ISSUE:

- ✓ February 6, 2020 meeting agenda
- ✓ DPR units requested: 1.0 hours L&R and 1.0 "other". 3.0 CCA units.
- ✓ Production notes.
- ✓ Telone update

Special Note:

L-13-81 (red skin) has been submitted for patent protection and will be released in 2020. Contact Dave Souza for details.

There will be a Metam stewardship class from 2:00 - 4:00 pm on Thursday, Feb 6 (class required by CAC for growers using metam products)

55th Annual

SWEETPOTATO MEETING

Thursday, February 6, 2020

8:00 am - noon

UCCE Classroom

2145 Wardrobe Ave., Merced

- | | |
|---------|---|
| 7:30 am | Signing in, coffee, and Jantz Sweetpotato muffins
<i>Courtesy of Wayne Luker, Nutrien Ltd., Merced</i> |
| 8:10 | Sean Runyon, Assistant Merced County Agriculture Commissioner. DPR regulations update: Telone and chlorpyrifos restrictions. |
| 8:30 | Scott Stoddard, Farm Advisor. Summary of 2019 variety and pest management research: Collaborators trial and ALT, nematicide trials,, and potassium fertilizer trials. |
| 9:30 | Brian Hegland and Patrick Dotsy, Corteva Agriscience. Telone availability and registration update. |
| 10:00 | Coffee break |
| 10:20 | Caddie Bergren, UC Cooperative Extension. The CDFA Healthy Soils program |
| 10:40 | Edgar Vidrio, CA DPR Environmental Monitoring Branch. Options to mitigate acute 1,3-D exposure. |
| 11:30 | Jill Damskey, AgAMSI, and Jill Silverman Hough. The Sweet Potato Council of California marketing review. Darren Barfield. SPC Board nominations. |
| Noon | Lunch (pork loin & sweetpotatoes by Arnold's Catering)
<i>Courtesy of Simplot</i> |
| 1:30 pm | The Sweet Potato Council of California business meeting (library). |

January, 2020

The University of California, in accordance with applicable Federal and state laws and University policy, does not discriminate on the basis of race, color, national religion, sex, disability, age, medical condition (cancer related), ancestry, marital status, citizenship, sexual orientation, or status as a Vietnam-era veteran or special disabled veteran. Inquiries regarding this policy may be directed to: Affirmative Action Director, University of California, Agriculture and Natural Resources, 1111 Franklin St. 6th Floor, Oakland, CA 94607-4200 (510) 987-0097.

PRODUCTION NOTES

The winter of 2018-19 had good rainfall accumulation, with 15.92" recorded at the Merced airport. The summer was slightly cooler than 2018, with 10 days at 99 F or above as compared to 12. The unique weather phenomenon that occurred in 2019 was not the total rainfall nor the heat, but rather several late spring storms in the last week of May. The area received 2.2" of rain along with very moderate temperatures around 70 F for daytime highs. Furthermore, there was little wind associated with these storms. The result? Near perfect transplanting conditions for most of the planted crop. Possibly too perfect. Sweetpotatoes are very sensitive to heat and moisture in the first couple of weeks after transplanting, and under ideal conditions can set more roots than can be sized. I suspect this occurred in 2019, as most growers reported heavy root sets and very few jumbos. Production on average was fair — I estimate yields at average to slightly below average in 2019, around 31 bins per acre.

Quality, however, is excellent. There were minimal problems from wireworms, which caused extensive damage in 2018. Wireworms are the larvae of the click beetle, *Limonius* spp. The Western sugar beet



wireworm is the most common species in our area (*Limonius californicus*). This insect has a lifecycle that is typically 2 - 3 years long. Normally, fumigation in either the fall or the spring kills the overwintering larvae (and adults). Insecticides may provide additional control: Lorsban (chlorpyrifos), Mocap (ethoprop), and Belay (chlothianidin) can be applied preplant. Note that CA DPR is implementing new Lorsban restrictions in 2020: liquid formulations can no longer be purchased, and existing stocks must be used up this year.

The main pest issue for growers in 2019 was Southern Blight in the hotbeds. Southern blight, *Sclerotium rolfsii*, is a destructive soil fungus that attacks the roots and sprouts. The disease prefers warm moist conditions, and therefore appeared about 6 weeks after bedding. Plants become infected at the soil line, and die off in circles that enlarge and eventually coalesce. Diane seems particularly vulnerable, though all varieties are susceptible.

The southern blight pathogen produces survival structures called sclerotia. They are initially white, but gradually turn brown and take on a mustard seed appearance. These sclerotia can live in the soil for many years, and serve as a source of future infections.

While fumigation with products containing Pic (such as Pic Color 60, a blend of Telone and choropicrin) should virtually eliminate this disease, seed can also serve as a source. Fungicides may provide some suppression — Quadris Top and Botran are registered. Reducing air temperatures below 100 F under the plastic by venting more frequently will also help.

USDA revised estimates for **harvested acreage** is listed below. 2019 estimates have not been released.

	acres, 2016	acres, 2017	acres, 2018
California	20,000	21,000	21,000
North Carolina	95,000	89,500	78,500
Mississippi	29,000	29,000	26,000
Louisiana	9,500	9,500	8,300
TOTAL	153,500	149,000	133,800



L-13-84 is characterized by a good shape and “double” purple skin, but is nematode susceptible. It did not yield well in 4 out of 5 locations in 2018, but did better in 2019.

VARIETY TRIAL RESULTS

New varieties in the National Sweetpotato Collaborators Trial were evaluated in both Livingston (Quail H Farms) and Bakersfield (Valprado Farms). L-13-81 is the new double-skin red from LSU that looked very promising in earlier trials. Results are shown in Table 2. Based on 11 trial-year locations since 2016, the average yield potential is about 86% of Diane. Note that this line does not have root knot nematode resistance and will perform much better on fumigated soil. A limited amount of seed will be available for growers to try this year. Contact Dave Souza for details.

NEMATICIDE TRIAL RESULTS

In 2019, Velum (BASF) fungicide/nematicide was evaluated as a sidedress application with fertilizer and also when applied through the drip after planting. 2019 results with it and other new nematicides showed significantly increased

sweetpotato (Burgundy) root yield and quality with all the treatments as compared to the untreated control (UTC), however, drip applications performed better in this trial location (Table 3). The trial was conducted with Mininger on unfumigated ground. Results are similar to 2018, in that both Salibro (Corteva) and MBI-304 (Marrone) performed very well, with significantly highest yields in the test and 44% increase in TMY. There was no difference in the cull % between any of the treatments (11%).

Scott Stoddard, Farm Advisor

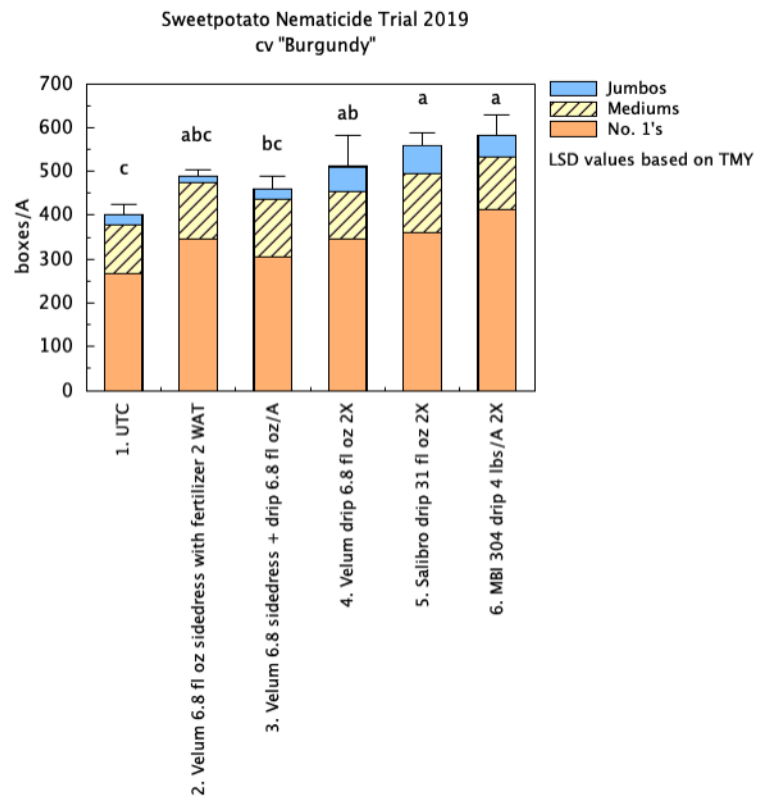


Table 2. Average yield of L-13-81 and comparison red-skin sweetpotatoes from 11 locations in California, 2016-19.

Variety	40 lb box/A			adjusted TMY		No. 1's #1%	Culls cull%	root description	rel yld % of Diane
	No. 1's	Meds	Jumbos	box/A	bins/A				
Average L-13-81	458	238	193	888	36.3	51.6%	8.2%	purple skin, smooth, elyptic	84.2%
Diane	497	270	162	929	38.2	52.5%	10.3%	red skin, smooth, long	100.0%
Burgundy	495	167	216	879	36.0	57.1%	7.9%	maroon skin, smooth, chunky	90.5%
NC09-122	498	244	160	903	37.8	54.9%	7.5%	purple skin, smooth, uniform	106.3%

Average yield includes strip trials and replicated trial data.

Not all comparison varieties at each location-year. NC09-122 data from 5 locations; Burgundy from 8 locations; Diane from 9 locations.