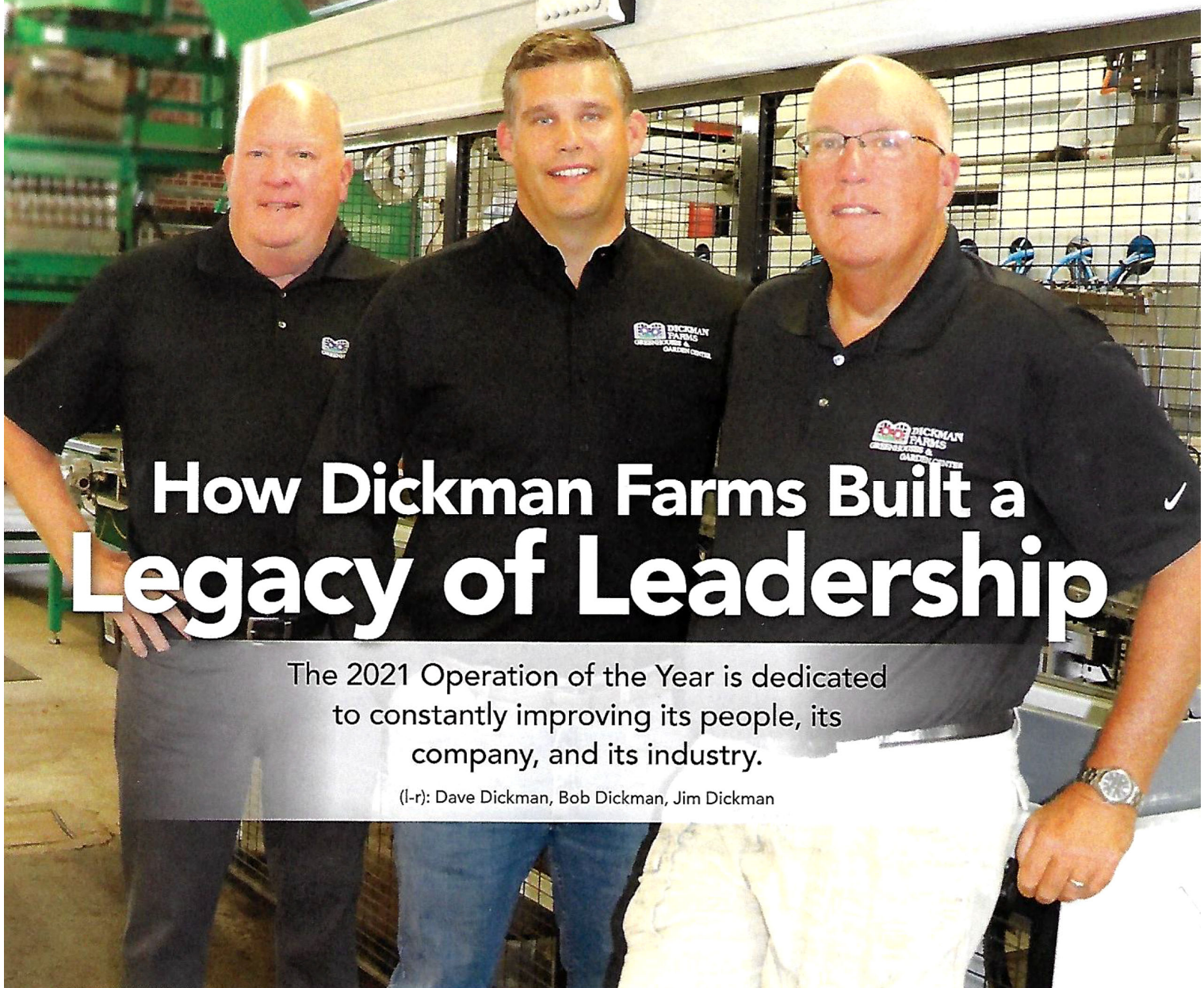


GREENHOUSE GROWER



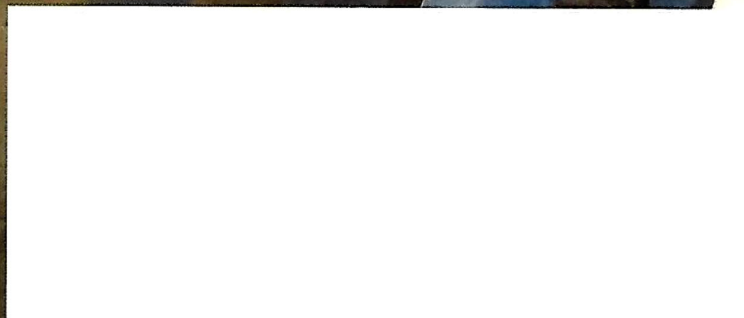
The Voice for Controlled-Environment Production



How Dickman Farms Built a Legacy of Leadership

The 2021 Operation of the Year is dedicated to constantly improving its people, its company, and its industry.

(l-r): Dave Dickman, Bob Dickman, Jim Dickman



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How Echinaceas Became an American Success Story

What was once a challenging plant to grow has become popular among both breeders and consumers for its color and landscape-changing potential.

By Chuck Pavlich



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Terra Nova Nurseries, based in Canby, OR, has long been one of the most progressive breeders of ornamental plants in the modern horticulture

era. Nothing quite demonstrates this as well as its array of Echinacea plants. Beginning from the simple Native American species, found dotting the prairies and meadows of mid-America and eastward to Tennessee, Terra Nova has turned spindly weeds into searing orange, glowing magenta, and a virtual rainbow of colors, once not possible in this genus.

In the early years of Echinacea breeding, Terra Nova discovered that gorgeous colors were pretty easy to

make, but the plants were somewhat lacking in good, upright habits. This meant homeowners would have to put in a little extra effort to make them stand up in the garden. By increasing genetic combinations, introducing new species selections, and correcting flaws, Terra Nova has brought along new, exciting, and

VARIETY CENTRAL

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Four New Echinacea to Consider

Here's a closer look at Terra Nova Nurseries' echinacea lineup for the coming season.



'Dark Shadows Wicked' is named for its deep chocolate-burgundy stems that support dusky magenta flowers in great profusion. This plant is very upright, and its bouquet habit makes it great for use in mixed containers or as a specimen in the garden.

'Moab Sunset' distracts even the most jaded Echinacea growers and attracts people that have never noticed Echinaceas prior. Sweetly scented, double atomic-flaming, solar flare-colored flowers demand to be seen. Deep, pine-green foliage dresses 'Moab Sunset' right to the ground.



garden-worthy varieties that will not disappoint even the most sophisticated gardeners.

Overcoming Early Obstacles

Today's Echinacea market is on the climb, but the journey has been a rollercoaster since the first crosses in the 1990s that came from Jim Ault, Ph.D., of the Chicago Botanic Garden. Somewhat like a bad romance, gardeners swooned over the first hybrids, but then became disappointed that the promise of this garden miracle never came true. Gardeners divorced themselves from Echinacea, only to be lured the following season with another seductive selection. It wasn't until breeders took a critical look at their own work that the relationship improved between this genus and gardeners.

Breeders started selecting for a higher number of

crowns emerging from the soil, which meant more stems, more foliage, more flowers, and a higher survival rate. As the quality of the plants improved, so did the popularity of Echinacea. Today, the problem isn't the quality of the genetics; it's the supply available to the market. Labor shortages, overcrowded labs that produce tissue culture plants, and shipping routes being disrupted are the enemies of Echinacea now.

Modern Echinaceas are changing the minds of growers and consumers alike. Originally classed as fussy, prima-donna plants, Echinaceas are coming into their own rather quickly

thanks to thoughtful breeding and the feedback of trial gardens, growers, and consumers. Embarking on new breeding projects is a bit like rolling genetic dice, and the breeder must build on each roll, select the best, destroy the rest, and move on.

Overcoming the bad traits that several Echinacea species had, such as poor crown count and intolerance to some soil conditions, yet maintaining the desirable traits, including intense color and broad, non-droopy petals, was a challenge to say the least. Fortunately, breeders saw the potential in this American native and continued breeding and selecting. The

result is absolutely one of the most successful in modern plant breeding. While it is true that every garden plant started out as a weed somewhere, few genera have undergone such a rapid transformation as Echinacea.

The transformation of echinacea has been rather remarkable. They have come so far, and the journey isn't over yet. **GG**



'Sunny Days Lemon' is perhaps the new archetype for garden Echinaceas. Nurseries that got to trial this Echinacea were stunned by its vigor, habit, and large, double, lemon-colored flowers that open with a distinctive emerald-green eye. Growers were so impressed with this variety that they asked to have this exact plant in at least four more colors.



'Sweet Sandia' is very special because of a lucky color break that was utilized by the breeder to develop this exciting variety. 'Sweet Sandia' is watermelon pink and green. Sandia is the Spanish word for watermelon, and the pink and green combo is sweet. The scent is another sweet feature of this plant, attracting a number of genera of pollinator bees but especially bumbles. For some reason, they have selected 'Sweet Sandia' as the restaurant of choice.