



MAFES horticulturists Cecil Pounders, left, Christine Coker, and Patricia Knight.

Horticulture research helps homeowners find the landscape plants they want

By Bob Ratliff

Anyone who has driven U.S. Highway 90 from Gulfport to Pascagoula knows the Mississippi Gulf Coast has changed. Fluorescence-draped casinos and high-rise hotels line a beach that was just a few years ago dominated by fishing boats.

Another change taking place along the Coast and other areas of Mississippi is the trend toward homes with smaller, but well landscaped lots, according to MAFES horticulturist Patricia Knight at the South Mississippi Branch Experiment Station in Poplarville.

“With the trend toward smaller lots, there is increased demand for dwarf varieties and other types of plants that work well in smaller spaces,” she said. “Among the projects we have under way is work with irradiated seed and genetic selection to produce dwarf magnolias.”

MAFES scientists conduct research with ornamental plants and production methods at several locations, but research with landscape plant varieties currently in demand and those that have promise for the future is a primary focus at the South Mississippi Branch. In addition to Knight, horticulturists conducting research at the branch station include Christine Coker and Cecil Pounders.

“At the station, we evaluate plant material ranging from herbaceous annuals and perennials to shrubs and trees,” Knight said.

Knight, who is in charge of ornamental horticulture research at the station, explains that there is a lot more to the work than just growing pretty flowers or green shrubs.

“Ornamental horticulture research at the station involves a comprehensive approach,” she said. “Research projects are currently under way in the areas of weed control, fertilization, plant selection, and media components.”

South Mississippi nurseries play an important role in the station’s research by providing input about the needs of the industry and by providing a commercial setting for some of the research.

“All of our research is aimed toward helping Mississippi’s horticulture industry,” Knight explained. “The industry is very supportive in providing time, plant material, space, and anything else needed to make our research with ornamental plants a success.”

The MAFES research helps make the state’s horticulture industry more productive, according to Dan Batson, president of Green Forest Nursery in Perkinston.

“The researchers are interested in everything from propagation to shipping,” he said. “Their work has the potential to help our industry take great strides toward production efficiencies through mechanization.”

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One indication of the success of the ornamental horticulture work at the station is its selection for participation in the National Arboretum's plant evaluation and release program. Horticulturists at the station have evaluated cold-hardy, disease-resistant crape myrtles for the program since 1985.

Such evaluations are important in helping nurseries provide their customers with plants that will perform well.

"Just because a plant is popular with homeowners doesn't mean it will do well in the heat of south Mississippi," Knight said.

The research scientists also try to stay at least a step ahead of trends in the landscape industry and consumer demand.

"We want to anticipate the needs in the future," Knight said. "We want to give them the things they will need 10 years in the future."



Bob Ratliff

Bon appetit for blossoms?

It started with the ancient Romans, was extremely popular in Victorian England and is again in vogue. The practice is the use of edible flowers in cooking.

Today, many restaurant chefs and innovative home cooks garnish their entrees with edible flowers for a touch of elegance.

"Since many fine restaurants now offer flowers as a decoration or food, there is a potential high-return niche market for suppliers of those flowers," MAFES horticulturist Patricia Knight said. "As a result, the Mississippi nursery industry needs more information about flowers with potential for this market."

Knight and fellow horticulturists Christine Coker at the Coastal Research and Extension Center in Biloxi and Glenn Fain at the Truck Crops Branch in Crystal Springs are conducting research with one of the most popular edible flowers—the daylily. The project is supported by the USDA Agricultural Research Service through a MAFES internally competitive Alternative Crops and Value Added Products grant.

Sales of daylilies by Mississippi nurseries total about \$100,000 each year, and Knight said that figure could be increased by sales for use in cooking.

"Since Mississippi has its share of fine restaurants and is in proximity to other Southeast markets, the edible flower market deserves consideration," she said. "This could be a supplement to the state's already strong ornamental horticulture industry."

The university horticulturists are conducting the initial phase of the research, which is to determine if flower color influences taste.

"We are growing daylilies at Poplarville for use in taste tests," Knight said. "Participants will be volunteers from garden groups who will be asked if they can tell a difference in the taste of test samples."

The tests will be conducted at the new James E. Garrison Sensory Evaluation Laboratory on the MSU campus.

Similar research with lotus is planned and Fain is currently growing lotus for the project at Crystal Springs. Market evaluations will be conducted later in the project.



Keith Renny

Daylilies - Slightly sweet with a mild vegetable flavor, like sweet lettuce or melon. Their flavor is a combination of asparagus and zucchini. Some people think that different colored blossoms have different flavors. To use the surprisingly sweet petals in desserts, cut them away from the bitter white base of the flower. Also great to stuff like squash blossoms. Flowers look beautiful on composed salad platters or crowning a frosted cake. Sprinkle the large petals in a spring salad. In the spring, gather shoots 2 or 3 inches tall and use as a substitute for asparagus.

Following are some simple guidelines to keep in mind before you eat any type of flower:

- Eat flowers only when you are positive they are edible. If uncertain, consult a good reference book on edible flowers prior to consumption.
- Just because flowers are served with food does not mean they are edible. It's easy and very attractive to use flowers for garnish on plates or for decoration, but avoid using nonedible flowers this way. Many

people believe that anything on the plate can be eaten. They may not know if the flower is edible or not and may be afraid to ask.

- If pesticides are necessary, use only those products labeled for use on edible crops.
- Do not eat flowers from florists, nurseries or garden centers. In many cases these flowers have been treated with pesticides not labeled for food crops.
- Do not eat flowers picked from the side of the road. Once again, possible herbicide use eliminates these flowers as a possibility for use. Remove pistils and stamens from flowers before eating. Eat only the flower petals for most flowers.
- Introduce flowers into your diet in small quantities one species at a time. Too much of a good thing may cause problems for your digestive system.
- If you have allergies, introduce edible flowers gradually, as they may aggravate some allergies.

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