



Research Shows Mint Could Fit Mississippi Farms to a “T”

Story and photo by Bob Ratliff

Southerners' taste for mint juleps may be more myth than fact, but Mississippi State University researchers may create a new role for the tasty herb in the South.

Mississippi Agricultural and Forestry Experiment Station scientist Valtcho Jeliakov established plots of several mint varieties at the North Mississippi Research and Extension Center in Verona, Delta Research and Extension Center in Stoneville and Truck Crops Branch Experiment Station in Crystal Springs during 2007.

"Poor drainage caused some problems for the plots at the Delta Research and Extension Center, but otherwise the plots have been successful," Jeliakov said. "Yield data from the two cuts dur-

ing the 2007 season and the first cut of this year is pretty good. It appears peppermint and spearmint cultivars grown in Mississippi can provide the same or greater yields than in some traditional mint-growing areas of the nation."

There are about 75,000 acres of mint grown commercially in the United States each year. Most of the production is in the Midwest and in Idaho, Washington and Oregon. About 90 percent of the crop is used in mint-flavored chewing gum and dental products, such as mouthwash and toothpaste. Candy, teas, breath mints and similar products account for most of the remaining 10 percent.

Demand for mint is increasing at the same time Midwestern growers are cutting back production, said Rocky Lundy, executive director of the Mint Industry Research Council.

"Mint is losing acreage to corn in the Midwest because of the sharp increase in grain prices," he said. "However, the industry needs about another 10,000 acres."

Lundy was in Mississippi in late June to visit the MSU research plots and again in mid-July to meet with prospective growers in the Delta. During the first visit, he was accompanied by Gregory Biza, technical director of I.P. Callison and Sons, a major supplier of mint to manufacturers of mint products.

"Mint is one of the few remaining all-natural flavors," Lundy said. "About 90 percent of the mint produced in the U.S. is used in chewing gum and dental products, including toothpaste and mouthwash. Other uses include candy, breath mints and teas."

Production of mint starts with planting certified, disease-free plants, Biza said.

"After the crop is established, growing mint is a lot like growing alfalfa," he added. "Once the leaves are harvested, they are taken to a processor where steam is used to extract mint oil, which is placed in 55-gallon steel barrels. Each barrel can be used to flavor 500,000 tubes of toothpaste or 5.2 million sticks of chewing gum."

It takes mint leaves from about 4 to 7 acres to fill a 55-gallon drum, and a drum currently sells for about \$8,000 to \$10,000.

Both Lundy and Biza noted that about 100 acres of mint are needed to support a processing plant. However, one large grower or several small producers can supply this acreage.

During the July meeting at the Delta R&E Center, the presidents of I.P. Callison and Sons, and Rcb International, another mint oil dealer, indicated they would work with growers on infrastructure development.

"Peppermint, spearmint and possibly Japanese mint are promising new high-value crops for Mississippi," Jeliakov said. "We have identified a market for a new high-value crop, and our research has demonstrated the crop's feasibility."

The MSU researcher plans to conduct on-farm studies to demonstrate mint production to prospective growers and to determine the production and capital costs associated with growing mint.

"It is a long-term commitment because mint is a perennial crop and because of the need for a distillation facility," Jeliakov said. "However, our research the past 3 years has shown that mint and similar oil crops can be high-value crops in Mississippi and provide a product that meets the market demand for consistency in supply and quality."

Rocky Lundy with the Mint Industry Research Council explains cultural practices needed to grow mint to potential Mississippi growers (photo above).