

Crop Scientists Say Biotechnology Seed Companies Are Thwarting Research

By ANDREW POLLACK

Biotechnology companies are keeping university scientists from fully researching the effectiveness and environmental impact of the industry's genetically modified crops, according to an unusual complaint issued by a group of those scientists.

"No truly independent research can be legally conducted on many critical questions," the scientists wrote in a statement submitted to the Environmental Protection Agency. The E.P.A. is seeking public comments for scientific meetings it will hold next week on biotech crops.

The statement will probably give support to critics of biotech crops, like environmental groups, who have long complained that the crops have not been studied thoroughly enough and could have unintended health and environmental consequences.

The researchers, 26 corn-insect specialists, withheld their names because they feared being cut off from research by the companies. But several of them agreed in interviews to have their names used.

The problem, the scientists say, is that farmers and other buyers of genetically engineered seeds have to sign an agreement meant to ensure that growers honor company patent rights and environmental regulations. But the agreements also prohibit growing the crops for research purposes.

So while university scientists can freely buy pesticides or conventional seeds for their research, they cannot do that with genetically engineered seeds. In-

stead, they must seek permission from the seed companies. And sometimes that permission is denied or the company insists on reviewing any findings before they can be published, they say.

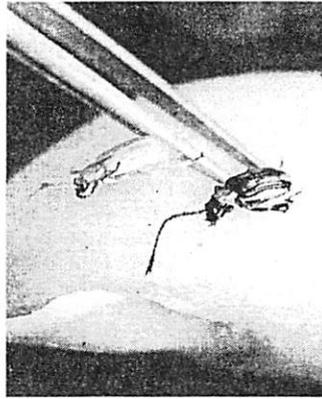
Such agreements have long been a problem, the scientists said, but they are going public now because frustration has been building.

"If a company can control the research that appears in the public domain, they can reduce the potential negatives that can come out of any research," said Ken Ostlie, an entomologist at the University of Minnesota, who was one of the scientists who had signed the statement.

What is striking is that the scientists issuing the protest, who are mainly from land-grant universities with big agricultural programs, say they are not opposed to the technology. Rather, they say, the industry's chokehold on research means that they cannot supply some information to farmers about how best to grow the crops. And, they say, the data being provided to government regulators is being "unduly limited."

The companies "have the potential to launder the data, the information that is submitted to E.P.A.," said Elson J. Shields, a professor of entomology at Cornell.

William S. Niebur, the vice president in charge of crop research for DuPont, which owns the big seed company Pioneer Hi-Bred, defended his company's policies. He said that because genetically engineered crops were regulated by the government,



Insect-resistant corn varieties are bred to repel rootworms.

companies must carefully police how they are grown.

"We have to protect our relationship with governmental agencies by having very strict control measures on that technology," he said.

But he added that he would welcome a chance to talk to the scientists about their concerns.

Monsanto and Syngenta, two other biotech seed companies, said Thursday that they supported university research. But as did Pioneer, they said their contracts with seed buyers were meant to protect their intellectual property and meet their regulatory obligations.

But an E.P.A. spokesman, Dale Kemery, said Thursday that the government required only management of the crops' insect resistance and that any other contractual restrictions were put in place by the companies.

The growers' agreement from

Syngenta not only prohibits research in general but specifically says a seed buyer cannot compare Syngenta's product with any rival crop.

Dr. Ostlie, at the University of Minnesota, said he had permission from three companies in 2007 to compare how well their insect-resistant corn varieties fared against the rootworms found in his state. But in 2008, Syngenta, one of the three companies, withdrew its permission and the study had to stop.

"The company just decided it was not in its best interest to let it continue," Dr. Ostlie said.

Mark A. Boetel, associate professor of entomology at North Dakota State University, said that before genetically engineered sugar beet seeds were sold to farmers for the first time last year, he wanted to test how the crop would react to an insecticide treatment. But the university could not come to an agreement with the companies responsible, Monsanto and Syngenta, over publishing and intellectual property rights.

Chris DiFonzo, an entomologist at Michigan State University, said that when she conducted surveys of insects, she avoided fields with transgenic crops because her presence would put the farmer in violation of the grower's agreement.

An E.P.A. scientific advisory panel plans to hold two meetings next week. One will consider a request from Pioneer Hi-Bred for a new method that would reduce how much of a farmer's field must be set aside as a refuge aimed at preventing insects from



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becoming resistant to its insect-resistant corn.

The other meeting will look more broadly at insect-resistant biotech crops.

Christian Krupke, an assistant professor at Purdue, said that because outside scientists could not study Pioneer's strategy, "I don't think the potential drawbacks have been critically evaluated by as many people as they should have been."

Dr. Krupke is chairman of the committee that drafted the statement, but he would not say whether he had signed it.

Dr. Niebur of Pioneer said the company had collaborated in pre-

paring its data with universities in Illinois, Iowa and Nebraska, the states most affected by the particular pest.

Dr. Shields of Cornell said financing for agricultural research had gradually shifted from the public sector to the private sector. That makes many scientists at universities dependent on financing or technical cooperation from the big seed companies.

"People are afraid of being blacklisted," he said. "If your sole job is to work on corn insects and you need the latest corn varieties and the companies decide not to give it to you, you can't do your job."