

GROWERTALKS

Features

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Crash Coarse

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One of the many live event casualties of the pandemic was the DIG Conference. Part of a lineup of smaller conferences that AmericanHort holds each year, “DIG” stands for “Disease, Insect & Growth Regulators” and was originally slated to be in Denver, Colorado, in the fall of last year.

Those of us who regularly attend these conferences missed the grower tour and workshops they usually have on the first day, but as we’ve all learned during the last year, educational sessions lend themselves easily to being virtual. So that’s what the focus was on for this conference—plenty of live and on-demand education for attendees to choose from. Tracks covered specific insects and diseases, along with PGRs, and pest management for hemp.

AmericanHort members can still register and access all of the sessions until March 1, 2021 at americanhort.org/dig-conference-2020, but I wanted to highlight the “DIG Deeper” panels here because there was a ton of interesting insights and information too good not to share.

DIG Deeper Panel: Current Issues & Developments in Plant Health

Hosted by Craig Regelbrugge (AmericanHort); and panelists Dana Rhodes (National Plant Board), Jennifer Gray (Horticultural Research Institute), Chris Schlegel (D.S. Cole Growers), and Dr. Jill Calabro (Valent), the focus was on advocacy, regulations and research regarding plant health.

The Ralstonia outbreak on Ball FloraPlant geraniums in early 2020: “It just came out of the blue because it’s been 16 years since we last saw it,” said Jill, who was Science and Research Director for AmericanHort at the time. “But the experience from dealing with it [last time] and prevention protocols helped mitigate it quickly.”

“A shout out to Ball for all of the things they did and their response,” said Craig.

Since the outbreak, there’s been a focus on sanitation at the production sites. Jill mentioned that HRI has “quick sheets” on best practices on handling Ralstonia, like not composting diseased material, for instance.

Standardized terms for disease resistance: AmericanHort and HRI coordinated the efforts to get all of the major industry plant breeders and key researchers together to discuss and agree on the appropriate terms for communicating disease resistance to growers and consumers. There are now industry-wide agreed-upon definitions of “resistance” vs. “tolerance.”

Boxwood Blight: “We’re starting to get better answers,” said Jill. Recently, the USDA-ARS received funds to conduct more research on Boxwood Blight, so the Boxwood Blight Insight Group of scientists was created. It will be a couple of years before we know the results of the trials, but the goal is to identify which cultivars are resistant and which are the most susceptible. Researchers are hoping to publish some preliminary results of their trials in the next few months. (Stay tuned to these pages!)

SANC certification: Dana said each state has a plant regulatory official; she’s the one who represents Pennsylvania. She’s worked closely with AmericanHort and the USDA’s Animal & Plant Health Inspection Service (APHIS) on the Systems Approach to Nursery Certification (SANC) initiative that provides plant health best practices to growers.

So far, three different growers have been certified under the SANC pilot program. As of January, SANC is open to any grower who wants to be part of the program. And don’t be afraid of the requirements—the SANC manual is only 14 pages long, so becoming certified isn’t a scary prospect. (Information on SANC can be found at nationalplantboard.org.)

D.S. Cole Growers is one of the operations currently going through the SANC program and they’re not new to the certification process—they’ve been a part of the MPS environmental program for a few years.

Chris is D.S. Cole’s head grower and she said the most time-consuming part of the SANC program is the risk-assessment process to figure out which areas needed the most attention. She said that it’s offered them a better way to train their employees and keep better records.

“Now people make a concerted effort to look for pests and diseases,” she said. “Our sanitation practices are much better.”

They also have a constant line of communication with their state regulatory officials, which helps build those relationships before any problems arise.

“We catch problems earlier, so we’re treating earlier, and we’re using less chemicals,” said Chris. “And the quality of our plants is better.”

The Offshore Cuttings Greenhouse Certification Program: This new certification program for offshore cutting production facilities is now officially open. Operations who meet or exceed the requirements will be able to bypass the APHIS inspection completely and ship directly to rooting stations.

DIG Deeper Panel: IPM Challenges and Solutions

Hosted by Matt Foertmeyer (Foertmeyer & Sons Greenhouse); and panelists Broch Martindale (Corteva Agriscience), and Chris Schlegel (D.S. Cole Growers), this Q&A format discussion was on their experiences with integrated pest management.

What are your guiding principles with regard to IPM?

“Zero tolerance for pests—especially on liners going out,” said Chris.

Many of their customers are using biocontrols, which can be a challenge since D.S. Cole grows a lot of different types of crops. Chris said they always start with sanitation and biocontrols first, and then use what she calls “softer chemicals” if they have to.

Matt said they apply biocontrols “from Day 1” because “if you’re always reacting instead of being proactive, you’ve probably already failed.”

Which insects do you have problems with?

Matt said their No. 1 pest right now is aphids for a number of reasons, with one being the temperatures they use to grow their crops. Western flower thrips used to be more of a problem.

Chris said they've had more issues with aphids than in the past, but their main challenges have been with thrips and whiteflies.

What drenches are you using?

Chris said she and her team are primarily using Mainspring. They've used Kontos, but they were having some phytotoxicity problems.

Matt said he uses Mainspring and Endeavor, especially on calibrachoa.

How do you train your staff?

IPM can't run smoothly if everybody isn't trained on scouting and prevention techniques.

"Everyone should get pest ID materials; they don't have to be fancy" said Broch. "And everyone should know what the insects are and how to report them."

It can be as simple as the staff answering a few questions, like: Where did you see them? Which crop? When? Is it a rush issue?

"You have to make sure all employees are aware of the potential problems, not just the growers," said Chris. "If you communicate current and potential problems, the staff gets into it and become really interested in solving the problems."

Weekly grower and staff meetings to share information are a good start. "It goes beyond sticky card counts," said Chris.

Broch goes even further, incentivizing employees to really look into the crop by hiding Starbucks gift cards and other prizes in the plants.

Who are your go-to people when there's a problem?

All of the panelists agreed you should build trusting relationships with your biological suppliers.

"Every grower should have someone in their Rolodex they can always reach out to because IPM is challenging," said Matt.

"Having partners is key," said Broch. "You have to have someone who knows your crops."

Other than suppliers, growers can turn to university and extension specialists, and distributor companies who have technical experts on staff.

DIG Deeper Panel: PGR Challenges & Solutions

Hosted by Dr. Todd Cavins (Ball Horticultural Company); and panelists Rob O'Hara (Rainbow Greenhouses), and Isaac Brantingham and Rebecca Dabney (Riverbend Nursery), highlighting their role in using PGRs on a wide range of products.

The future of PGRs: Rob says just by looking at the new genetics that are coming out, you can tell the goal for many plant breeders is less need for PGRs. It's especially important for him because being located in Canada gives him less chemical options.

With more access to PGRs because they're in Virginia, Isaac said they don't just use PGRs to control habit, but it

reduces the need for more maintenance, so they use a lot less labor. His wish is to see more perennials that need less PGRs.

What tools do you use?

Riverbend uses backpack sprayers and drenches where they go container to container.

Ninety percent of Rainbow's PGRs go through boom sprayers. Rob says they get a more consistent, even cover this way and he finds they use less. It also takes less time and labor applying PGRs through booms. And with no sprayers blocking the walkways, it's less disruptive.

What nozzle type do you use for PGR applications?

"It depends on the crop," said Rob. "You do have to test first and it takes a level of training. With the booms, it's a little bit easier because you can establish parameters and the boom does all the work."

He said it can be difficult to teach someone how to apply PGRs because some people spray heavier than others. "Automation has made it easier," he said.

How have you handled PGR-related mistakes?

Isaac joked and said they've inadvertently done trials over the years, learning what not to do, especially on rudbeckia and hellebores. Luckily, there are tools to correct mistakes, like Fascination, which Rob said he's had to use on phlox in the past.

"Some [chemicals] can be good, but they can also really ruin a crop," Rob said. "They have their place, but some of those mistakes you can't come back from."

Isaac agreed. "The rate is really important. I have turned iberis into spaghetti before."

When is the best time to apply PGRs?

Again, it depends on the crop and the conditions, said Rob, whether it's a cloudy day vs. sunny, morning vs. evening, etc. "Understanding what you're working with is important," he said.

"We have a lot of wind, so evaporation can be an issue for us," said Isaac. "We also have a lot of fog because we're near the river, so we take advantage of the conditions when we can."

What about adjuvants?

Isaac said they typically use Capsil. One day they ran out and had to resort to Dawn dish soap and it actually worked! But he wouldn't make that a habit.

"We don't use them on everything," said Isaac. "Only on certain crops, depending on how much spread we need."

"We don't use them on herbs," said Rob. "We start clean and stay clean." And since Capsil isn't available in Canada, if they need to use an adjuvant, they mix in magnesium sulfate. Todd mentioned that growers in Europe use Epsom salts.

When do you treat hanging baskets?

Rob said they don't use too many PGRs once the plants are in the air. They shear them before they're hung and then do one timely application if necessary.

"Scissors are our friend still," he said.

What about PGRs on succulents and houseplants?

In the last couple of years, Rainbow has increased the volume of houseplants they grow in-house and they're adjusting and learning. Configure seems to work well on toning houseplants to hold them at retail and on chick production for sempervivums, but it's a lot of trial-and-error right now.

"We don't do anything too crazy," said Rob. "Bonzi can really bring out the color in succulents, but you have to really be careful." **GT**

One last note: The panel mentioned their main sources for PGR information are the breeding companies and the PGR Guides that GrowerTalks publishes every year. You can find one for annuals (growertalks.com/pdf/Annuals_PGR_Guide_2021.pdf) and perennials (growertalks.com/pdf/Perennial_PGR_GUIDE_2020.pdf).