

CRANBERRY STATION NEWSLETTER

February 22, 2022 Vol. 23:1

New building rendition



UMass
Amherst



UMass
Cranberry
Station

Research
& Extension



1 State Bog Road
East Wareham, MA 02538
508-295-2212
ag.umass.edu/cranberry

IN THIS ISSUE:

News Regarding Pesticide Credits

News Regarding UMass/USDA Late Water Study

2021 Crop Summit Notes

Station News

Pesticide Credit News

by Marty Sylvia

RESPIRATOR TRAINING SESSIONS

The Cranberry Station is offering 2 respirator trainings via Zoom, one on **Tuesday, March 8, 2022, from 7:30-9:30 AM** and one on **Thursday March 24, 2022, from 5:30-7:30 PM**. Each session is \$25 per person, and you will earn 2 pesticide credits. To register please contact Marty Sylvia 508-265-6921 or martys@umass.edu.

UMASS CRANBERRY PESTICIDE SAFETY MEETING

Save the date! The UMass Cranberry Pesticide Safety Meeting has been scheduled for **Tuesday, April 26, 2022, from 7:30-NOON** via Zoom. Registration fee is \$50 per person, and you will earn 4 pesticide credits. Please look for the registration form in our March newsletter.

USDA-ARS News

By Casey Kennedy

CALL FOR GROWER PARTICIPANTS: UMass/USDA Late Water Study

Scientists from UMass and USDA are developing best management practices for late water flooding. As part of this effort, USDA hydrologist Casey Kennedy is leading a study on phosphorus releases from flooded soils of cranberry bogs. If you plan to apply late water and are interested in this study, please contact Casey Kennedy by email (casey.kennedy@usda.gov) or phone/text 781-223-3807.

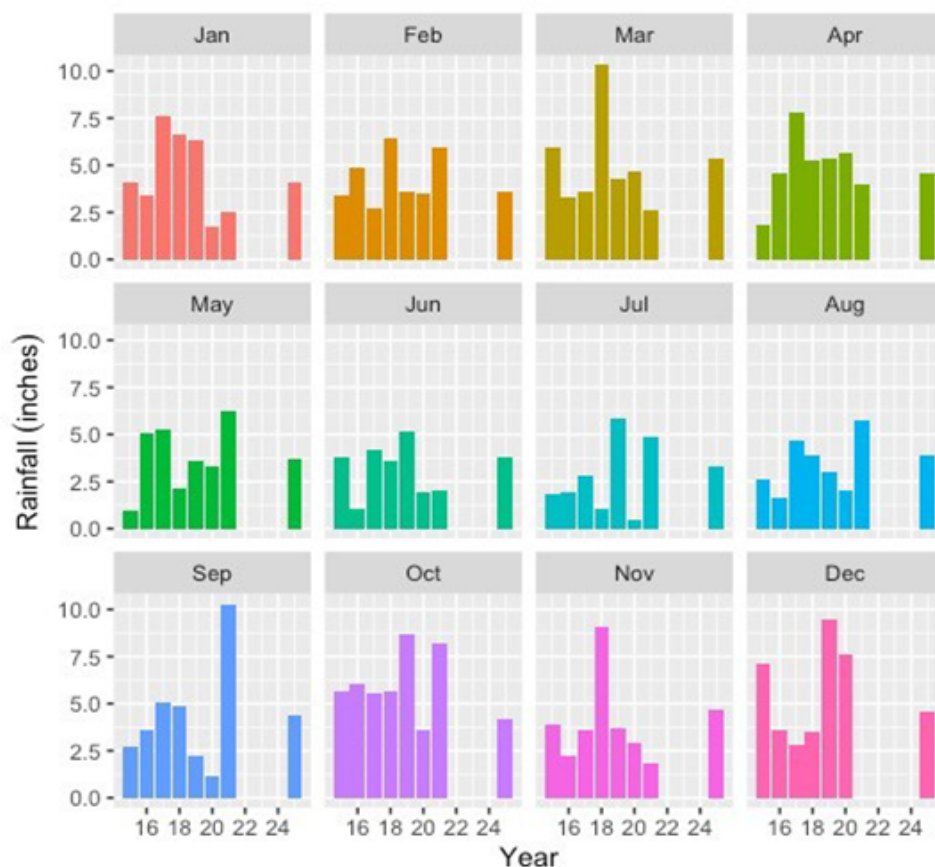
2021 Crop Summit Notes

By Hilary Sandler and Martha Sylvia

NOTES FROM THE 2021 CROP SUMMIT

The 2021 Crop Summit was held virtually by Zoom platform on December 9, attended by 53 people. The following is a summary of the information and topics discussed during the 2-hour meeting.

Peter Jeranyama presented a **weather summary** for the 2021 season. Compared to data for the past 7 years (2014-21) and the 30-year average (or long-term average, LTA), July, August and October were above normal rainfall and September was extremely above normal rainfall. We received more than 6" of precipitation in one day in early September (10.26" total for the month), exacerbating the rot situation. Total precipitation for 2021 was 55.79" (5.75" above 30-year average of ~50.3") and very different compared to drought conditions of 2020 (had ~38.6 inches of precipitation). We received 31" snow for the 2021 season (measured from Dec through Feb). LTA for snowfall is 27"; we received 16" snow in 2020.



Rainfall data for 2014-2021. Bar on the very right is the long-term average for the month (recorded in East Wareham).

Air temperatures in June, July and August were slightly higher than the 30-year average, but only by 1-2 degrees F. Monthly maximum and minimum air temperatures were similar to the long-term averages. Bog temperatures, however, were over 100 F on more than 12 days during July and August. Some growers ran irrigation to cool the vines and berries during the late August heat. There was no official heat wave during the season based on air temperature, but if you look at on bog temperature, we did have what could be considered a heat wave!

Erika Saalau of Ocean Spray shared that 2021 was probably one of the worst for symptoms of vine stress coming out of winter. Early spring, many growers reported bronze-colored vines, upright dieback, and general stress as a result of a bad drought year in 2020. Quite a few growers applied Bravo early to manage upright dieback symptoms. Many bogs showed classic UDB symptoms – salt and pepper vines, orange uprights interspersed with green ones. Some bogs showed other injury such as brittle vines, damage on the woody tissues, and picking damage. Additional stress after picking and with pruning, combined with a very wet spring, may have all combined to result in secondary infections of more dieback and stem gall.

Bloom was somewhat delayed and lengthy. Stevens had erratic and prolonged bloom throughout the growing area. Good spray windows for fungicides were hard to find and having extended bloom did not help. High bog



Upright dieback symptoms (L) and examples of vines stress coming out of the winter flood (photos courtesy of E. Saalau-Rojas).

temperatures in July and August resulted in both water stress and heat damage. Wilted tips, blasted flowers, and scorched areas were seen. The very wet spring followed by the heat resulted areas with underlying *Phytophthora* or root issues showed symptoms starting in July and August.

In a couple Ben Lear bogs, only one berry would set per upright, and others shrunk up, likely caused by the several high temperature days. Some bogs had significant flooding (and standing water) from the August rain event at the absolute worst time. Many growers struggled to get water off quickly. Berry quality was already looking grim even before all the September rain.

Lush, puffy canopies, quite a bit of fruit

underneath the canopy, lots of rain events, and high relative humidity resulted in the perfect storm for loss of fruit set and for berry quality to go downhill. Some canopies were so badly overgrown that it may take more than one year to get them back into shape. Aggressive pruning could be considered in bad areas.

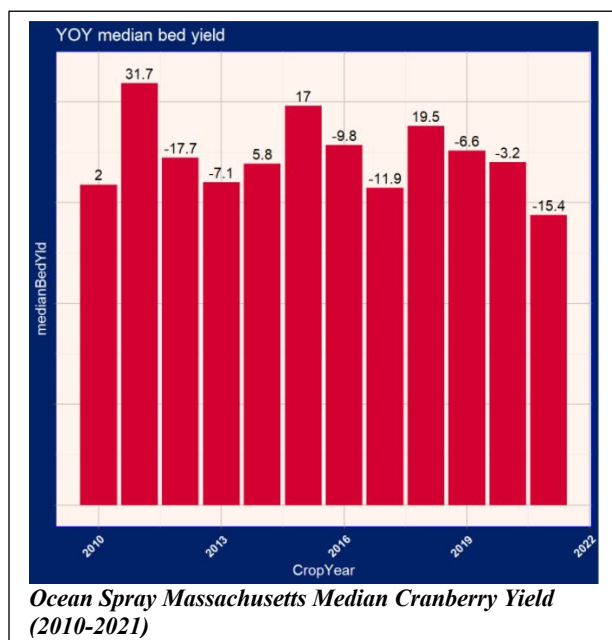
At harvest, 2021 was a tough year for fruit quality – at delivery, there was a lot of rot in general and more poppers seen. Beat-up fruit can make it into the receiving station because they are not taken out by the cleaning systems. Quite a bit of splitting, particularly in Crimson Queens, was seen. A peculiar rot was also seen. Fruits were not like popper berries but more of a mealy berry with a hard center. Berries with partial rot on the side were also delivered. Many growers had issues in their usable fruit percentage because of all the above issues. A few growers (at the Summit) mentioned concerns about whether QuadrisTop and Proline were doing as well as Abound and Indar in previous years.

Viral pressures (e.g., tobacco streak virus, blueberry shock virus) seemed to be more prevalent for some growers than in previous years. This is disappointing as we have talked about the viruses actually phasing out once a plant has been infected. Perhaps there was an upsurge of symptoms due to crop stress. Erika finished by noting there is no treatment for either virus.

Adam Korejwa of **Ocean Spray** confirmed that the yield in MA was way down. The median bed yield was the lowest in at least 10 years! This graph shows year on year, median bed yield was down 15% with 3 years in a row showing a decline. WI yields were also dramatically off.

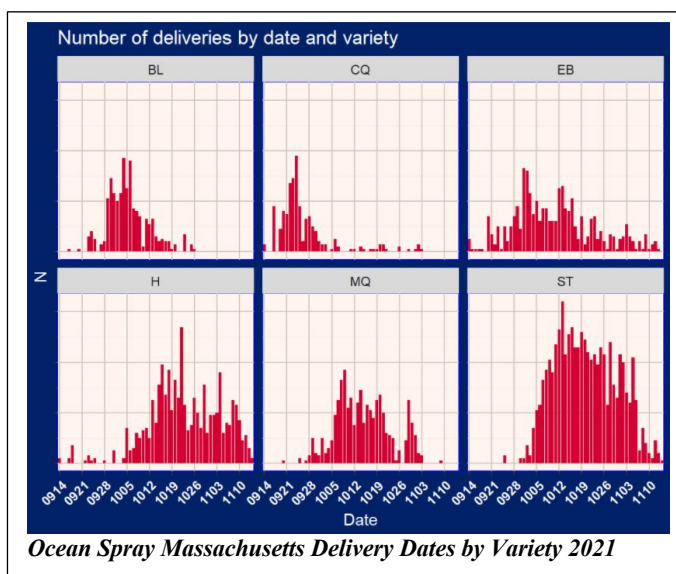
The graph on page 4 shows delivery timing for the top 6 varieties which correlated closely in comparison to other years. Crimson Queens were delivered first, and there was a pause before Stevens started coming in.

Color was later to develop compared to last year. Fruit were a little bit lighter across the board this year. Percent poor by variety, compared 2020 and 2021, showed that Mullica Queens and Stevens did have an off year, with more rot than usual. Firmness overall was slightly higher in aggregate, which was surprising given the rot issues. Size of the fruit did not show a big difference from other years (almost identical to



last year), again surprising based on grower reports. However, the 3/8" berries did decline a bit while the 5/8" berries increased a bit.

Parker Mauck spoke for **Decas and Fruit D'Or**. For processed fruit, there were significant fruit quality concerns prior to harvest. Concerns were warranted, with higher-than-normal rot in delivered loads and lower than expected volumes. Much of the expected volume became rotten fruit and was removed before and after delivery. Fruit packout percentages were lower than normal as more rot had to be removed from delivered loads. Color came slowly for most growers, but by the end of the harvest, the average color number was similar to the average for the last 5 years. The only bright side to this difficult harvest year was that growers had plenty of water.



Fresh fruit and dry harvest also had trouble. Quality was significantly challenged this year compared to previous years, with increased field rot and below-normal levels of storage quality. Quality levels decreased as did overall volumes delivered. In MA, Decas's overall volume was down ~4% but some growers were down 15 to 20% in their volumes. There were more rejections due to poor quality this year than normal. Overall, growers felt the crop was OK in August but much of the fruit ended up in the trash trucks and on the side of the bog, rather than in the bins.

12.7.21

Region	2016	2017	2018	2019	2020	CMC 2021 Estimate (Aug)	Compiled 2021 Est. (Dec)	% Diff. 2020 - 2021 Est.
WI	6,040,837	5,335,235	5,271,545	4,485,133	4,609,882	5,564,000	4,100,000	-11%
MA	2,102,566	1,758,592	2,237,243	2,015,713	1,876,891	2,041,000	1,700,000	-9%
NJ	575,192	422,830	447,592	447,723	513,801	500,000	540,000	5%
OR	379,458	474,359	544,464	515,038	546,251	495,000	500,000	-8%
WA	159,475	130,684	180,778	141,863	185,686	153,000	175,000	-6%
Other	217	196	0	0	0	0	0	
U.S.	9,257,745	8,121,896	8,681,622	7,605,470	7,732,511	8,753,000	7,015,000	-9%
B.C.	1,007,684	856,941	1,347,753	597,000	976,000	940,000	1,014,000	4%
AC	200,000	180,000	160,000	150,000	150,000	150,000	150,000	0%
QC	2,758,936	1,602,672	2,513,928	2,558,093	2,306,906	2,530,000	2,201,082	-5%
Canada	3,966,620	2,639,613	4,021,681	3,305,093	3,432,906	3,620,000	3,365,082	-2%
Chile	488,000	480,000	440,000	484,000	501,000	501,000	501,000	0%
Industry	13,712,365	11,241,509	13,143,303	11,394,563	11,666,417	12,874,000	10,881,082	-7%

Cranberry yield values 2016-2020 by region, country, and industry totals. Data provided by Cranberry Marketing Committee.

The above table shows overall industry volume numbers for 2016-2020 as well as estimated 2021 crop and more accurate compiled estimate from the CMC (actual data should be available from CMC late January 2022). Of note, the WI crop was way down from its estimate, and down from 2020. Reports from WI attribute the low crop to bad weather during bloom and other weather challenges. MA crop was ~1.7 million barrels, down 9% from 2020. Other regions had average to slightly above average crops. Overall US estimate seems to indicate a crop below 2020, around 7 million barrels.

Quebec reported a conventional crop of 1.67 million barrels, similar to 2020, but includes 900 acres converted from organic to conventional. Organic forecasted at 524,000 barrels, down 130,000 barrels from 2020, mostly

due to conversion of organic acres to conventional production (conversion driven by price). Huge organic crops in the past 2-3 years crashed the commodity price for organic products. Pest management problems were also reported as a pressure forcing growers to convert back into conventional management.

Decas did not restrict fungicide use and applications were similar to other years. Growers who had Bravo-based programs still had rot troubles. Fungicides can only do so much, given the set of environmental conditions and the lush canopies.

Mike Utley from **Nutrien**, reviewed his sales for the year.

Some growers reported that they felt the late copper applications allowed them to at least pick a crop. It was noted that there were many wet bogs and root rot issues in 2021 and phosphonates and Ridomil use was up as a result.

Mike pointed out that Titan XC is added to many of their available fertilizers to help nutrient availability and uptake. It is a non-plant food ingredient that is impregnated or sprayed on many of the blended dried granular fertilizer formulations. During the blending and bagging process the Titan XC is sprayed onto the dry granular fertilizer at the rate of one pint per ton.

Orders are hard to get, and prices seem to be going up across the board.

Quebec Production	2019	2020	2021	% Chg. '20-'21
Conventional Barrels	1,832,845	1,653,085	1,676,457	1%
Conventional Acres*	6,201	6,417	7,387	15%
Production/A	296	258	227	-12%
Organic Barrels	725,249	653,820	524,850	-20%
Organic Acres*	3,944	4,265	3,390	-21%
Production/A	184	153	155	1%
Total Barrels	2,558,094	2,306,905	2,201,307	-5%
Total Acres*	10,145	10,682	10,777	1%

Fungicide	% up or down in 2021
Indar	Down 50%
Abound	Down 68%
Bravo WeatherStik (chlorothalonil)	Down 9% (65% down 5 yr avg)
Bravo Ultrex (chlorothalonil)	Up 28% (70% down 5 yr avg)
QuadrisTop	Up 25%
Proline	Up 21%
Manzate Max, Manzate ProStick	Up 5% (compared to 3 yrs)
Dithane F45, Koverall (EBDC's)	
Champ 2F, MasterCop, OSO (coppers)	Up 65-70% (late August)
Phostrol, Rampart, Fosphite, Aliette WDG (phosphonates)	Up 30%
Ridomil Gold SL, Ridomil Gold GR (mefenoxams or phenylalimides)	Up 10%

Herbicide	% up or down in 2021
Casoron	Up 11.5% (down 88% from 20 yrs ago)
Callisto, Explorer	Down 8%
Evital	Up 55%
Roundup PowerMax	Even
Makaze, MadDog (generics)	Up 48%
Devrinol 2XT (liquid)	Down 40%
Devrinol DF (dry)	Up 35%
Intensity One, Select Max	Up 22.5%
Kerb Quinstar	Little sales of either (15-35 gallons total)
Zeus	Little sales (32 gallons total)

Insecticide	% up or down in 2021
Actara	Up 12.5%
Altacor	Up 4%
Avaunt WDG (now Avaunt EVO)	Up 10%
Delegate	Down 5%
Diazinon AG500, AG600	Down 5%, Up 45%
Intrepid, Invertid	Up 35%
Sevin	Down 5%

Fertilizer	% up and % sales in 2021
Overall	Total up 21.5%
18-8-18 100% SOP w/ Titan XC	~ 19% of sales
3-0-6 w/ Titan XC	~ 15% of sales
18-8-18 100% SOP no Titan	~ 10% of sales
12-6-24 w/ Titan XC	~ 5% of sales
10-20-20 w/ Titan XC	~ 5% of sales

Glenn Reid from **AD Makepeace**, added that there were signs of rot early on and the rain did not help matters. The growing season was challenging! Makepeace was down anywhere between 6.5 to 8% from their estimates, down like everybody else. It was definitely a challenging year. Makepeace cleaned 24,000 barrels of their own cranberries, which was double the loads compared to last year.

John Mason from **AD Makepeace**, added that the first week of March had a quick cold dry snap that likely exacerbated the stress on the vines. He flooded a couple pieces at his home bogs, and they were noticeably healthier going into the spring. He noted that fruitworm pressure could be seen where sprinkler heads missed, although overall 2 Altacors and a Delegate spaced weekly did well on all else. He reported good control on weevil with Avaunt on 2 big properties in Carver but everywhere else had to rely on Actara. Diazinon was used across the board for Makepeace on everything before the bees arrived and it stopped much of the developing scale infestations. It's a challenge managing scale and disappointing to spray right before the bees come. He reported some bogs had weevil, scale, and spag and was forced to do a Diazinon/Actara/Delegate combination. It was effective but had never mixed so many compounds! He also mentioned that 40 lbs of Casoron on Mullica Queens before late water stressed the crop but killed moss.

A few horror harvest stories were shared. Hellish Mullica crops floating in the water at 75 degrees F, deliverable in the morning but not deliverable in the afternoon. Backups at the OS receiving station. Having to regroup during harvest, moving a lot of fruit 2 or 3 times, back and forth, into the rot pool, coordinating trucks to get loads delivered. For a year with hardly any fall frosts, and little issues with available water, it was still a challenging harvest season. No normal anymore, just a matter of adapting to what we're given and doing the best we can, with what we got. He asked growers to note that the [CCCGA research committee](#) sets research priorities based on what is heard from the growers, so give feedback to John!

Leela Uppala shared: "I definitely believe it is not just fungal rot. It's a multitude of factors that contributed to rot and the weather is a major source of that. Regarding Abound and QuadrisTop, azoxystrobin only targets 2 of the 12 different fungi we see in fruit rot, so the combination of QuadrisTop is really ideal. For integrated fruit rot management, there are a multitude of factors that contributed to rot this year, not just fungi. In addition, I know some growers wanted to spray something after the first week of September, after we receive 7" of rain overnight, but I communicated that while a spray might give some peace of mind, it definitely would not make much difference at the receiving station or at harvest."

Gavin Bartlett from **AD Makepeace**, noted everything was stressed coming out of winter - upright dieback and a combination of issues. Although it looked bad, there was potential during the flowering and flowers just seemed to keep coming. A lot of growers saw that and perhaps some people fertilized a little bit more than they should have leading to the dense canopies. Nothing ever dried out. Avaunt worked fine on worms and weevil at Makepeace Pierceville properties, but at Rosebrook and Smalley, Avaunt only worked on the worms and did

not touch the weevil. Makepeace got permission to use Belay and it knocked the weevil down for that week. Next year, looking at 3 Actara shots for the very challenging weevil populations.

Peter Beaton and Rob Rubini from **Cranberry Growers Service** shared that they have never witnessed two successive years with so many environmental challenges from weather. The vines came out of winter water very dried and crackly; no extensive leaf drop, just poor vines and probably related to the drought in 2020. Going into the spring and early summer, they seemed to come out of it well (the vines never really got to look “perfect”) and the bloom and set looked okay. The berries never really sized up and then the rains came. Some locations went under water for a long time, and it challenged the fungicide programs. They felt comfortable with the program they were using (from the UMCS). Even though there was some poor fruit on nearly every bed, the fungicide program kept them from a real disaster and only 2 or 3 beds were really terrible. Crops were compromised between 5 to 18% on most of bogs. Some had a record crop, but most were down 10 to 15% from last year. Stevens surprised them (more fruit), and the Crimsons were a close second. The best variety was Howes.

They have been pruning to a large degree the past couple of years and noticed where the bogs were aggressively pruned, the fruit were very good. The production was lower, but the berries and the vines did better than non-pruned bogs. They have been a bit slack on ditch maintenance so next year they will concentrate on cleaning ditches and drainage tile.

Regarding scale, they didn't notice much early but did notice a lot late August and into September, which was different from the usual (spring-early summer). During harvest, more scale dieback areas were spotted resulting in sprays on several properties. Fruitworm pressure was definitely there. They found more eggs this year. In areas that didn't have heads working, damage could be seen but very well controlled elsewhere. For cranberry weevil, some properties still have success with Avaunt. There were no summer weevil sprays required (despite expecting problems).

Scott Conner and Ben Richards from **Hannula Cranberry**, definitely saw the effects of the drought from the previous year. In particular, EB, H and some cases BL, had dieback issues. It certainly affected the yield and the size on the EB. Stevens were definitely a challenge this year. Normally it's not that humid during bloom, but it seemed a little excessive during that stretch. Even with using less fertilizer than normal this year, some vines got overgrown. There was a lot of rain after the second shot a fertilizer went out (~July 6) and may have put more nitrogen out there than expected. Soil tissue tests came back low on nitrogen, which was interesting because overgrowth was seen in places.

Rot was not as bad with the Bravo-treated vines compared to Manzate-treated vines. Rebuilt Stevens (with rot issues) still had the same kind of rot issues on the new beds. So, whatever the condition of the original beds, the same sort of rot problem was being seen on the re-built beds.

The Stevens were a tough deal this year. On one bed, the fruit wouldn't be bad and literally the next one over, there would be a lot of rot. Although the crop was down at the end, it seemed like the crop was originally there. By the time the rot came, and the bad fruit was removed, half the crop was lost. The plant did its job, but the crop fell apart in many spots. Fruit size was really variable. Anytime you have dieback on any scale on Early Black usually the yields are down, and it usually affects the size. Howes had a late bloom but, in the end, size was good. The quality was excellent on the Ben Lears. Going forward we're going to make a huge commitment to canopy management. We have the ability to sand any kind of way we choose to, and we will.

Chris Cokinos from **Weston Cranberry** shared that they got some sanding done on the ice and then some Terragator sanding. Going into spring, insect pressure was not bad. Going into bloom, everything looked really good. Ben Lears just didn't set. We had a lot of upright dieback on the BL. Crimson Queens had a great bloom and set a ton of fruit, almost to their demise. Fruit were just piled on top of each other, so they didn't hold up

well into the fall with all the water. Mullica Queens did amazing, many beds did well into the 500s! The crop was actually up a bit over our average. Rot wasn't horrible on most varieties, except for CQ. We did five fungicides, and, in the end, it turned out okay for us.

For fertilizer, we used our same routine, looked at bloom and then used 18-8-18 with Titan. We did have the upright dieback problem on BL and held back on the fertilizer, so we didn't blow it over the top. You could see it in August on the CQ where the crop was thick. Berries were just stacked on top of each other and rotted where the berries were wet all the time. We had potential for 500s on the CQ but they went low 300 barrels/A due to the rot factor. We got everything in, nothing rejected, but we were very lucky.

Steve Ward also reported that bogs looked terrible this spring. It was the trifecta of record drought, record rain and record days over 90 F on the bog. In August, on those hot hot days, automation sensors showed temperatures on the bog around 118 F. Comparison with a laser gun got temps of 105 F. Based on what Peter Oudemans says, berries are damaged at 108 F. Concerning, but no daytime cooling was used and stuck with watering in the morning. In September, 10 acres went under water with the heavy rains. After consulting at the station with Leela, $\frac{1}{2}$ the acreage was treated with OSO and $\frac{1}{2}$ was left untreated - they both came out the same.

As we harvested, we did a lot of scrambling, trying to get to the beds that were going downhill. We definitely plan on a lot of pruning. Considering flooding in March, like NJ does, because that is where stress may be coming from - those very chilly nights in March.

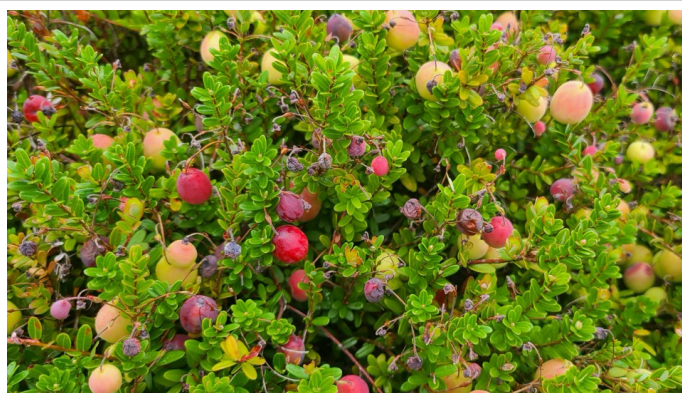
Keith Mann agreed that this year, in the spring, there was a lot of upright dieback, particularly in BL and ST bogs, some with 20 to 40% of uprights impacted. As the season progressed, the vines grew out of it. It looked like a decent bloom. Insects were easily controlled, and weevils were down a bit, actually did one less spray than usual, and didn't get the summer population as high as usual.

Some BL areas had 100% of the fruit aborted and shriveled up. Virus issues were ruled out. Fungal tests were run but nothing unusual and it was decided that it was likely secondary infection. There was discussion of NIS added to applications that may have caused the burn. Sprays went out later in the morning, and within 3 hours, the temperatures hit >95 F. The vine looked healthy, but fruit was aborted, so still unsure of the cause.

Dave Ross reported for the Cape Cod perspective relaying that lingering damage from the previous year's drought had the biggest effect. Yield was down definitely 15-20%, mostly on the older varieties, not so much on Stevens, Mullicas and Sundance; Howes did okay. Canopy management has been good. Rot was not seen as the cause for yield loss. The Cape (in locations) had a huge amount of rain, two 7-inch rain falls within about two weeks. There was plenty of water for harvesting.

Will Stearns reported 10 of his 40 acres went underwater in early September. It didn't end up as bad as feared. It was underwater for 24 hours but fortunately it wasn't a really hot day, and the sun didn't come out until late in the day. Mullica were great, Early Blacks were a disaster.

He shared his unique perspective, growing turf as well. With turf, compared to cranberry, you get instant feedback. They put out less fertilizer than normal on the turf and were "baling hay" the entire summer after all the nitrogen from rainfall. Same with fungus. In cranberry, fungicides go on in July and we all just hope everything is good in September. This year the disease pressure was just too much. Usually use 3 fungicides



Aborted fruit and pinheads on Ben Lear bogs

on the fairways a year, this year had to do 6! With 14-to-21-day products, signs of disease were already there at 14 days.

Ron Drollet just picked his 43rd cranberry crop and it was the worst crop that he's ever picked with no idea why. Yields were down roughly 70% over 2020. The bloom seemed thin, and things seemed off the whole season. He's up there in age (80 years old) and hopes to live long enough to have another bad crop.

Cass Gilmore, spoke for both AD Makepeace and his own farm. He reported low cutworm pressure but saw weevil counts >100 in the spring - unbelievable. Weevils were sprayed and sprayed but just kept coming back for more. Late water bogs (ST bed as part of a study) did not fare well this year; even with 3 fungicides, most of the fruit went to the rot pond for cleaning. He noticed side by side bogs sprayed with Bravo had dodder and no-Bravo bogs did not have dodder. At Bensons Pond, even with 4 fungicides on everything, yields were down 30%. Had pruned 75% of acreage in past year. With rain, he reduced fertilizer by 25%.

Beds that went underwater (some for 4 days) in September fared better than expected; very surprised. Deep floods did better than the light floods. Surprising that bogs that were underwater for such a long time (3-4 days) were not completely destroyed.

Make Rachel Carson Proud. Cass wanted to point out 2022 is the 60th anniversary of Silent Spring, a book written by Rachel Carson warning about dependence on pesticides. Our pest pressures are just getting worse and worse, and we need to adapt, we need to try something different, and we should! We need to remember to look at biological options because sometimes the spray approach is not working. We may be hurting ourselves by over spraying! It's time we start trying something different and integrating other theories into growing.

Brian Wick, Director of the **Cape Cod Cranberry Growers' Association**, wrapped up the meeting and stressed the need for continued research. He reported an averted wetland regulation (see CCCGA newsletter). The Bog Tour program had a great 2021 but needs help for 2022. ARPA funding, federal recovery act funds, are being filtered down to the State, MA to get their share. It is a multibillion-dollar program, and the legislature has been working on figuring out where that money is going to go. It could be a significant chunk of money (millions!) to come to MA cranberries for more bog renovations. He mentioned that they are considering a re-format of their winter meeting.

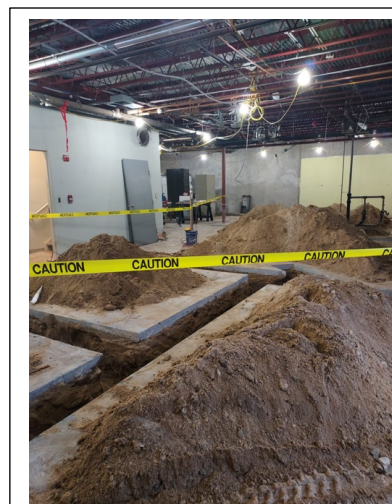
Station News

By Hilary Sandler, Director

CONSTRUCTION UPDATE

Progress is continuing on the lab renovation and conference center construction at the Station. Walls have been poured for the new building and we hope to see the slab go in very shortly. The mechanical room has been demolished and oil tanks have been removed. Plumbing upgrades are underway in the basement of the lab building (see photo) and duct work is being assembled on the upper level. Plans are moving forward to upgrade our IT capabilities and service.

The Admin Building is open during construction with a core group present every day. If you do visit, please park outside of the fenced area. There could be active machinery driving around, so please be careful. All faculty are working remotely but are in the field on occasion as needed. **Our conventional phone system is no longer available!!** The best way to reach us is through email or by cell phones. You can reach at Hilary 413-800-6531 or Robyn at 413-800-7470.



Trenching in lab basement

CRANBERRY STATION NEWSLETTER

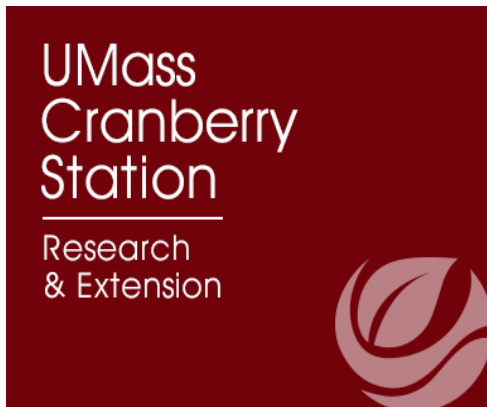
IN THIS ISSUE:

News Regarding Pesticide Credits

News Regarding UMass/USDA Late Water Study

2021 Crop Summit Notes

Station News



UMass Cranberry Station
1 State Bog Road
East Wareham, MA 02538
OFFICIAL BUSINESS