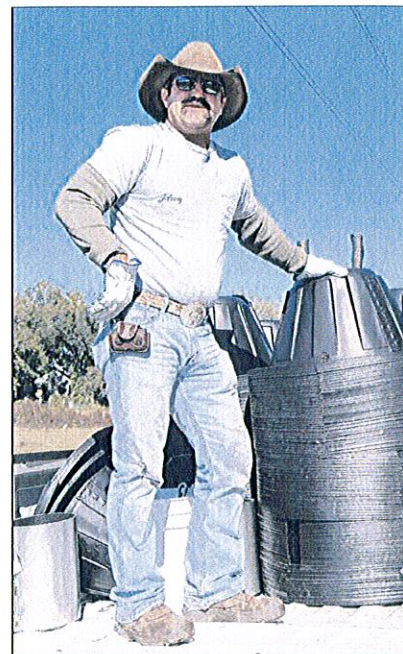


Arcadian's invention is citrus saver

Tree-T-Pees protect tender young plants

By CLINTON BURTON STAFF WRITER

ARCADIA — With temperatures dipping below freezing, citrus growers are looking for ways to protect their very young trees. An Arcadia man's invention — the Tree-T-Pee — is coming to the rescue. The brainchild of Johnny Georges, the simple piece of two-foot-tall molded plastic could not only change the way citrus is grown in Florida, but revolutionize agricultural water conservation and pollution control throughout the world. Georges, owner of GSI Supply Inc. in Arcadia, has been selling his invention for years to protect Florida's citrus groves from sporadic cold temperatures. Although first conceived as a means of frost protection, it quickly became apparent that the system also conserved two very valuable resources: water and money. Now, as society is trying to become more environmentally friendly, Georges' Tree-T-Pee may finally make the world set up and take notice. Innovation runs in Georges' family. His father, Rick Georges, was the inventor of the now ubiquitous micro jet irrigation system. "Before the micro jet came into the industry, the way we irrigated was with overhead and flooding," Georges said. "Both used a lot more water than we use today and offered almost no frost protection." The Tree-T-Pee takes the advantages of the micro jet and multiplies them exponentially, according to Georges. The inverted coneshaped Tree-T-Pee wraps around and focuses water from the micro jet sprayers into a small perimeter at the base of the tree. The concentrated 72-degree water goes directly to the root system and travels throughout the tree's vascular system to keep it warmer than any previous technology, he said. It creates a "sauna" around the tree to keep it as much as 10 degrees warmer.



Johnny Georges of GSI Supply Inc. unloads dozens of the Tree-T-Pees he invented to help protect tender young trees from cold temperatures. Last week he completely sold out his stock of the device, which he invented. ARCADIAN PHOTO BY SUSAN E. HOFFMAN, shoffman@sun-herald.com

"That also keeps the whole grove warmer," Georges said. The Tree-T-Pee can also be molded in other colors to accommodate trees from other regions that require different temperature parameters, he said.



Last week, Kevin Shelfer, owner of Joshua Citrus, center, ordered hundreds of Johnny Georges' Tree-T-Pees to protect young citrus trees. Here they, along with Mark Orr, right, look at how the device is protecting a young lemon tree. Georges said the Tree-T-Pee will work for a tree up to four or five years old, when it is established.

ARCADIAN PHOTO BY SUSAN E. HOFFMAN, shoffman@sun-herald.com

Cold weather can be devastating to a citrus crop and protection from the weather was the primary focus when Georges and his father first dreamed up the Tree-T-Pee in 1984. But when natural resource conservation issues began to come to the forefront, Georges said, inspiration came to him at an unusual moment.

"One day in 2002 I was in the shower and I was looking at the low-flow shower head when I thought, 'How much water could we save with the Tree-T-Pee,'" he said. "When we started making them no one cared about water conservation, but now we have to. We've sucked the ground dry. We have saved trillions of gallons of water.

Georges said the Tree-T-Pee cut down on the use of millions of gallons of irrigation water on one 1,750-acre-Southwest Florida citrus grove.

“Without them they watered for six hours and used 15.8 million gallons. With the Tree-T-Pee they had to water for only about one hour and use 2.6 million gallons,” he said. “That saves over 13 million gallons of water every time they water.”

Georges extrapolated that into dollar amounts.

“If it takes a dollar a year to water a grove of trees without the Tree-T-Pee, you can do it for 24 cents with them. That’s a 76 percent savings.”

The savings multiply further when growers calculate the rising costs of fuel or electricity needed to run irrigation pumps, he said. And new trees can be brought into production a full year faster because the concentrated moisture and heat produced by the black plastic Tree-T-Pees promotes up to a 30 percent increase in new growth, he said.

“That’s my estimate, but I like to be conservative. A study by the University of Florida estimated it at 37 percent,” Georges said. “It’s like a little greenhouse out in the field.”

Because the water and liquid fertilizer is concentrated on just the tree, he said growers can use less because they’re not fertilizing surrounding areas.



Johnny Georges shows how the Tree-T-Pee fits around the trunk of a young tree to help hold in water and nutrients, and keep the tree a bit warmer. “Trees started with my Tree-T-Pee have deeper roots and are stronger” he says. ARCADIAN PHOTO BY SUSAN E. HOFFMAN, shoffman@sun-herald.com



“And since they’re not fertilizing the weeds, they’re using a lot less herbicide” Georges said. “It’s very, very green. It’s a good investment.” Local growers agree. Spurred on by the cold, Georges had already sold all 5,000 Tree-T-Pees he had in stock by late last week. On Thursday morning he was delivering his final 500 units to Joshua’s Citrus on County Road 760. Owner Kevin Shelfer wasn’t concerned about conserving water at the time. He was focused on saving his trees. “They really do work,” he said. Walking along the perimeter of his grove, Shelfer focused his attention on two trees standing side by side, one with a Tree-T-Pee and another without. The dark-hued leaves of the taller tree were the tell-tale sign of leaf burn, he said. Shelfer said it would take some time to determine the full extent of the damage. “It could be a little, or it could be more,” he said. “It’s too soon to tell.” The immature tree beside it showed no signs of damage. “It really does keep them warmer,” he said. “It really protected the trees.” At \$3.50 each, Georges said the cost of the Tree-T-Pee is insignificant compared with the loss it could prevent. “Nobody wants to spend extra money. But the Tree-T-Pee costs less than a new seedling,” he said. “It cost a lot less than losing an entire crop.” For more information on the Tree-T-Pee, call Johnny Georges at 863-990-2095.

A small tree protected by the Tree-T-Pee fared much better than a row of trees without that extra protection.