

# Pretty plants

create an **exasperating** situation

*Article and photographs by Les Harrison*

**I**“It was incredibly frustrating,” said Dr. Jeff Norcini, associate professor and resident wildflower specialist at the Quincy Institute of Food and Agricultural Sciences (IFAS) North Florida Research and Education Center (NFREC). “We’d plant a test plot of *Coreopsis floridana* and the deer would eat it to the ground.”

After several attempts to produce the autumn blooming native wildflower as an ornamental crop, the epiphany struck.

“You know, there are people who are trying to attract deer and Florida tickseed (as *Coreopsis floridana* is commonly known) does just that,” Norcini said.

Norcini is no newcomer to the field of wildflowers. His work with wildflowers extends back over

12 years, and he has numerous research publications to his credit. His work at the Quincy NFREC involves all phases of native wildflower production and use.

Florida ecotypes are a special interest of Norcini’s.

“These are plants that have been in the area for many years and are adapted to our climate, soil, and overall growing conditions,” he said.

Testing Florida tickseed occurred as part of the ongoing effort to provide new native wildflower alternatives for the public. Ornamental horticulture is a large segment of Florida’s agriculture industry and the research and education centers (REC) provide useful research and support to plant nurseries.

The plant has been identified

*The bright blooms and buds of Florida tickseed prompted scientists to try to develop the native wildflower as an ornamental crop. Local deer had a different take on the plant.*



**Above:** Dr. Jeff Norcini stands in one of his test plots. **Below:** A Florida tickseed control plot at the NFREC in Quincy is surrounded by 8-foot-high fencing.

in many Florida counties. Though it is thought to be a natural hybrid of two other native species of tickseed, as yet, no DNA analysis has confirmed this theory.

“This plant was selected for possible propagation based on several factors,” Norcini said.

First, are the airy “panicles” of bright yellow/orange flowers that appear in the fall and add showy color from erect, waist-high stems. The flowers are numerous as are the dark purple buds.

Being a perennial minimizes the need for replanting each year and is another major advantage. The final deciding feature is that the plant grows best in damp areas. It has the potential to flourish in areas subject to invasive plant encroachment.

“But the initial field testing suggested that deer will walk past other plants and mow down Florida tickseed,” Norcini said.

This trait is fatal for an ornamental crop’s marketing potential. Deer pressure on suburban landscaping, and even

some urban areas, is high. If a plant equates to a candy bar for browsing deer, then homeowners and landscapers will never purchase the plants or seed.

### Deer make a choice

Turning a negative into a positive, Norcini and his senior biologist, Jim Aldrich, collaborated with NFREC wildlife ecologist Holly Ober and biologist Lucas DeGroote to determine if their hypothesis was true. Would deer walk past other native wildflowers to eat Florida tickseed?

Test plots were established in two locations at the Quincy NFREC so browsing deer could easily find them. A selection of native wildflowers that produce tender vegetation were intermingled with Florida tickseed.

To verify that deer were the culprits, control plots with a similar selection of plants were planted adjacent to the test plots – with the added protection of an 8-foot-high wire-mesh fence.

Then, they waited for deer to visit. Several weeks passed before any action took place in the test plots. Then came tracks and stripped plants.





So far, deer have confirmed the scientists' suspicion about their preference for Florida tickseed.

"The choice has been obvious. Deer will walk past other plants to eat Florida tickseed," Norcini said. "However, we also noted that deer will occasionally eat two other native fall blooming wildflowers – Coastal Plain tickseed (*Coreopsis gladiata*) and Chipola coreopsis (*Coreopsis integrifolia*).

### The research continues

Several questions remain about Florida tickseed propagation before it is touted as a certified deer-magnet for game managers and hunters.

"We have been growing plants under controlled conditions, and then transplanting them to test sites," said Norcini. "We have not attempted to seed a game plot yet, so we do not know what to expect under natural conditions. However, based on preliminary research we do know that seeds need to be planted in sites consistently moist to get good germination."

Another issue is the current cost of the seed.

"Availability is limited. One commercial grower is in his first year of production and has a very limited supply of the seed used for our research," Norcini said.

The relative rarity of current seed stocks prices the seed beyond many budgets.

A final concern is how well this plant will reseed itself once it is discovered by deer herds. From a practical standpoint, game managers and hunters will have to protect the food plots in some

way if reseeding is required.

"Answers to these challenges are a research project yet to come," Norcini said.

Dr. Jeff Norcini can be reached at the IFAS NFREC at 155 Research Road, Quincy, Florida 32351-5677 or by calling 850-875-7160 or by e-mail: [wldflower@ufl.edu](mailto:wldflower@ufl.edu). **FW**

*Les Harrison is a regional specialized sustainable agriculture and extension technology agent.*

**Below:** Florida tickseed is being tested for possible use as a deer magnet. **Above:** A test plot has Florida tickseed plants that have been reduced to stubble by deer growing near other wildflowers that remain untouched.

