

Glyphosate herbicide negatively affects soil-friendly bacteria, study shows

Cornell researchers found negative consequences of the weed-killing herbicide glyphosate on pseudomonas, a soil-friendly bacteria [read the full study [here](#)].

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[Gyphosate] applied to crops can drain into the soil and disrupt the molecular factories in the bacterial cells in some species, interfering with their metabolic and amino acid machinery.

The new findings show that glyphosate does not target the amino acid production and metabolic gadgetry equally among the pseudomonas species.

For example, when *Pseudomonas protegens*, a bacteria used as a biocontrol agent for cereal crops, and *Pseudomonas fluorescens*, used as a fungus biocontrol for fruit trees, were exposed to varying glyphosate concentrations, the researchers noted no ill effects.

However, in two species of *Pseudomonas putida* used in soil fungus control for corn and other crops, the bacteria had notably stunted growth, said Aristilde, who is a faculty fellow at Cornell's Atkinson Center for a Sustainable Future.

"Thus, if a farmer is using *Pseudomonas fluorescens* as a biocontrol, then it is probably OK to use glyphosate," Aristilde said. "But if the farmer uses *Pseudomonas putida* to control the fungus in the soil, then glyphosate is more likely to prevent the bacteria from doing its job."

The GLP aggregated and excerpted this article to reflect the diversity of news, opinion and analysis. Read full, original post: [War on Weeds Takes Toll on Soil-Friendly Bacteria](#)