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Camellia cousin could become Georgia farm crop

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TIFTON, Ga. — A cousin of camellias may become an alternative crop for Georgia farmers who are strapped by the prices of more conventional row crops, says a University of Georgia expert.

The plant is *Camellia oleifera* Abel. A woody cousin of a favorite garden flower, it can be used to produce healthy cooking oils, livestock feed, makeups and other products.

"It's more commonly known in other parts of the world, namely China, as 'tea oil camellia,'" said John Ruter, a UGA College of Agricultural and Environmental Sciences horticulturist who has been experimenting with the plant.

It grows into a large bush with white flowers, he said. Native to China, it has been used there for more than a thousand years. It's been commercially grown there on large plantations since 1949. Chinese farmers keep them pruned to about 8 feet.

The crop is harvested in October and November. It requires a lot of labor to pick the fruit, Ruter said. But Georgia farmers grow other labor-intensive crops -- vegetables, for instance.

About 14 percent of the Chinese population uses tea oil for cooking. The oil is derived from the marbled

seed the plant produces. The seed's oil content is about 50 percent.

"The oil can be compared to, and has a lot of the characteristics, of olive oil," Ruter said.

It tastes much like olive oil, maybe a little sweeter. The oil is high in oleic acid. This healthy acid has been shown to reduce cholesterol. Tea oil has a higher smoke-out temperature than olive oil. Home and commercial cooks will like this, he said.

You can do more than cook with it, though, Ruter said. From the seed hulls, you can extract saponin, which is used to make detergent and the foam for fire extinguishers. Triterpenoid saponin from the camellia can improve the immune functions in humans and animals, too.

Soaps, hair oil, rustproof oil, paint, lipstick, antiwrinkle creams and fertilizer can all be made from extracts of the camellia.

Most of the research on tea oil camellias comes from Chinese sources. But Ruter is looking to change that. Due to funding problems, China ended most of its tea oil research in 1990.

Last month, Ruter went to China to visit with tea oil experts and scientists to learn how they grow the crop. The plant grows in soils very much like those of the southeastern United States, particularly Georgia.

"It should be very much adaptable to this area," he said.

But finding the right species to do research on in the United States proved to be a challenge.

Ruter found two plants at the U.S. National Arboretum in Washington, D.C. He had another sent to him from a camellia expert in North Carolina. And believe or not, he found another growing in the backyard of a camellia enthusiast in Valdosta, Ga.

Ruter is selecting plants from these four original seed sources at the UGA Bamboo Farm and Coastal Gardens in Savannah, Ga., and with a nursery grower in middle Georgia. He's looking to develop the best types of tea oil camellias to grow for this area of the world.

But the process takes time. "We're starting at ground zero," he said.

Ruter can see tea oil being sold on grocery store shelves along with other oils.

A new oilseed cooperative has started in Georgia. It plans to build a \$55 million oil crushing and processing facility in Claxton, Ga.

Through this facility, Georgia farmers could develop and market their own Georgia-grown tea oil, Ruter said. And that could be just the start for this multitasking crop in Georgia.

(Brad Haire is a news editor with the University of Georgia College of Agricultural and Environmental Sciences.)