
AAES Impact

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AU, Chinese scientists develop two golden kiwifruit varieties

Auburn University and Hubei Academy of Agricultural Sciences's Institute of Fruit and Tea in China have signed an agreement designating them as co-developers and co-owners of two new varieties of kiwifruit.

The new varieties aren't the kiwifruit most Americans know—the fuzzy brown, egg-shaped fruits with bright-green, seed-studded flesh and their distinctive sweet-tart taste.

The new ones, Golden Dragon and Golden Sunshine, are, as the names imply, gold-fleshed kiwifruit with smooth, "hairless" skin and a much sweeter taste than the originals.



GOLDEN OPPORTUNITIES—Trellised kiwifruit vines at the Clanton center are loaded with new gold variety that will be on the market soon.

AAES horticulturist Billy Dozier and colleagues at Auburn obtained the plant material in the late 1980s from the Hubei insti-

tute, where the varieties were developed.

At the AAES's Clanton Research and Extension Center in Clanton, where full-scale kiwifruit research has been going on for 25 years, Dozier and center director Jim Pitts have adapted the golden varieties to Alabama's growing conditions and harvested bumper crops every year for more than a decade.

Overall, the kiwifruit project has proved that in central and south-central Alabama, the subtropical fruit thrives and could be a highly profitable alternative crop for produce growers and others. ♦

Fresh onions a sweet option for produce farms

Can Vidalia onions by any other name taste as sweet? You bet, says Arnold Caylor.

Caylor heads the AAES's North Alabama Horticulture Research Center in Cullman, where, in repeated trials, some of the very same onion varieties Georgia markets worldwide as Vidalias have produced an abundance of sweet, mild onions second to none.

Alabama produce farmers haven't had much success with onions in the past, and the Cullman work shows that's because the traditional late-February planting date is a couple of months too late. For high yields, growers need to plant late November to early December.

The research also has shown that while Georgia's card-carrying Vidalia growers may plant their onions on bare ground, that doesn't fly in north Alabama. If you want a good onion crop, you've got to plant on plastic.

Caylor is convinced that fresh onions, sold directly to local consumers, could provide a substantial source of income for fruit and vegetable producers. Onion production won't make you rich, he says, but it can make you a living. ♦



FRESH IS BEST—Onions just harvested from research plots at the Cullman center are big, sweet and juicy. For local sales, producers would peel the first layer off to reveal the shiny layer underneath; they would also leave the tops on.

Chickens need their beauty sleep, too

In poultry production, lighting is a very big deal. How many hours of "lights on" and "lights off" birds are given in a 24-hour period affects their activity level, physiological health, disease resistance and breast-meat yield.

As you might expect, broilers tend to be more active when the overhead lights in their houses are burning, and movement keeps birds "in shape." Historically, poultry producers, perhaps assuming that more is better, raised their birds in 23 hours of bright light and one hour of darkness daily.

But AAES poultry scientist Roger Lien's research at Auburn indicates that providing only one hour of darkness each 24-hour period turns chickens into couch potatoes—birds so immobile, or lazy, that in tests requiring them to climb up on a six-inch-high deck to reach the feeder, they eat far less than birds provided more darkness.

He has found that lighting programs that incorporate four to six hours of darkness can increase activity levels and improve production performance. ♦

IMPACT is a quarterly newsletter the Alabama Agricultural Experiment Station (AAES) publishes to inform state and federal legislators, public policymakers and the general public about AAES research projects and how they affect all Alabamians. The AAES (www.ag.auburn.edu/aaes/) is based at Auburn University (www.auburn.edu). Contact **IMPACT** at 334-844-2783 or jcreamer@auburn.edu.

Supply chain management could benefit sod growers, buyers

In recent years, sod production has come into its own as a significant economic entity in Alabama. The number of producers rose from 26 in 1978 to 89 in 2002 and is up to 128 today.

A new survey now being conducted will update the numbers, but in 2002, the 89 growers had 23,000 acres of turfgrass that brought \$200 million at the farm gate and pumped \$1.67 billion into Alabama's economy.

Months before the U.S. economy started tanking in earnest, two ag economists, a turfgrass specialist and an industrial engineer at Auburn launched an AAES-funded project designed to help sod producers operate more efficiently and reap stronger profits.

They're developing a supply chain management model that will introduce interested producers to the practice that major U.S. corporations rely on heavily to ensure



TIME TO CUT IT—Workers cut sod at an Alabama turfgrass operation. Supply chain management could significantly streamline the industry.

they always get the right quantities of the right products to the right place at the right time and at the lowest cost.

Ag economist and project leader Norbert Wilson says the concept, especially beneficial in the current economy, could reduce growers'

sod shortages and surpluses and streamline the delivery process and help landscapers and other buyers more easily find the sod they needed from the closest source possible, thus saving on delivery costs.

Training will be offered when the model is ready to go. ♦

Scientist's goal: cogongrass eradication

Cogongrass is one of the most serious invasive plant threats Alabama and much of the Southeast have ever faced. Listed as one of the 10 worst weeds worldwide, it invades and overtakes disturbed ecosystems, ousting native plant and animal species and rendering farm and forest land unproductive.

Much research has been done on control and suppression, but Auburn weed scientist Stephen Enloe is taking things a step further, to not just suppression of cogongrass but total eradication.

He's focusing on the masses of extensive rhizomes that are the major culprits in the aggressive spread and tenacity of cogongrass. Backed by an AAES grant, he is studying the influence of the only two herbicides known to substan-



BAD STUFF—Cogongrass spreads via an extensive rhizome system.

tially impact the rhizomes and aims to determine the best sequence of treatments necessary for eradication.

He also is investigating whether popular additives now on the market actually do enhance the herbicides' cogongrass control properties and are worth the money. ♦

Ponds owners could be reeling in income

Most of the 100,000 or more private ponds in Alabama are there for fishing. But a study AAES fisheries researchers Rusty Wright and Dennis DeVries are heading at Auburn shows almost half the state's pond owners don't practice even the basic management techniques—fertilizing, liming and keeping the population balanced—known to give you bigger fish, and more of them.

The researchers now are investigating whether other practices, such as providing supplemental feed and adding more prey fish, are cost effective and how soil type impacts pond production. Findings could help all owners better the fishing quality in their ponds and could prompt some to build theirs into moneymakers. ♦

Information contained herein is available to all persons without regard to race, religion, gender or national origin.