

Pretty Flowers Lead Two Scientists to a Discovery



Not all research begins with a plan. Some studies begin by Meredith Schafer says that is what happened with her and Cynthia Sagers.

Cynthia Sagers is a biology at the University of Arkansas. Meredith Schafer is a graduate student.

They were traveling in the state of North Dakota on a project. They noticed pretty flowers.

They recognized them as canola. Farmers grow canola for seeds to make cooking oil. Canola is also used for animal feed and biofuel.

But the canola plants they saw were not growing in farm fields. They were growing along the

MARKET

VEHICLE

ROAD

ACCIDENT

CHEMICALS

QUALITIES

MEETING

YELLOW

PROFESSOR

PAPERS

The researchers decided to test the plants. They had brought along special testing for the project they were working on. They crushed some of the leaves in water and added the test strips.

The results showed that the weedy canola plants contained genetic changes. If a plant is genetically modified, that means its genes have been changed to produce desired

This summer, the researchers from Arkansas went back to North Dakota. This time they went on a road trip to find canola. They traveled more than five thousand kilometers.

They stopped about every eight kilometers to count plants and take samples to test in their

What they found, they say, was the first discovery in the United States of wild canola plants with modified genes.

Meredith Schafer presented the findings at a recent of the Ecological Society of America.

The scientists found canola plants in almost half of the places they investigated. They tested a total of two hundred eighty-eight plants. They found that eighty percent of those plants contained genes from genetically engineered canola.

Some crop plants are modified to resist damage from the that farmers spray to kill weeds. There are two proteins that can give canola the ability to resist two commonly used herbicides. One protein gives resistance against glyphosate. The other protein gives resistance against glufosinate.

Two of the plants growing in the wild showed resistance to both kinds of weed killers. Professor Sagers says canola varieties with these genetic qualities have not been released on the This suggests the result of wild populations reproducing on their own.