

# GROWERTALKS

## Growers Talk Production

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### An Introduction to Holding Houseplants

*Austin Bryant*

I take calls from small garden centers and new plant shops all the time that are wanting to move into houseplants. It can be intimidating due to the amount of material you have to buy in at one time to justify the freight and receive material direct from the grower. The average total cost to a Midwest garden center for a minimum LTL (Less Than Load semi) delivery would be around \$2,400.00, including freight or around \$1,200.00 for a FedEx freight box shipment. For a new plant shop or small garden center, that's no small amount. It's a commitment.

So before committing, let's make sure it'll be a success and not an experiment to see if your greenhouse or plant shop conditions are good enough for holding houseplants. There are a few common questions that always come up and they revolve around three factors: light, water and time.

I bring up light first because it has the most influence on the other two factors. Light is the driving force and engine of any plant. Houseplants are often categorized into three light levels: high, medium and low. This isn't the level of light they'll thrive in. It's the amount of light they need to survive.

At our nursery here in Florida, the lowest light varieties, such as an aglaonema or spathiphyllum, are grown under 83% shade. On a bright, sunny day outside, we have around 15,000 foot candles (f.c.) of light. That means at 83% shade, the plants in our greenhouses are actively growing under 2,550 f.c. If we look at where this low-light plant would be placed in the interior living space of a home, such as a hallway or living room, we would find the brightest artificial lighting could reach no more than 600 to 800 f.c. and can be as low as 150 f.c.

Often, we don't see how much less light is inside because of our eyes' amazing ability to dilate and quickly adapt to seeing in lower light. Don't trust your eyes to tell light levels. The only way to really know how much light you have is to measure it. The plant shop or greenhouse should simulate the best light conditions possible to ensure the best health of the plant and offer the longest hold times between the receiving of the plant and selling the plant at retail. These low-light plants can often take moderately higher light levels just fine.

Under ideal conditions, the retail shop isn't holding the plant longer than two to three weeks before it sells. It shouldn't matter if the plant is held under 2,500 f.c. or 5,000 f.c. Being held under the higher light over a prolonged period of time could cause lighter leaf colors. But the actual damage we often tie to super bright light, such as scalding or burn, is caused by dry low humidity heat coupled with super bright light.

So what's the best shade to have? Having a greenhouse with 72% shade as a single cover will provide options for a wide variety of houseplants. This would allow a low enough shade to escape burn for the low-light plants, but still have high enough light for the high-light plants, which are grown commercially under 50% shade in Florida.

A fanned humidifier, mobile wet pad or mister helps circulate humid air through the house, protecting sensitive plants like anthuriums from dry scald under higher light and hotter temperatures where the humidity would crash too low if not checked.

For a larger structure being set up long term with the ability to change with different seasonal crops, I would set up a permanent 50% shade or poly along with an additional second shade of 50% or 72%. This would allow you to have three options—50% by itself, 50% base shade plus an additional 50% second shade (which equals around 73% total shade), or a 50% base shade plus 72% second shade (which would give you around 83% total shade). These three light levels would simulate what we use here in Florida as growing light conditions for high, medium and low. (Note there will be a difference in outside f.c. of light the further geographically north you are, along with a higher percent of clouded days through the wintertime.)

Light is the most important factor in holding plants for retail because it directly impacts water needs as well. The correct light allows normal amounts of photosynthesis, which is the driving force for daily plant transpiration. If you drastically reduce the amount of light a plant is getting, such as moving a low-light plant from a commercial growing environment of around 3,000 to 4,000 f.c. to 200 f.c. as what it would be in a home, then the amount of transpiration will drastically reduce as photosynthesis is lowered.

The watering schedule must be extended to allow the plant to dry out. If the media becomes saturated over a long period of time, it encourages nasty pathogens to take hold, like *Pythium* or *Rhizoctonia*. We run our nursery on the dry side for several reasons. It naturally reduces the amount of pathogens that would need to be drenched or sprayed for, and it also encourages a stronger, more advantageous root system by making the plant do a little work for gathering the water.

The question, “How much do I need to water these plants?” asked by the shop owner cannot be answered until it’s known how much light, average temp and humidity is in the greenhouse. Most all water catastrophes are caused by overwatering. It’s easy to see an under-watered plant from its obvious curled leaves, but more importantly, feeling the light physical weight of the pot quickly gives it away. Held in this condition for a short period of time, there’s no damage. When the plant is watered, it perks right back up. However, the overwatered/diseased pot, whose leaves could be showing curling or yellowing, only shows these symptoms after the damage is already done. The pot feels heavy due to the soil being highly saturated and the plant is not using the water.

These curled leaves and yellowing symptoms are most likely caused by root rot. To confirm this, pull the pot off and inspect the roots. You’re just guessing until you physically inspect the root for disease damage. Flipping a plant and inspecting the roots in your greenhouse should be a normal thing. (Wash or disinfect your hands between pots when inspecting roots.)

The third question is “How long can I hold these plants?”—which, under the correct holding conditions, does not impact the plant. This is, however, important to the garden center or plant shop owner. The weekly or bi-weekly customer that visits the shop can tell when you get new material. You can only spin a plant so many times to show a new side. The plant material should be sold through within a three to four-week period at most. No plant should look like it’s taken up residence in the plant shop unless it’s a super cool specimen that’s more of a show piece.

But, remember, those plants owe you rent as well and you’re missing out on having something else in its place that could be for sale. Collecting plants is an easy trap for plant lovers to fall into. Suddenly, as a retail shop, you’re keeping plant pets instead of stocking plants. A good timely rotation makes the greenhouse look youthful and reduces pest and disease.

If the volume of shipping direct from Florida is too much to maintain a three- to four-week sell-through, then the local plant re-wholesaler is the way to go. They provide an unbelievable service in offering freight, high levels of variety in

smaller numbers and a trusted knowledge base of plant material. Every region of the country has different likes and dislikes on what plants sell. Experiment with lots of different things to find out what sells in your area.

If you're purchasing through a plant broker, encourage them to bring in different material as well. It's easier to sell a couple different items to a customer than it is to sell multiple pots of the same thing. **GT**

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*Austin Bryant is in Sales for Heart of Florida Greenhouses, Inc. in Zolfo Springs, Florida.*