GROWERTALKS

GT in Brief

3/26/2014

The impact of Dümmen's TMV outbreak

Chris Beytes

You may have heard that German breeder Dümmen suffered an outbreak of tobacco mosaic virus (TMV) in Red Fox vegetative petunias at its Las Mercedes production facility in El Salvador. We're told that the total vegetative petunia industry in the U.S. is estimated at 100 million cuttings. Dümmen's TMV outbreak has impacted roughly 15 million cuttings—15% of the total market. (Bear in mind: That does NOT mean 15 million cuttings are infected with the virus, or were even shipped, or even cut from the mother stock. It only means that an estimated 15 million cuttings were produced or could have been produced at Las Mercedes between Weeks 51 and 7, and those are now, for the most part, lost to the market.)

Fifteen percent is a large hit to a key crop and it has left suppliers and growers scrambling to find substitutions. And left Dümmen working overtime to alleviate the infection's impact.

A 15 million-cutting shortage ripples across the industry. It impacts branded programs at Home Depot, Lowe's and Walmart. Large growers have dumped millions of cuttings on the advice of Dümmen. It impacts independent garden center programs such as the HGTV HOME Plant Collection (of which Dümmen genetics account for more than 90% of the petunias).

And you don't just source 15 million cuttings from another supplier overnight. Nobody speculates on cuttings to that large an extent. Other petunia suppliers have done what they can to fill in the gap and Dümmen has ramped up production at its other farms, but nobody can ramp up millions of extra cuttings that quickly.

Some background

To get a recap and update of the situation, *GrowerTalks* spoke with Kate Santos, Dümmen's Chief Product and Operations Manager. She was on the road in California dealing with the issue, but took time to answer our questions.

Kate says the TMV outbreak was first discovered during Week 51 (the week of December 15) in one variety, Sweetunia Johnny Flame. Dümmen notified customers about it and stopped shipping that variety and dumped the stock, per their protocol. They also upped their testing schedule.

Three weeks later, in Week 2 (the week of January 5), they found additional spot infections of TMV in beds adjacent to where Johnny Flame had been. They again stopped shipping from those locations and again

notified customers. This time, they upped their protocol, discarding entire bays of plants and increasing their testing.

Unfortunately, that wasn't enough.

Said Kate: "We felt at that time that the second cleaning [of the petunia stock blocks] was sufficient to have controlled and gotten rid of any potentially infected plant material."

But as they moved into February, they started getting positive test results from customers on material shipped after Week 2.

"Which at that point told us that we had not contained the virus," Kate said. "As a consequence, we made the decision to no longer ship any Red Fox petunias from El Salvador, because we could not identify where the edge of the infection was."

So in Week 8 (the week of February 16), Dümmen stopped all petunia shipments from Las Mercedes. They shifted entirely to other production sites: their own stock farm in Ethiopia, Cohen in Israel and a new petunia block at Oro Farms in Guatemala. (There have been no reports of the virus in those locations.)

Was the action/reaction appropriate?

We asked a trusted colleague with extensive propagation experience for his opinion. He says that, based on the timeline Dümmen is claiming, it seems they reacted appropriately. We should note that there is no formal "industry standard" protocol for disease outbreaks; each producer develops their own. Unfortunately, Dümmen's protocol was insufficient for the situation.

"In hindsight, if we had understood the ramifications of the virus spreading as it did, of course we would have [stopped all shipments]," Kate said. "Our actions at the time were not enough, we recognize that now; and moving forward, if we find [virus] in one variety, we would quarantine the entire petunia block."

What was the cause?

We asked Kate if they know the source of the infection yet.

"We don't," she answered. "We've narrowed it down. We know it started at the Las Mercedes farm, we know it didn't start from the clean material coming into the farm, based on the fact that the other farms received the same material and have remained clean throughout the season. We don't know the original point of infection—we are very much focused on that as we're going through protocol reviews and trying to prevent this moving forward. There are a couple of hypotheses of where it started, but we're not 100% sure yet."

What has Dümmen learned?

"Every protocol is certainly up for review," Kate told me when asked what changes they were making in the wake of the outbreak. She listed several changes already going into effect, including moving petunia production to a new greenhouse, dividing the typically large greenhouses into smaller compartments to isolate varieties, putting in full concrete floors under benches to improve sanitation and allowing only smaller crews into the stock houses.

"These are some of the initial things we're focused on ... it's multi-pronged," Kate says. "We've got a team working on that right now, going through every single protocol to identify and improve upon any potential weaknesses in order to prevent this from happening in the future."

What HGTV and PW have to say

Retail programs like HGTV HOME Plant Collection are working overtime to find replacements for lost Dümmen petunias. HGTV's Randy Hunter said it's too soon to know the impact on the HGTV program because the situation changes day by day. He said he talked to a grower last Thursday and the grower had no disease. By Friday, he'd gotten a positive test.

"We're going to lose some product in the marketplace, I'm sure of that," Randy says. "How much? We're trying to keep it to a minimum.

"I think we're in okay shape, all things considered. The people we know that have it, we've been able to get it rectified fairly quickly, with product, or make some adjustments. We're just taking it day by day right now."

Proven Winners has been one of the go-to suppliers of replacement liners and the three U.S. propagators—Pleasant View, Four Star and EuroAmerican—as well as the Proven Winners propagators in Canada, have been able to deliver, says Proven Winners Executive Director Mark Broxon. "I can tell you that the group is getting a lot of orders and the propagators are filling them as much as they can with spec," he said.

With many large growers looking to fill holes in national programs, there were reports that some suppliers were allowing their genetics to go into any program without any special labeling in an effort to help growers meet their retailers' needs. What is Proven Winner's philosophy on the topic?

Mark explained that, "based on our significant consumer awareness and branding focus, we can't alter our long-standing policy of requiring a Proven Winners tag with each plant and not allowing our genetics to be sold in another national brand's pot." But he added, "Our group is assisting the industry by filling plenty of orders."

Everyone from Dümmen on down will learn something from it. Kate Santos said at the end of our interview, "The realization of the significant impact a situation like this can have on our broker partners and growers and our team is as humbling as it is impactful. Speaking for myself and the team, this is certainly not something we're going to forget. Nor something that we will repeat."

Rest assured that this won't be the last time something like this happens. It might be wise to use the situation to develop an action plan with your suppliers for the next time. **GT**