

Containers

People are learning the value of roots

By Todd Davis

Container production has come a long way since the days of the fruit can. The introduction of polyethylene nursery pots changed everything. But since plastic pots trumped metal cans, the basic design of nursery containers has changed little. Though extensive research and millions of dollars have gone toward developing new technology, the basic container used by nursery growers remains the same today.

But are we on the brink of a new container revolution? The market appears to be chang-

ing. In 20 years will a traditional nursery container look as outdated as a metal fruit can?

Possibly. Tom Yeager, professor at the University of Florida Department of Environmental Horticulture, has seen many designs come and go over the years. But he sees real interest in pots that help produce better root systems.

Above and below

"Whether it's above-ground production or below-ground production [such as pot-in-pot], hard sided or soft sided, the No. 1 thing people are looking at is root manipulation," Yeager said. "It's really catching on. It seems to be very important, particularly with tree production."

The main ways containers manipulate roots is through air and copper. Air-root-pruning pots direct roots toward holes, which stops root circling and promotes branching. Copper-treated pots work in the same way, but are falling out of favor.

Bonnie Appleton, Virginia Tech professor of horticulture and extension specialist, said she wished more growers would adopt production in root-pruning pots.

"There's proof out there that they can produce superior plants and that clientele will pay for it, yet they still don't do it," Appleton said.

She sees more liner producers switching to air-root-pruning pots than growers of finished material.

"But it makes no sense to lose that modification," she said. "If you take an air-root-pruned liner and overgrow it in a traditional pot, you lose all the benefits."

There is clearly a market for high-quality nursery crops, particularly caliper trees, Appleton said. In her region, landscapers have a hard time finding enough high-quality material and often have to accept sub-par trees that meet size requirements.

"It's obvious that there's a fairly large population willing to pay premiums for high-end material," Appleton said. "And growers see the benefits, but few are willing to take the risk to put large percentages into major production."

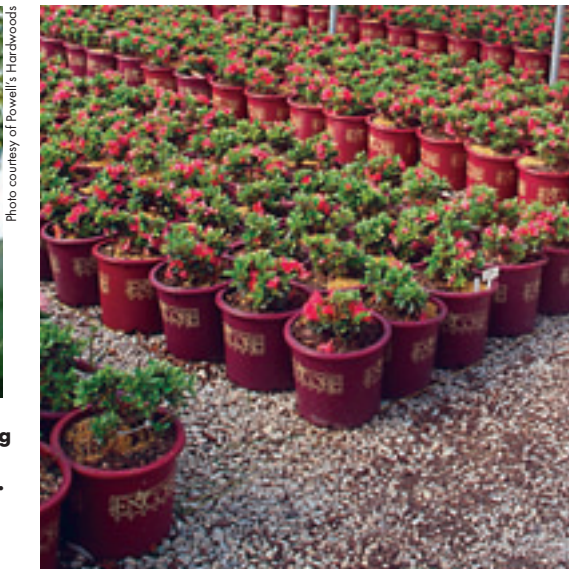
But how long can this strong demand stay until growers start taking advantage?

Marketplace issue

Charlie Parkerson, owner of Lancaster Farms Inc., has been a pioneer in new nursery technology, and helped popularize pot-in-pot practices. With pot-in-pot, crops are grown in



Some growers have switched to root-pruning bags designed to resist high root temperatures.



Branding programs with specialty pots are becoming more popular in the United States.

5 CONSIDERATIONS

There are more to containers than just something to hold growing media and roots. The container you choose should be selected depending on how you feel about the following criteria.

1. Root manipulation. How important is producing a superior root system? Newer containers make producing plants with dense, fibrous root systems easier. Will your clientele pay for this premium?

2. Heat. Summer temperatures can be killer for container root systems. Are you willing to try new products designed to reduce root-zone heat?

3. Handling. Large containers can be difficult to manage by hand. Newer options are available with handles or with lips designed for more ergonomic carrying.

4. Color. Many growers are using colored pots to differentiate lines of branded plants. Would this help your crops stand out, too?

5. Cost. Everything comes at a price. All improved container designs and styles are more expensive than traditional pots. With plastic prices high anyway, can you afford premium pots?



Pot-in-pot production solves many problems associated with container growing, but takes an investment to get started.

sunken production pots, which are typically nestled in buried socket pots. This production system helps insulate root systems and prevents pots from tipping over.

For new container systems to become popularized, it takes both demand from the growers and the desire to produce new pots by the pot manufacturers, Parkerson said.

"It's an economics issue," Parkerson said. "It takes a lot of money for manufacturers to build more molds. They're already selling as many pots as they can sell, so there's little incentive for them to change."

Beyond plastic

With plastic prices rising along with the price of oil, many growers have looked to alternatives. Fiber, or pulp, containers are available and studies have shown that they can produce superior crops due to their insulating nature.

However, many growers have concerns about their shelf life. Will they withstand the rigors of producing long-term crops? But there's no telling what the future will hold.

"Ten years ago we just focused on the top of the plant. Now we know that what's below the ground is important too," Yeager said. "But we may not know just how important it really is. Who know what we'll discover and how we'll be producing crops 10 years from now."

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CHALLENGE NO. 6 Benefits and health care



Growers fight to remain competitive

Businesses in every industry struggle to provide good benefits and health care programs for their workers. This is especially true for the nursery industry, which is composed mainly of small, family-owned businesses.

How can we keep up with what large corporations are doing, especially when the corporations themselves are grappling? This is why **NMPRO** readers voted employee benefits and health care the No. 6 challenge facing the nursery industry.

It's obvious that for the nursery business to thrive we need to attract and maintain good, skilled workers. However, with so many employment options available, fewer people seem attracted to physical, outdoor labor.

Bart Worthington, general manager of Mountain States Wholesale Nursery in the Phoenix metropolitan area, tries to combat this by offering better-than-average starting wages and health care. As a result, the company has little turnover.



Fewer people seem willing to participate in physical, outdoor labor.

Two plans

Mountain States, which has about 120 employees, offers one health care plan for office workers and another for field workers. The field-worker program covers catastrophic damage and has a high deductible. Worthington said that when workers have to use the plan, the company usually loans the money to cover the deductible and comes up with a payment plan.

A problem with hourly workers and health care is that few will participate, said Alan Cone, president of Casa Flora Inc. in Dallas. His company dropped health coverage for hourly employees due to lack of participation.

"They'd ask us, why do we have to pay for this, then pay a deductible to see the doctor when we can go to the clinic for free?" Cone said.

Other benefits

Cone tries to retain employees with other benefits. The company's paid vacation ranges from one week after one year of service to five weeks after 15 years. But there are stipulations when time can be taken.

Casa Flora also offers English classes on site, taught by a community college professor. The classes are free and last two hours every Wednesday afternoon. Of the company's 45 employees at the Dallas site, about 10 or 12 participate per class.

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