# Selecting the Right Potting Mix®

### **Graham Saltiel**

Daltons Limited, PO Box 397, Matamata 3440, New Zealand

#### INTRODUCTION

Over the years I have been associated with the manufacture of, and involvement with, a wide range of mixes and growers. It didn't take long to realise that many variables, unique situations, and management systems existed. I became increasingly aware that mixes needed to be tailored to suit each situation and that a regular and in depth dialogue was needed between supplier and grower. Observation and communication between both became critical.

In some instances in the past, growers would change supplier in an attempt to rectify a problem with a mix or with plant growth. Each change really only meant going back to square one whereas observation, discussion, and adjustment were really all that was needed. Working together has great benefits for both supplier and grower and our industry as a whole.

### **GROWING MEDIA**

- One of the most important, if not the most important, ingredient in your nursery.
- Good potting mixes produce good plants.
- Good plants help generate better sales.
- Better sales create or secure jobs.
- Poor plants can lead to fewer sales, and maybe less jobs and even no business.

It is tough out there and every business and every part of our industry needs to focus on efficiency, quality, and service — no compromise.

I want to concentrate on the importance of communication, the interaction between grower and supplier, and combining and sharing each one's expertise.

It is not a matter of asking for a mix and receiving one, no questions asked.

It is vital that at the initial enquiry regarding a mix, even from established clients, each party sits down with the other to discuss the whole aspect of ....

## **NURSERY LOCATION**

Where is the nursery geographically? What are the prevailing weather conditions? What is the land contour and how much shelter is there? Is there any unique microclimate? The answers to these questions are important to help establish the physical makeup of the mix. An exposed slope, for example, with minimal shelter, will call for a good water-holding mix. A nursery nestled in a valley may have prevailing weather conditions that favour fungal "nasties," and it may experience damper days so that we then need to look at a more aerated mix, and ideally a mix for bottom-up watering systems.

We need to look at individual management practices. Even nurseries not far from each other can vary in their potting mix requirements. We need to establish whether the growing is indoors or out.

Pot size also has a bearing on the make-up of a mix.

So, even adjacent nurseries growing the same plants may need different mixes because of pot size, irrigation systems, crop expectations, and so on.

### **GROWER EXPECTATIONS AND SUPPLIER OBLIGATIONS**

The grower should be relying on his supplier to provide a mix that will fulfill his expectations. The grower's expertise now needs to be coupled with the supplier's expertise. Quite simply one grows plants and one makes potting mix. Together they will produce optimum results. The supplier must communicate, discuss what is required and understand what is required. Every aspect needs to be discussed and understood — then the goods need to be delivered. From this point on, communication is essential. The after-sales service can then determine a number of things. Was the mix delivered to the grower's satisfaction? Visually, did it meet the grower's expectations?

The Supplier Then Needs to Observe. By meeting up with the grower to monitor the mix performance the supplier is able to find out if the mix is performing as expected. Is it maintaining its structure? Has it promoted good root growth? Is the growth quality and growth rate as expected?

As a result of these observations by both supplier and grower any adjustments can be made. Perhaps more water-holding is needed, perhaps a little more up front nutrient, for instance, and if these things are not noted and discussed then they go unaddressed, and plant quality suffers, usually at the expense of the potting mix's reputation.

Involve Others in Any Communications. The supplier needs to deal with more people than just the decision maker in the nursery. The staff in the potting shed can contribute to mix improvement. They are the ones who use it and handle it. Their comments and concerns can help in such matters as to how it performs through the potting machine, how it is in a tubing situation, and how easily it takes water in. Field staff can also contribute by comments on the weight of containers and their stability in a wind, how often they need to irrigate and whether the plants are performing as expected, or better. I see it as imperative that supplier representatives are in constant communication with the growers. Regular nursery "walks," even sometimes without the grower, can turn up minor issues that are not always noticed by people in regular contact with the nursery and with plant performance.

Arrange Regular Comprehensive Nursery Walks and Mix Performance Reviews. Reviews with relevant management and staff members are necessary. Suppliers should, as a matter of course, provide full details of each mix supplied, including pH and EC test results, to confirm that it conforms to the predetermined desired range.

Once a mix has been formulated, after discussion between supplier and grower, there should be a physical analysis test and a nutritional analysis carried out to confirm that the mix is within the expected parameters. When it is established as correct, then regular re-tests from time to time can assure everyone that the mix is remaining as constant as it should. The supplier can also perform regular testing on mix samples taken from the field. This enables a pH and EC test to be carried out to give an indication of what is happening to the mix over a period of time during the growth cycle. Regular tests can also be carried out to determine the amount

of fertilizer left in a mix. This gives a fairly accurate indication of when to top-dress, for instance, and how the controlled-release fertilizer is performing.

### REMEMBER THEN...

- Getting the mix right is crucial to plant quality and nursery success.
- Getting the mix right is achievable by mutual interaction and expertise shared between the supplier and the grower.
- Establish climatic conditions at the nursery site.
- Find out managerial practices in regard to potting, pot size, plant species, irrigation, and anything that may be peculiar to that nursery.
- Provide an after sales service and arrange regular nursery walks and mix performance reviews.
- Share discussions and observations with management and staff.
- Provide an ongoing service and establish a working relationship between supplier and grower.