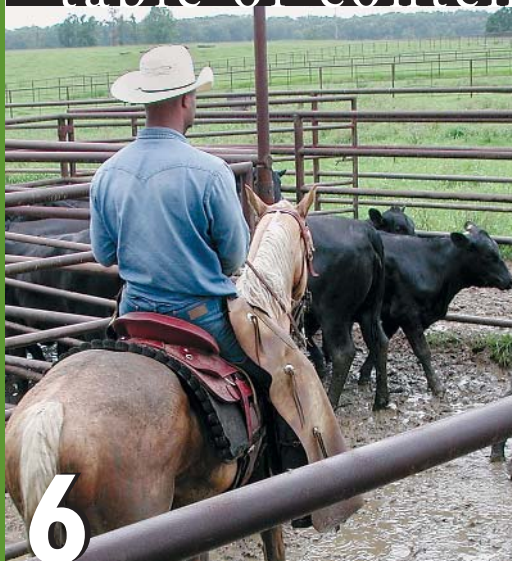


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## On the Cover

Field days are a chance for MAFES scientists to inform producers about their work and for producers to discuss their needs with the researchers. Reports on recent field days begin on page 16. (Photograph by Marco Nicovich)

## 4 Preparations under way for rust attack

Soybean rust is a serious plant disease in the soybean-growing areas of South America and is poised to move into the northern hemisphere. MAFES scientists are preparing to lessen the disease's impact once it reaches the U.S. crop.

## 6 Fast cows not always winners

Research at the Brown Loam Branch shows faster is not always better when it comes to cattle.

## 8 Tracking plants with technology

High-tech implants can help nurseries keep tabs on their plants.

## 10 How many miles per bushel?

Soybeans can provide a safe, clean and reliable source of diesel.

## 12 Melons to go

Consumer demand for personal-sized watermelons is increasing, and research at the Truck Crops Branch is helping meet that demand.

## 13 Not a blackboard in sight!

Agriculture classes in Mississippi's high schools are being taught in very different classrooms.

## 14 Mapping the pine genome

Scientists have already mapped the human genome, and now MAFES scientists are taking on a much bigger task: mapping the genetic makeup of pine trees.

## 16 Cool cows

It takes more than shade to keep dairy cows cool enough to produce their best during hot Mississippi summers. Tunnel ventilation is doing the job for some dairies in the state.

## 18 Field days

Hundreds of visitors attend field days at branch stations and research and extension centers each year. Here's a look at some of this summer's events.

## 22 Updates

Meet new and award-winning MAFES personnel.