Experiences in Growing Fraser and Pyramid Magnolia

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When I moved back to Georgia in 2009 I had no idea where this new path would lead. Almost immediately I was introduced into a world of magnolias that I had no idea existed. I witnessed many magnolias blooming in pots as we worked to bulk up our future collection for the garden here in Gainesville, GA. So many hybrids, pinks, purples, yellows, near reds, pure and creamy whites. It was overwhelming and exhilarating all at the same time! Just as I was soaking all this in, a tall, soft spoken man with a big, wide brim hat came into my life. He began to show and teach me all about our own U.S. native magnolias, where they grow, what grows with them, ID characteristics, and what it takes to grow them. This man is my now good friend Jack Johnston. I still remember Jack showing me the differences in the leaves of M. macrophylla, tripetala, acuminata, and fraseri. As we got to know each other and spent more time in the woods together I came to realize that very few people are working with Magnolia fraseri. Since north GA is the southern end of the range we began an effort to get out every year to collect what seed we could from this elusive species. Jack already knew many good spots where it grew on public land and was accessible. Being accessible is a key word here since most of the seed producing specimens grow on steep slopes and are 30-40’ tall. This poses a bit of a challenge as you can imagine. Generally, I was the seed “goalie” if you will, and Jack was the cutter. Sometimes we would get 3-4 seed pods from a tree, and sometimes we would get lucky and get 10-12. Other times we may be out all day and have nothing to show. No matter how many we got, we could usually count on about half of the seed being parasitized and no good. Now you’re probably wondering why I am talking about Magnolia fraseri when this article is supposed to be about M. fraseri v. pyramidata. In my many years of working with M. fraseri and in the last several years M. fraseri v. pyramidata, I have found them very similar to grow in the greenhouse from seed.

In 2016 Matt Lobdell, Greg Paige, and Andrew Bunting began an effort to collect seed of M. fraseri v. pyramidata across its native range starting in northern FL, AL, MS, and TX. Our first round of seed consisted of only about 22 seeds from 2 different sites. At the end of it all we ended up with about 12 plants in 1g. pots after 2 seasons of growing. 5 were planted at our garden in Gainesville, GA, and the rest were distributed to other participating organizations. My point in telling this story is to show how much time and effort goes into collecting and growing these plants. It is most definitely a labor of love.

Now on to how in the world do you grow these wonderful trees? Starting magnolias from seed is not a terribly difficult task as most of you know. Once you have cleaned seed it will need to either be sown outside or put in a bag with moist media, then put in the refrigerator. Magnolia seed generally needs 3 months of cold, moist stratification whether that is natural (outside), or forced in a refrigerator. Once the 3 months is up the seed can be taken out of the refrigerator and sown in a warm location. If stratified outside, just keep an eye out for germination as the weather warms. Once the seedlings have 2 sets of true leaves it will be time to transplant into individual pots at this point. This is also the time to start really watching watering and start applying a preventative fungicide. Both fraseri and pyramidata are
prone to damping off as well as root rot in these early stages of growth. They do not appreciate having wet feet. One of the ways we help reduce chances of root disease is by using air root pruning pots all the way through the process. It also helps to have a well-draining and aerated media. Our soil blend is a simple pine bark blend with added amendments. We start with communal trays of seedlings, then transplant each one into a 4” Rootmaker® pot. Usually they stay in this pot the whole first season as they appreciate being well rooted before transplanting. My main goal in the first season is to develop good roots. This is achieved partially through good watering practices. Be sure to let the seedlings dry out appropriately between waterings. They can go much drier than you think. Don’t be tempted to transplant the seedlings too soon. If they are not well rooted going into winter it greatly improves the chance of root rot. We use a slow release fertilizer and light liquid feed through the growing season as well.

When it comes to overwintering, there are a few things to keep in mind. Ideally a covered area is best to store them, so you can control the water. Keeping the seedlings on the dry side through winter is critical. Definitely water thoroughly once they have sufficiently dried out though. We keep ours in a greenhouse that stays between 34 degrees F and 55 degrees F. This lets them go dormant, but never freeze. It also helps them wake up quicker the following spring. I think overwintering is where a lot of people lose their plants. We still give them lots of attention through the winter, but it is mostly just checking for water needs and root rot. If you ignore them and let them sit wet and cold all winter, that is a recipe for disaster.

Once they start to wake up in the spring, don’t be in too big of a hurry to transplant them. Let them start growing before moving them into a bigger pot. Usually from the 4” Rootmaker® we will go straight to a 1g. Rootmaker®. This will be the pot they finish in as I have found they do not do well going into a bigger size. I have killed every one I ever put in a bigger pot. It helps to drill a couple extra holes in the very bottom of these pots to improve drainage. Again, at this point really watch watering. Also continue preventative fungicide treatments especially right after transplant. Once they are rooted in fully the chance for root rot decreases. By the end of the season if everything goes right you should have a very nice tree ready for planting. We can usually get them up to 2-3’ in the 1g. pot. Using the air root pruning pots will prevent them from developing circling roots and allow them to develop a dense healthy root system that will establish much quicker once planted.