

Most hybrids have resistance

New race of corn blight detected

LANCASTER — A new form of the fungus which causes Northern Corn Leaf Blight has been discovered by two corn research pathologists.

The new form has been named Race 3 by researcher David Smith. The new race was first detected near Estill, South Carolina at one of 24 disease monitoring locations operated by DeKalb. It has since been detected in Tennessee and Iowa.

Smith initially began study on what he suspected to be the new race in 1976. In 1979,

he had enough scientific data to confirm that the new fungus was indeed Race 3 of NCLB.

Smith says resistance to the disease is already in most U.S. corn hybrids. "We've identified a race that will have absolutely no impact on the 1980 crop," he states.

The new race brings the existing number of races of NCLB to three. The first race, Race 1, came under control when corn breeders discovered a gene known as Ht and incorporated that

gene into most commercial corn hybrids.

In 1974, Race 2 was first reported from Hawaii and was able to overcome the genetic resistance offered by Ht. Although the new Race 2 posed no major threat at the time, some corn breeders began conducting research on forms of resistance called Ht2 and Ht3, which are effective in controlling Race 2, but not Smith's Race 3.

Since Smith knew that DeKalb was the only major seed research company that conducts a wide-scale disease monitoring project, he immediately made his findings known to corn pathologists at other research institutions.

"I felt we should react in a responsible manner and

notify other individuals so they could also better manage their resistances to Race 3," Smith says. "The discovery of Race 3 was a direct benefit of operating such a large disease monitoring program."

The pathologist points out that if there are any potential problems in the immediate future from NCLB, they "most likely will be from Race 2."

He adds, however, that polygenic resistance (controlled by many genes with additive genetic action) will function against Races 1, 2 and 3.

"I should point out that polygenic resistance to NCLB is used in many hybrids," Smith explains.

Smith says that by no

means is NCLB resistance work over. DeKalb is now testing several hybrids further with various types of genetic resistances using Race 1 of NCLB for field evaluations.

"We have material that would be classified susceptible in test next to the same hybrid with Ht resistance. We also have that same hybrid with Ht resistance and others with Ht and Ht2 together. Then, we have a complimentary set with high levels of polygenic resistance," he says.

"We're doing this because even though we know these resistances have been reported, we don't know how well the genes Ht2 or Ht3 may function in the field."

The disease monitoring project Smith directs continues to play an important role. The Corn Pathology laboratory operated by DeKalb in Dekalb, Illinois, has been approved by the Animal and Plant Health Inspection Service to receive plant tissue from across the country. It was the first corn pathology laboratory operated by a major seed company that was approved by APHIS.

"We'll continue to monitor corn diseases occurring at different locations so that we can detect different forms of existing diseases or new diseases so we and the industry may react to specific situations," Smith says.

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Plans set for woodsmen's carnival

COUDERSPORT — Plans are nearly complete for the 29th annual Woodsmen's Carnival which will be held Friday and Saturday, Aug. 1 and 2, at Cherry Springs State Park.

The Park is located eight miles south of Route 6, between Galeton and Couderdport, Potter County.

A capacity crowd is expected again this year for the Woodsmen's Show, which yearly attracts more than 30,000 persons.

On Friday, August 1, light and heavy weight horse pulling contests will be held in

the arena, getting underway at 1:30 p.m. First place purse in both classes is \$250. Following the pulls, best teamster awards will be presented in both classes.

Also, on Friday, at 7:30 p.m., Re-Creation, a singing group from Penn State University, will perform. Re-Creation has appeared in the area several times and has been well received. There is no admission fee to their performance.

During both days, carnival visitors can browse through a large mid-way outside the show arena. A million dollar

display of lumbering and logging equipment is featured, as well as various crafts, educational, and knick-knack booths. The mid-way displays are open from 9 a.m. to 6 p.m. both days.

On Saturday, Aug. 2, the woodsmen's events are held, beginning at 1:30 p.m. Contestants come from all over the country to participate in these skill-taking events. The highly competitive field events (also held in the arena), include cross-cut sawing, log rolling, log chopping, unlimited chain sawing, and tree felling. Several monetary prizes are

given in each event and champions in each category will receive trophies. During the two days, more than \$4500 will be awarded.

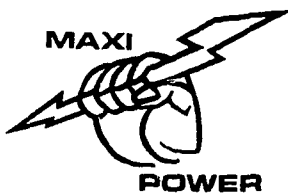
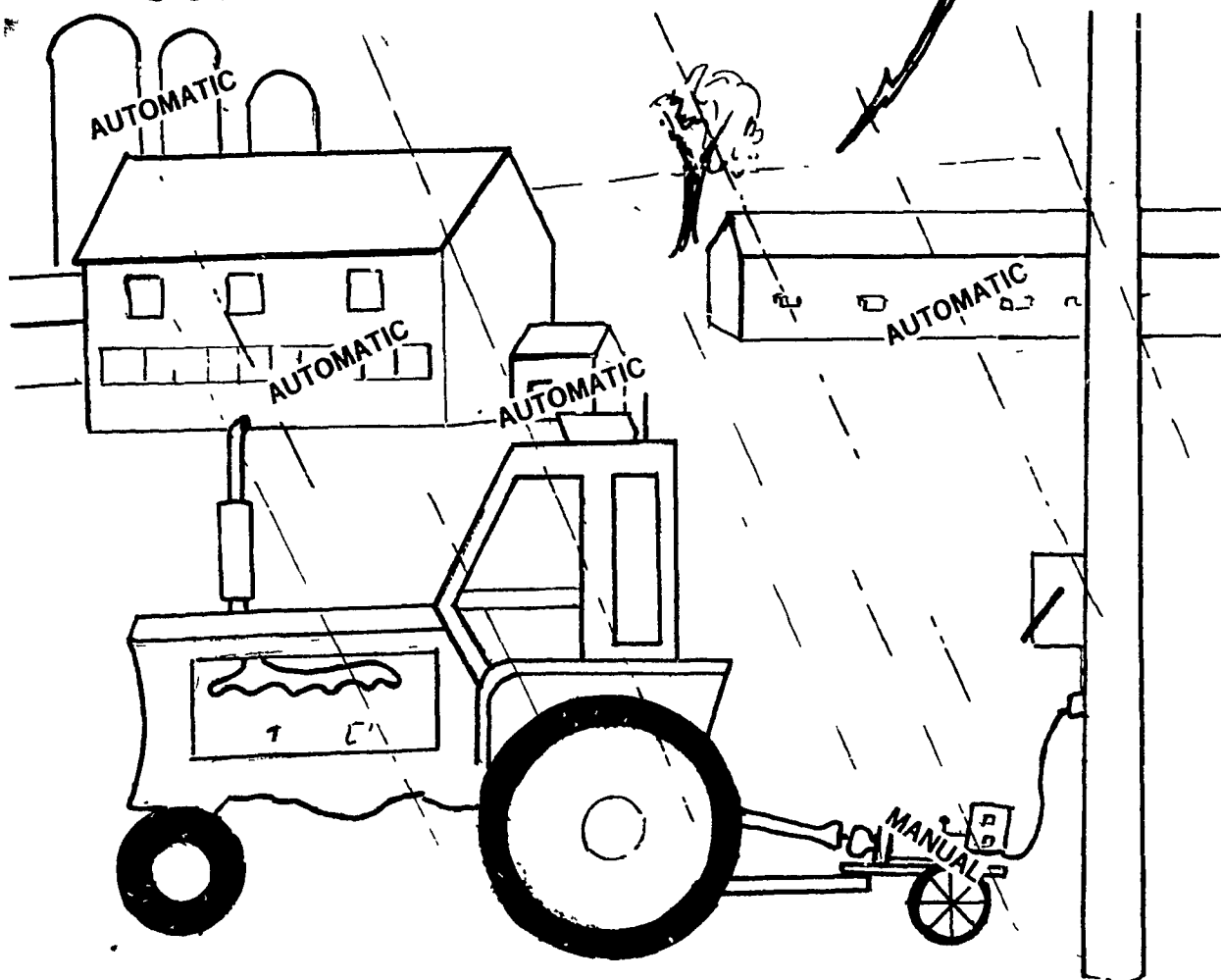
There is ample parking space, and the arena accommodates thousands of people. Food and soft drinks are available on the grounds as well as complete meals at the Galeton Rotary Food stand.

Admission is \$3 for Adults and \$1.50 for children under 12.

The event is sponsored by the Penn-York Lumbermen's Club and is under the general chairmanship of Beno Kramer of Galeton.

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