GROWERTALKS

Growers Talk Production

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Hurricane Worries: Be Prepared!

Austin Bryant

Florida and the Gulf Coast states have directed their attention squarely toward the 2024 hurricane season. The NOAA (National Oceanic and Atmospheric Association) has predicted an above-average number of named storms this year. In mid-May, the National Weather Service released their predictions forecasting 17 to 25 named storms, with eight to 13 becoming hurricanes and four to seven of those becoming a major hurricane. Mother Nature didn't disappoint the predictions with its first major storm, Beryl. The earliest major storm of the season tracked as a strong Category 4/5 in the Southern Caribbean. Beryl formed as a hurricane in June, breaking any hurricane record in history for the earliest major storm.

This year, we're cycling through a La Niña, which is a weather pattern that creates lower easterly trade winds across the Eastern Pacific, crossing Mexico and the Southern Caribbean. These are the winds that generally produce the shear or resistance that pushes a storm heading west to hook north. Stronger easterlies mean, in general, the storms will have a better chance of hooking north sooner into the Atlantic and not affect the U.S. Weak easterlies, like those found in La Niña years, will allow the storms to track further west before hooking into Mexico or the Gulf region. This La Niña weather pattern coupled with all-time-high water temps means this could be a year for the record books.

I've always found the subject of hurricanes extremely interesting. My father was part of the U.S. Navy hurricane hunters as a flight engineer on the P-3C Orion. This is the same plane used today by NOAA for flying through the eye wall to measure wind speed and barometric pressure of a storm.

Why fly into a hurricane with the satellite technology we have today? Tracking and intensification. The first opportunity to see a storm change course is by tracking the position of the absolute low pressure within the storm's eye. What looks like the center of the eye isn't always the center of the storm. The inner bands can wobble non-symmetrically around the center point, and it can sometimes be misleading where the storm is heading until it becomes obviously apparent.

I've heard our local meteorologist use the term "now-casting" which implies no prediction tracking value at all. This is simply looking at the last couple hours loop of radar and predicting where the storm will head by past path generalization. Hurricane Charlie in 2004 was predicted to move off the Gulf coast and enter north of Tampa. Until it didn't. An abrupt turn to the east at Port Charlotte put the storm heading directly to us. I'll never forget staring at the radar loop and seeing that right hand jog and praying it was a wobble. The next couple radar loops confirmed the change in direction, which was significant. It was a 10- to 15-degree unpredicted course deviation that nobody saw coming and sent the eastern eye wall directly over our location.

For the past couple years, the top headline has been the story of AI. I've been interested in how the weather services

will use this new technology and where they'll implement it in hurricane forecasting.

There are two new tracking models coming online for this year's season. The MOM6 and the SEDCON. The MOM6 is an oceanic model that helps consider the ocean waters and currents regarding storm intensification. The SEDCON is a prediction for probable chance of rapid intensification. I'm sure both of these models were watched closely with the current hurricane Beryl, which spun up from a Category 1 to a Category 4 in a 12-hour period.

So a hurricane is coming. I wrote up an abbreviated checklist of what we use in preparation for an impending storm. Every operation has its own special quirks; I'm sure there are things on the list that may not apply to every operation. It's nice to review another's checklists to see if anything might apply to your own. Or this could be a great blueprint for starting your own.

For all the growers out in the Midwest, I'll take a hurricane any day of the week over a tornado. At least I can see it is coming. Preparation is key and every systematic grower should love a checklist. After a major storm, the longest we've been continuously out of power from a storm was 14 days. I know of others who've been slightly longer. Regardless, it's a long time to be out of power and communication. Be prepared. **GT**

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Hurricane Preparation Checklist:

In the cone of possibility one week out:

1. Order fuel: As required (gasoline, diesel, L.P., batteries, oil, etc.)
2. Get up-to-date telephone numbers of all employees
3. Test generators and locate extension cords
4. Test chainsaws, check 2-cycle oil and chain bar oil
5. Make sure ditches are open for flow to quickly relieve water
6. Order extra staples and groundcover

In the cone of possibility three days out:

1. Have enough cash on hand to cover at least one week's payroll
2. Check First-Aid Kits, bug spray, batteries
3. Fuel up cars, trucks, tractors, carts and other equipment
4. Turn off liquid propane main tanks for nursery
5. Put up hurricane shutters over windows
6. Secure loose items from outside office and barns (pots, chairs, boxes, trays)
7. Unplug all heaters throughout the greenhouses

In the cone one day out:

1. Make backups of computer system and store records off site—mail one out of state or store in the cloud
2. Run hard copy of current inventory— valuation report for all houses
3. Run hard copy of customer list, including telephone numbers
4. Run hard copy of current aging report in detail
5. Run hard copy of vendor list—include personal cell numbers for your reps
6. Run hard copy of trucker's company telephone numbers
7. Unplug all computers and printers from the wall; put plastic bags over servers and towers
8. Get all items off the floor in the office that could get water damage (water will come in through doors and windows)
9. Brace and secure large roll-up doors

Before first squall line:

1. Turn off all greenhouse pressurized water systems
2. Throw breakers on non-essential greenhouses and equipment