LSU team studying possible new crops
Researchers growing Stokes aster on farm

Amaranth was a crop of the ancients. Southern gardeners may know amaranth as a flower called "love-lying-bleeding." To LSU's Charles W. Kennedy, amaranth is a potential Louisiana farm crop.

As a crop, it has its drawbacks in Louisiana's climate. Harvesting its nutritious seed is not easy, Kennedy said.

But he said he is not ready to drop amaranth from his list of several plants that someday may give Louisiana farmers new choices of crops to grow.

Kennedy's main work in the agronomy department is cotton production research. Experimenting with new crops is an extra. He said he expects to be able to select one or two of the most promising new crops for more in-depth study in the next two years.

Research associate Gladys Carmona and graduate students Elizabeth Callan and Donald Cook work with Kennedy on the new crops studies. Some of his candidates are not complete strangers to Louisiana farming. Sunflower and sesame are grown or have been grown in the state.

One candidate, Vernonia, originates in Ethiopia. Kennedy also is considering pearl millet and buckwheat. He has tried crambe—pronounced "kram be"—an oilseed plant from the Mediterranean region. Right now, Stokes aster is getting much attention.

Kennedy and his team are growing Stokes aster in the LSU Agricultural Center's Ben Hur farm. Stokes aster is a Gulf Coast native. Its blue flowers may have some value for florists, Kennedy said, but he is after the seed. Stokes aster and Vernonia are the only natural sources of epoxy-acid oil used in paint, according to LSU.

Stokes aster grows back from the same root year after year. It does not bear seeds until its second year, which could be a problem for growers, Kennedy said.

He suggests a solution—plant it with a short-statured soybean. Soybeans could give the grower a crop from the aster field the first year without harming the asters.

Seeds heads of Stokes aster are the source of oil.

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Diseases are a problem, and must be controlled by chemicals. Suitable herbicides are being studied.

Vernonia, an Ethiopian plant domesticated for dry land production in Arizona by U.S. Department of Agriculture scientists, is susceptible to Fusarium wilt in Louisiana's climate. Kennedy's research is looking for resistant varieties that might serve as a profitable late-planted crop in Louisiana.

Sunflower and sesame, Kennedy said, offer more immediate potential. Both produce edible oils. Sesame seeds flavor bread.

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Kennedy said Louisiana farmers may be able to take advantage of a sunflower market developing in Texas.

Crambe, another oilseed plant, must be planted in the spring, but spring planting is often prevented by rain, which means the crop cannot be easily adapted to the state's growing conditions, Kennedy said.

Amaranth for feed grain planted in mid-May is susceptible to Lygus plant bug attacks, and it needs a frost before it can be harvested efficiently, Kennedy said.

Pearl millet and buckwheat perform better in Louisiana trials, he said. Pearl millet is an animal feed with more protein than the commonly grown grain sorghum. Millet is planted in the spring.

Buckwheat would be a late-summer crop. It is planted in August and

Graduate student Elizabeth Callan and agronomist Charles Kennedy with a planting of Stokes aster, which produces oil-laden seed.
Crops
CONTINUED FROM 11 September following corn, and it can be harvested in the fall. Primarily exported to Japan for soba noodles, buckwheat’s fall harvest in Louisiana would add a market advantage because it is harvested in the summer in the northern United States and Canada.

Buckwheat grows rapidly and smothers most weeds, which means farmers would use less herbicide, Kennedy said. The one drawback of buckwheat is its need for a frost to drop its leaves before it is harvested.

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