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University of California Agriculture and Natural Resources SWEETPOTATO TIPS



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IN THIS ISSUE:

- ✓ February 7, 2017 meeting agenda
- ✓ DPR units requested: 1.0 hours L&R and 1.0 "other". 3.0 CCA units.
- ✓ Production notes.
- New nematode found.

Special Note:

A limited amount of L-13-81 (red skin) will be available for grower testing in 2019. Contact Dave Souza for details.

There will be a Metam stewardship class from 2:00 - 4:00 pm on Thursday, Feb 7 (class required by CAC for growers using metam products)

54th Annual SWEETPOTATO MEETING

Thursday, February 7, 2019 8:00 am - noon **UCCE Classroom** 2145 Wardrobe Ave., Merced

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7:30 am	Signing in, coffee, and Jantz Sweetpotato muttins Courtesy of Gabriela Sandoval, Ag Foods Safety Solutions
8:10	Scott Stoddard, Farm Advisor. Summary of 2018 variety and pest management research: Collaborators trial and ALT, nematicide trials, fumigation alternatives, and IR4 herbicide trials.
9:00	Brian Hegland, Dow-DuPont. Telone availability update.
9:15	Lonnie Slaton, Simplot. Wireworm and grub management after 2018.
9:30	Sean Runyon, Assistant Merced County Agriculture Commissioner. DPR regulations update: fumigants, chlorpyrifos restrictions, and the school pesticide buffer zone.
10:20	Coffee break
10:40	Jill Damskey and Karli Quinn, AgAMSI. The Sweet Potato Council of California marketing review. Darren Barfield. SPC Bylaws changes and nominations.
11:00	Andreas Westphal, UC Nematologist. Peach root knot nematode discovery in Atwater, quarantine, and management.
11:40	Hicham Etal, Deputy General Manager, MID. Water supply update.
Noon	Lunch (pork loin & sweetpotatoes by Arnold's Catering) Courtesy of Lonnie Slaton with Simplot
1:30 pm	Sweet Potato Council of California business meeting.

January, 2019

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PRODUCTION NOTES

Very little rain fell in fall 2017 and winter of 2018 in the central California area, and in fact Merced County was experiencing one of the driest years on record, again, until March when spring rains finally arrived. Total precipitation for 2017/18 was only 6.7", 10" less than the year before. The summer was slightly cooler than 2017. In 2017 Merced experienced 27 days over 100 F, about twice the average of the previous 10 years. In 2018 there was a total of 15 days over 100 F, with the first 100 F day on July 6. However, the month was still very hot, with 25 days at 99 or above. Production on average was good — I estimate yields at average to above average in 2018, around 33 bins per acre.

The main production problem observed around the Livingston area was wireworm damage, which seemed to hit all fields regardless of variety. 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.

USDA estimated an increase of area in sweetpotatoes in 2108, to 22,500 acres in California. Nationally, however, 2018 saw a big decrease in harvested acreage, mainly due to wet fall conditions throughout the southeast, but especially in North Carolina where some farms received over 30 inches of rain from Hurricane Florence. Despite this, prices have remained low all year. A very large 2017 crop is partly to blame.

Heavy rainfall at harvest should result in increased losses in storage, and there are some indications that by January 2019 this was occurring and affecting price. At the National Sweet Potato Convention in New Orleans, Mississippi, Louisiana, and North

Carolina reported prices were \$18 per box of No. 1's, up from \$12 earlier in the year. There was no commensurate increase in California, however, where prices remain stubbornly stuck around \$20.

Table 1. USDA-NASS harvested sweetpotato acreage estimates for 2017 - 2018 (USDA-NASS Crop Production 2018 Summary - January 2019).

	2016	2017	2018
California	20,000	21,000	22,500
North Carolina	95,000	89,500	78,000
Mississippi	29,000	29,000	22,000
Louisiana	9,500	9,500	7700
TOTAL	153,500	149,000	130200

NEW NEMATODE FOUND NEAR ATWATER

Peach root knot nematode, *Meloidogyne floridensis*, a nematode previously known to only occur in Florida, was found by UC farm advisor Dave Doll and Specialist Andreas Westphal in a young almond orchard off Cressey Way last summer. This nematode looks exactly like our common southern root knot nematode *Meloidogyne incognita*, but can overcome the genetic resistance of peach root stock. It is not known how it arrived in Atwater, but CDFA has quarantined the field in an effort to limit its spread. We also do not know if current sweetpotato varieties are susceptible, but the Sweet Potato Council of CA will be supporting resistance assays with Dr. Antoon Ploeg at UC Riverside this year.

VARIETY TRIAL RESULTS

New varieties in the National Sweetpotato Collaborators Trial were evaluated in both Livingston

Table 2. Average yield of L-13-81 and L-13-84 from 5 locations in California, 2018.										
		40 lb box/A			adjusted TMY		No. 1's	Culls	harvest	market
	Variety	No. 1's	Meds	Jumbos	box/A	bins/A	#1%	cull%	comments	class
Average	L-13-81	361	219	160	740	30	49.0%	14.9%	RKN cracking	red
	Diane	393	308	166	867	35	45.0%	11.8%		red
	L-13-84	428	228	128	784	31	53.9%	10.9%	RKN cracking	orange
	Bellevue	593	251	288	1133	45	53.9%	11.7%		orange





L-13-84 is characterized by a good shape and tough red skin, but is nematode susceptible. It did not yield well in 4 out of 5 test locations in 2018.

(Quail H Farms) and Bakersfield (Valprado Farms) this year. Additionally, the new lines L-13-81 and L-13-84 were also grown in strip trials (Matt Alvernaz and Jason Tucker) and the Advanced Line Trial (ALT) with Dave Souza. L-13-81 is the new double-skin red from LSU that looked very promising in earlier trials. Results are shown in Table 2. L-13-84 has a similar appearance as Bellevue, but without nematode resistance. It is being dropped as it has no yield advantage. L-13-81 looked good in the ALT, but poor in the other 4 locations, probably because it has little nematode resistance. A limited amount of seed will

be available for growers to try this year. Contact Dave Souza for details.

NEMATICIDE TRIAL RESULTS

2018 results with new nematicides showed significantly increased sweetpotato (Diane) root yield and quality with pre-plant, at-plant, and post plant applications, however, post-plant applications performed better in this trial location. The trial was conducted in a buffer zone with Ed and Robert Silveira. The best yielding treatment was Telone, which had significantly better total

marketable yield than all the other treatments. Amongst the nematicides evaluated, Salibro (Q-80) 32 oz/A applied via drip at 4 and 6 weeks after transplanting, MBI-304, Nimitz 3.5 pts POST, and Nimitz 5.0 pts POST gave the best overall yields of 34 – 41 bins per acre. All of the treatments yielded better than the untreated control.



Scott Stoddard, Farm Advisor



