Sesame opens up possibilities for non-irrigated land

Fast Facts
- Sesame starting to take some peanut acreage
- Texas company looking to Arkansas to help make up drought shortfall

JONESBORO, Ark. -- Sesame, those tiny seeds probably most familiar as a topping for hamburger buns, is catching the attention of some northeast Arkansas farmers, thanks to a push by a Texas company that is looking to help make up for production shortfalls in drought-plagued West.

Sesaco Corp. of Austin, which claims the only breeding program for sesame in the United States, is contracting with farmers in Arkansas and other states to plant the crop, and approximately 15,000 acres are under cultivation this year.

"Traditionally we've been west of Interstate 35 -- western Oklahoma, western Texas, up to about Wichita, Kan. -- and we thought that was diversity," said Danny Peeper, commercial production manager for Sesaco. "But when you have a drought that covers that entire area, that's not diversified enough."

Peeper said Sesaco has been breeding sesame for about 65 years and in 2000 made a breakthrough that helped address the crop's major drawback: Brittle seed pods.

"In the old days, if you had a bad storm you'd lose 80 percent of your crop in the first hour," he said. "Now the sesame can sit in the fields three months after it's ripe and you'll lose 5 percent."

The ability to harvest with a combine was one of the things that attracted David Hodges, a Jonesboro farmer who has about 475 acres of sesame under cultivation this year.

"Like rapeseed and some other crops, it had to be cut in swaths and then you come back and pick up the windrow and harvest later, after it dried," said Hodges. "They [Sesaco] came up with a variety that did not shatter. That kind of makes it more practical to grow it conventionally, harvesting with a combine with a normal-type header."

Sesame fits Ark farming style
As a crop, sesame has a lot to recommend it to the Natural State's farmers: It doesn't need a lot of water or fertilizer, it has no natural pests in Arkansas, and it can thrive in marginal soil. Plus there's a long planting season, from early May to mid-July.

Derek Boling of Paragould was one of the pioneers who planted 140 acres of sesame in 2012, the first year it was cultivated in Arkansas. This year he has 400 acres planted.
"I planted it on some ground typically we just plant wheat on; it's so sandy, we don't ever plant anything behind it," said Boling. "We made 800 pounds of sesame per acre. That kind of got me excited about it."

This year some of Boling's sesame is under an irrigation pivot and he is hoping to see between 1,200 and 1,500 pounds per acre from that portion. He says other growers are trying irrigation, as well, and the fact that sesame needs much less water than other traditional crops is also attractive.

"It requires about an inch of water a week after the third or fourth week," he said. "That's basically nothing compared to other crops we're watering here in the mid South."

**Warm reception**

Branon Thiesse, Craighead County extension agent for the University of Arkansas System Division of Agriculture, said the crop seems to be well received by local farmers and he's not heard of any significant problems.

"I saw one guy who had to replant some – the seed is really small and it looks like using a drill will be really hard to get the depth right," Thiesse said. "We have a little space out here behind our office and we've got a little sesame out there; I just broadcast it and it's growing. I wanted to see what the plant looks like."

Travis Faske, an extension plant pathologist at the Lonoke Ag Center, said the amount of acreage under cultivation for sesame this year took him by surprise. It's concentrated in the northeast corner of the state in counties like Lawrence, Clay, Greene, Randolph, and Craighead, he said, and there's some effort toward establishing a general distribution center or buying point so there's a single place to ship the product out to Sesaco. Meanwhile, his office is trying to answer questions as they come up.

"The problem is, there's a limited amount of information about it," he said. "What do I spray? I know we spray Dual, a common pre-emergent herbicide, but what do we spray later on? What disease issues might we have it we have a wet, early fall?"

Because of the late planting window, growers seem to be putting in sesame after all their other crops are in. That might mean some problems in October when it comes time to harvest, if they run into rainy weather, said Faske, but he acknowledged that everyone is still in a learning cycle.

"I think it's a lot of wait and see," he said.

In the coming years, sesame may gain acreage from other crops, including peanuts. Peanut acreage in Arkansas dropped from 18,000 acres last year to 11,000 this year, following a price drop from $750 to $550 per ton. Peanuts also take more effort than sesame.
As with other crops, prices will guide the number of acres planted. If sesame prices go up, acres will likely increase, Faske said. There are other factors too. Farmers need to figure out how much the crop will earn them after the expense of growing it and if there is a rainy fall and they wind up with zero yield, acres in the following years will drop.

Farmers who got in early with Sesaco were able to contract at around 40 cents per pound, though the price has since dropped to the mid-30s. Sesaco's Peeper said half their crop is exported to Japan – Mitsubishi is a majority owner of the company – and the other half is sold in the United States, mostly for confectionary uses like baking. He is optimistic that, with about 40,000 acres total under cultivation in the southeast this year, there could be 50,000 to 100,000 acres of sesame grown in the region by the next couple of years, much of it in Arkansas.

"Everything's off to a good start so far," he said. "We have contracted with an acreage contract to pay for what they produce, so the price doesn’t change much from year to year. It’s a pretty table market year to year. And in another month, the sesame will be four to five feet tall."

The Cooperative Extension Service is part of the University of Arkansas System Division of Agriculture and offers its programs to all eligible persons regardless of race, color, national origin, religion, gender, age, disability, marital or veteran status, or any other legally protected status, and is an Affirmative Action/Equal Opportunity Employer.

July 12, 2013

By Eric Francis
For the Cooperative Extension Service
U of Arkansas System Division of Agriculture

Media Contact: Mary Hightower
Extension Communications Specialist
U of A Division of Agriculture
Cooperative Extension Service
(501) 671-2126
mhightower@uaex.edu