

Worms help protect plants against diseases

Knight Ridder Newspapers

Worms in apples: bad.
Worms in soil: good.

Gardeners count themselves lucky when they turn over a spadeful of earth to find earthworms, and the more, the better.

These hardworking helpers are a sure sign of loose, organically rich soil, a great environment for plants.

But exactly how do worms help soil and plants?

Some of the lowly worm's benefits come from its castings, or worm excrement, tiny pieces about the size of a pinhead — 100 percent organic and odorless.

In a garden, vericompost they improve soil porosity and moisture retention, stimulate plant growth and repel an array of insects and diseases.

Just a little bit of vermicompost goes a long way.

Ten percent by volume is ideal, but even 5 percent produces results.

Beneficial qualities of castings depend on what worms are fed, according to a study at Ohio State University. Worms were fed hog manure, dairy manure, paper waste and food waste. The castings produced by hog manure have far outperformed the other castings.

Vermicompost also suppressed several diseases on cucumbers, radishes, strawberries, grapes, tomatoes and peppers, according to research from Ohio State extension entomologist Clive Edwards. It also significantly reduced parasitic nematodes, aphids, mealy bugs and mites.