

Humble Wildflowers Could be a Money Saver for the State

by Jeff Norcini

MONTICELLO - Planting wildflowers along Florida highways could save the state millions of dollars by cutting mowing costs and stabilizing roadside soils, says a University of Florida researcher.

While that might seem like a simple move for the state to make, horticulturist Jeff Norcini says it's more complicated than it seems. Not just any wildflowers will do. For flowers to thrive in the scorching heat and arid conditions along state roads, they should be Florida natives, says Norcini, a native wildflower specialist in UF's Institute of Food and Agricultural Sciences.

Better yet, he said, would be growing them from seed collected from native wildflowers. But before the state can plant its roadsides with these local ecotypes of native wildflowers, Norcini has to develop seed sources for them.

The native seed is crucial, he said. In the past, the state has tried planting roadsides with wildflower seeds from other states but with limited success, especially in hotter climates south of Orlando. The flowers were adapted to conditions in their home states, and variations in their growth habits hinder them on Florida highways.

"The Florida Department of Transportation currently purchases all its wildflower seed from outside state sources because there are no seed producers in Florida that sell large quantities of seed," Norcini said.

The local ecotypes of native wildflowers, which have evolved under Florida conditions, should better withstand the stresses of Florida growing conditions, such as insects, diseases, heat, humidity, rain and drought, Norcini believes. In the Midwest, he said, several states already recognize the benefits of using local varieties of native wildflowers and grasses on their roadsides and encourage their use.

"I suspect the native-grown seed of wildflowers will perform better on our roadsides than seed purchased commercially from other states that may not be adapted to our conditions," Norcini said.

Norcini began his research in 1996 and immediately ran into a roadblock. He looked from the Keys to the Panhandle but could find no commercial source of seeds for native wildflowers. So he and his coworkers began roaming highways and natural areas, stopping to collect wildflower specimens and seeds.

He sent the specimens, collected with permission of various agencies and landowners, to the state Division of Plant Industry for identification and established research and demonstration gardens in Monticello at UF's North Florida Research and Education Center.



The demonstration garden includes black-eyed Susans, Indian blanket, different species of *Coreopsis* (tickseed), lyre-leafed sage (cancerweed), partridge-pea, standing cypress (Spanish larkspur), bee balm, liatris (blazing star), beach sunflower, goldenrod and others. Many can handle full sun and scant water.

"These plants all perform well under North Florida conditions. And coreopsis, black-eyed Susan and beach sunflower can be found throughout much of the state," Norcini said. "And, when you get enough flowers on them, you can see them at 60 miles per hour."

At the research plots, Norcini is doing an evaluation between wildflowers grown from Florida seed and non-Florida seed. He also is conducting a seed harvest experiment and comparing the performance of black-eyed Susans derived from seed produced in Texas, North Florida and Central Florida, with help from UF research centers in Milton, Bradenton and Fort Lauderdale.

Developing a plentiful supply of seeds is a key to economically lining state highways and byways with wildflowers, considering the thousands of pounds needed, Norcini said. If a seed supply develops, he said, wildflowers likely could begin cropping up in state parks and in wildlife habitat restoration areas as well.

Commercially, spin-offs are likely, too. A native wildflower and native grass seed industry would make a lucrative alternative crop for Florida farmers, Norcini said. Home gardeners also should be willing to try them because their hardy nature and drought resistance should make them easier to grow.

"We hope to develop this to the point that local nurseries will consider growing these native wildflowers and make them available for sale commercially and to homeowners," Norcini said.

Norcini said some gardeners knock wildflowers and call them weeds, but he disagrees. "What is a weed to one person may be a wildflower to another person," Norcini said. "Some people consider the goldenrod a weed. I consider it a harbinger of fall. Corn can be a weed if it's growing in the middle of a soybean field. "A weed is just a plant growing where you don't want it."

And no one can knock the economics of planting wildflowers on roadsides. Roadside vegetation management costs can be substantially reduced by using native wildflowers, and if they are mowed after flowering that dead heads the plant and spreads the seeds at the same time.

"Texas has shown that you can save a lot of money by planting native wildflowers and grasses and managing them properly," Norcini said. "In Florida, the DOT spends millions mowing roadsides. But planting wildflowers can save taxpayers money in replanting roadsides and the decrease in mowing saves money, too."