

The illustrated graphic shows a farmer figure in blue overalls and a yellow shirt. The farmer is standing in the middle of the page with a shovel. A blue sky background is behind the farmer, and the graphic shows light and dark brown dirt below the figure's feet. To the left of the farmer are yellow corn stalks. To the right of the farmer are green corn stalks and a center-pivot irrigation system. Blue water is being sprayed from the irrigation system.

This graphic starts with red text in the upper left corner of the page that says, "Can soil microbes help farmers grow crops during periods of drought?"

Below that, in brown text, it reads: "Microbes can sometimes protect plants from drought stress. ERI researchers want to know when or how commonly that occurs to help Midwest farmers contend with climate change."

Next are four white circles spread across the page and numbered 1, 2, 3, 4. The text within each circle is brown.

The text in the circles read:

1. Farmers must contend with many variables when making decisions about the best way to manage their land. Climate change is only making that harder by bringing hotter temperatures, shifting precipitation patterns, and more frequent drought stress.
2. By talking to farmers and testing their soil, the researchers hope to gain a better understanding of what practices can help crops withstand future droughts.
3. Irrigation is one solution farmers are using to withstand drought. It can be costly, draw on limited freshwater resources, and may actually inhibit the conditions microbes need to protect plants from drought.
4. Past research has shown that soil microbes have the ability to protect plants from drought stress. If similar effects occur on farms, then diverse soil microbial communities might naturally promote drought tolerance in crops.