

## **Bacteria surrenders plant war secrets**

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U.S. scientists say they've discovered the secret weapon of bacteria -- the way they secure a foothold in plants to launch an invasion.

The Michigan State University study focused on the bacterial pathogen Pseudomonas syringae, better known as the disease agent of bacterial speck. The pathogen attacks tomatoes, causing serious crop loss.

Michigan State biology Professor Sheng Yang used P. syringae in the laboratory plant Arabidopsis to obtain a better understanding of how bacteria establishes itself and destroys a plant's ability to fight infection.

The secret weapon: a bacterium's protein that targets a plant protein serving as a line of defense against illness, said researcher Kinya Nomura, the study's first author.

"The bacteria targets and disables a plant's defense protein, so they can get in and multiply," Nomura said. "It's a very nice strategy for bacteria, very clever."

The research project is described in the journal Science.

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