# **GROWERTALKS**

#### **Features**

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# **Poinsettia Production Plan**

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As long-time poinsettia growers know, getting each step in the production process right is vital to avoiding major problems and producing the highest-quality plants. So we've created this "task list" to help you and your team prepare for poinsettia production season.

Consider posting this step-by-step guide somewhere in the greenhouse, breakrooms or meeting areas so the crew can watch short videos as they're executing the tasks each week.

Of course, every greenhouse, crop and scenario is different. From finished pot sizes and dates to market to regionally specific weather and light levels, you know your greenhouse best. That's why we didn't indicate week numbers, but simply listed the topics in chronological order.

Also, be aware, these tasks are not quite comprehensive and considerations like a range of environmental tips for each specific propagation stage and other topics like managing deficiencies and slowing down or speeding up crops aren't highlighted as part of these 20 entries.

For an even more thorough look at poinsettia production, you'll find an additional 15 videos in the Tech On Demand Poinsettia playlist on YouTube. (Click or tap on the titles to go to that specific video.)

#### **Pre-Season Sanitation**

Every greenhouse has its hot spots—areas where insect and disease pressures seem to be the worst from year to year. This is true for poinsettia crops, too. You probably know where they are, and warn your growers and team members to stay on red alert. But do you have processes in place to help prevent the spread of pests and diseases? You need to and it's going to take a team effort.

# **Creating Your Specs**

Your goal needs to be clear and measurable, not just a guess or comment that "they should be big and beautiful." You must know your varieties and that most often hitting or missing specs goes back to the pinch. You also have different needs for different customers, so plan accordingly. You'll want to consider the number of blooms, finished height and finished width for each crop.

# Task #1 Propagation: URC Handling

The moment you receive poinsettia cuttings, the clock is ticking. Starting strong is critical. Open up the boxes immediately and take the cuttings out of the bags. Assess the young plants visually and use a thermometer. You'll most likely need to hydrate them, and if they're hot, cool them down overnight.

#### Task #2 Propagation: Moisture Management

In early stages of poinsettia production, you'll want to create the best environment possible for your little cuttings until they establish. Misting is a best practice, but be careful not to over-mist. Watch the video for tips. Be sure media is well-drained and remember, Days 5 to 8 are when the cutting is initiating roots, so be extra vigilant.

#### Task #3 Propagation: Nutrition & Fertility

Although your crop won't need a lot of fertility in Stage 1, you'll still want to have a clear plan for fertility in the early stages of poinsettia production, with special emphasis on phosphorous management. Phosphorous can cause damage to growing tips when applied over the top during prop. Building media EC back up by Days 5 to 7 is important, as your crop will have little or no media EC at the time of initiation.

# **Task #4 Propagation: Pest & Disease Control**

Everyone's favorite topics—pest and disease control. In the early stages, focus on fungus gnat control, as well as avoiding Erwinia and Botrytis to help you start your poinsettia crop pest and disease free. Preventative control of fungus gnats is a best practice and cultural practices like eliminating algae, careful monitoring and moisture management are important. Similarly, you can often prevent common diseases from occurring using some chemical controls, as well as balancing your mist.

#### Task #5 Propagation: Environment & Fertility

Moving into Stage 2, environmental management continues to be key to keeping plants healthy. Pulling back on mist (with the goal of being off mist by Day 14), slowly increasing light levels and air exchange, reducing relative humidity and looking at soil temperatures set the stage. You also want to pay close attention to fertility and pH measurements.

#### **Task #6 Transplanting**

By now, you've completed propagation and are ready to transplant. Care needs to be taken to optimize this process. Key considerations at this time include proper media moisture and irrigation, as well as temperature and humidity. Watch the video for tips on what to expect and warnings about what to avoid.

#### Task #7 Pinching

The pinch is critical for setting the crop up for correct branching and profile. It's always good to refresh your knowledge, and remind your team when and how to pinch. Remember: Your plants don't need to be rooted fully to the pot edge before pinching. Watch the video for examples of plants with a range of leaf counts to help you hit the finished spec you and your retail customers are targeting.

#### Task #8 Early Production: PGRs

It's critical to get your early PGR strategy just right. This video is less than five minutes long, but filled with information. Watch for early-production response to Cycocel and B-Nine in different regions, as well as the impact of these applications on branching.

# **Task #9 Early Production: Moisture Management**

After transplant, attention to moisture is very important and drip irrigation is the best bet. Focus on building a solid foundation by staying in the middle of the road with irrigation and not getting too wet or to dry. Learn how to develop a moisture "language" with your team and quantify moisture levels. Also, avoid growing too dry in an effort to avoid root disease and don't use overhead watering late in the day.

# Task #10 Early Production: Water Quality & Fertility

At this stage in the game, there are trialed and tested recommendations for media pH, what fertilizer works best and the optimum methods for feeding and what your poinsettia crop needs at this stage in the game. You'll find these in the video, as well as tips for knowing your water quality, and testing often in order to make the best decisions as your crop progresses.

# Task #11 Tracking Your Height

Height tracking during production feeds the ultimate goal of hitting your specs. There are different ways to track poinsettia height, from simple measuring sticks to graphical tracking software. These are discussed in the video. Another good tip is to create a photo log or file with images week by week to compare your crop each year. You'll quickly see differences and can react accordingly.

# Task #12 Spacing On Time

Space your crop on time! This is absolutely critical for hitting your specs and producing quality finished plants. The importance of properly timed spacing and why it needs to be a priority for your production team cannot be overstated. Spacing too late results in stretched and weak plants. Spacing too early leads to shoots growing sideways, and ultimately, a lot of breakage in shipping (and that means *SHRINK*). Your best approach is to space when the canopy of your poinsettia crop begins to close.

#### Task #13 Finishing: Media & Moisture Management

At this point, your crop is in the finishing stage. You're in the home stretch, but shouldn't let your guard down when testing and optimizing finished media. Get comfortable with regular testing and how to interpret the results to develop a solid fertilization plan. Actively growing poinsettias are heavy feeders, so watch the video for tips and tricks to bring the crop along in a healthy way, as well as what to be sure to supply and why.

#### Task #14 Finishing: Disease Management

There are no lack of diseases commonly encountered in poinsettia production. Rhizoctonia, Botrytis, Pythium and Powdery Mildew are all concerns. Thankfully, there are chemical and biological strategies to deal with each. These diseases are no joke and can quickly damage a crop, putting you behind the eight ball when it comes to finishing a quality crop. Check out the video for signs to watch for, and strategies for prevention and control.

# Task #15 Finishing: Insect Control

Like disease, there are some usual suspects when it comes to insects on poinsettias. Fungus gnats, shore flies and various species of whitefly can all be a problem when finishing your crop. Watch the video to learn the dangers you can run into with these little guys, but also control strategies and ways to mitigate your risk, both chemical and biological. Of course, early detection is best and will allow you to avoid infestation, so continue to use sticky cards, scout and monitor regularly.

# Task #16 Finishing: Temperature & Humidity

Attention to both day and night temperatures is necessary to finish the optimum poinsettia crop with fewest losses. Remember, when temps get too warm at night, flowering will be delayed. Also, Average Daily Temperature (ADT) must be considered as a critical factor. This video concludes with a deeper look at how temperature impacts bract development with a look at how different varieties react.

# Task #17 Finishing: Light Levels

As days get darker and your crop keeps moving along, instead of reducing light, you now want to maximize the amount of light hitting the plants, especially if you're growing in Northern regions. Light dramatically affects bract temperature and development, critical pieces to the puzzle that ends with an optimal crop. One tip is to "unpaint" your roof to increase light coming in. It's a challenge that natural light is the lowest as you're finishing your crop, but one that can be managed.

#### Task #18 Finishing: Nutrition

You want to continue to keep a close eye on pH and EC until the time of shipping, as pH tends to rise as you finish the crop. Your poinsettias will also start to use less fertilizer as they mature toward the end of the fall. At this time, you might want to switch to a higher Calcium fertilizer to help with bract development. Remember, don't completely stop fertilizing or you'll start to see deficiencies.

#### Task #19 Finishing: PGRs

There's a lot of intricacy to PGRs at this stage, but thankfully, a lot of trials and research as well. Watch the video for differences in effectiveness between sprays and drenches, and tips on exactly when to apply PGRs (and how much). About halfway through the video, you'll see results from trials using Cycocel sprays and Bonzi drenches to illustrate differences.

# Task #20 Improving Shelf Life

It's finally time to put the finishing touches on your poinsettia crop and send it out the door looking great and ready to hold up at retail until the point of sale. Feeding to the end, keeping disease in check, and storing and shipping cool are your goals at this final stage. Your poinsettia season is just about over and this video will help get you to the finish line.

# **Planning for Next Year**

Poinsettias aren't geraniums and you don't sow multiple crops making changes as you go. You only get one shot at poinsettias each year. That's why recording data, taking careful notes and debriefing at the end of the season is so important. As soon as the season ends, make notes while the information is still fresh in your mind. Evaluate your season from start to finish and file all of your photos. Evaluate your genetics and pot sizes, and make any necessary process changes now.