

Just When I Thought I Had the Right Recipe®

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The horticulture industry, indeed the world, is all about change today. There are constantly new ideas surfacing, different technologies emerging, and new plants being introduced. In this evolutionary world, when is the last time you took a look at your media recipe? Are you still using what dear old dad concocted back in '72? Are new plants problem crops or does the price of your mix give you the shudders? This article tackles some of the reasons to make changes and hopefully some guidance in implementing those changes successfully.

Let us begin by looking at the reasons we would change recipes in the first place. Ingredients offered over the years have changed. We are witnessing peat moss shortages from the East and bark shortages from the South, and we all know with shortages come price increases. In our generation of recycling, more compost is being produced, and the quality continues to increase whereas cost remains stable or decreases. While we seldom experience completely new ingredients to the market, recycling material from other industries offers that potential. A foam waste product from the auto sector has been successfully used as a lightweight ingredient for rooftop plantings. Aged bark piles formerly thought to be unusable due to the high percentage of stone contamination can now be successfully cleaned of stone debris by innovative new technology. Plant breeders are introducing new plants that are wonderful to the eye but need special care in the growth stages. These plants are also moving through our production at high speed, and being first to the market is a key for profitability. There are many other reasons that you may want to change the media recipe that is specific to your nursery.

Specific to your nursery! Your nursery is as individual as you are yourself, and "one size fits all" seldom works in the entirety. When preparing to modify your media recipe; list the benefits / drawbacks that the existing media offer. It is not uncommon to find that groups of plants do well or not so well in your existing blend. The next step is to list which criteria need to be addressed and for which groups of plants. Cost is always a consideration; however, cost should seldom be the limiting factor in plant growth or health. Nor is cost easily determined between two separate potting mixes. The easy example is a poinsettia crop grown in a low cost mix that is of marketable size December 26 — not a viable solution. The true value of the mix can only be ascertained when the crop is sold. Perhaps this is one of the reasons recipes don't change very often: fear of the unknown.

The list is complete and which criteria to change and for what crops are set. The next step is to gather information. Existing suppliers are a great place to start. They know your individual nursery, nurseries in the area that are similar and available ingredients, and they should have a vested interest in working with you to make the best recipe choices happen. Competitive suppliers will also provide a great source of information, but may not possess the same knowledge of your nursery's individuality. Don't be afraid to ask for information. If the main goal is to increase air porosity for your Japanese maples then you need to start with analyzing your

current mix and comparing subsequent mixes against that standard. Physical tests are time-consuming, but in most instances, the supplier will be able to complete the tests. Chemical tests can be performed at independent labs at reasonable costs. Visiting other nursery operations, near or far, and talking with liner suppliers can also provide valuable information, especially about new selections. Industry conferences and tours are great networking opportunities. Use every chance to learn and then go learn again!

Once you have decided what to change and for what crops, monitor and evaluate until the crop is sold. Mixes that begin cheap can become expensive due to higher crop loss and delayed maturity. Make a lot of notes and include key personnel. Crop evaluations should also cover top to bottom inspections. Root growth, especially during crop establishment, should be routinely monitored. Look for healthy roots to the bottom of the pot. Wet layers at the bottom will cause rooting issues and are disease prone. Root stress may show damage in the spring and cause crop loss. Does the canopy fill the pot as quickly; are plants saleable when needed? Did the change in recipe result in the change you were aiming for? Remember to only make final decisions when the crop is sold.

There are no magic ingredients, nor will one recipe be best for all crops. There are many trade-offs when designing your media recipe, and finding balance takes effort and will be different for each individual nursery. As a final thought — always keep in mind that the plant gains most of its nutrient and water needs from the media. Starting with the right media will lessen plant stress and be more profitable.