



Earthworms - silent workers for your crops

Silent Workers Get a Wriggle On

There's a saying that you can judge the health of your soil by the number of earthworms found in it.

If you dig your soil and find numbers in the order of 5 to 10 worms per shovel, this represents a very healthy population.

In the right conditions some of these silent workers will double their numbers every 6 to 8 weeks, so providing a good environment for them to breed, is good organic farming.

The benefits of earthworms include a faster and more complete breakdown of plant residues and organic matter.

Soil humus levels also increase improving soil water penetration and porosity. This is especially important given our non-wetting sands.

To maximise earthworm numbers we need to provide ideal conditions in terms of shelter, food and water.

The best environment for earthworms is uncultivated soil with a permanent cover of organic matter on the soil surface, and a pH close to neutral.

The soil should be free from fumigants, fungicides and many insecticides.

In terms of cultivation, deep ploughing is an obvious hazard to earthworm populations. Apart from killing a portion of them it disturbs their habitat by burying organic matter and exposing them to predators. Minimum till or no till systems are the best options for earthworm survival.

Not all farm chemicals have an adverse affect on earthworms, but many reduce their population.

Soil fumigants are the worst group of chemicals for earthworm populations, closely followed by fungicides.

Herbicides as a group tend to have a low direct affect but do have an indirect impact by reducing the amount of plant residue available as a food source.



Ammonium based fertilisers that have an acidifying affect in reducing pH will also tend to have an adverse impact on earthworm populations.

Earthworms love ground cover, so organic farmers who have a basic philosophy of maintaining soil cover at all times, provide them a good environment.

This cover can be live or dead plant material. It will moderate soil temperatures and soil moisture and act as a food source for earthworms.

The best thing about these silent farm workers is that they keep on fertilising the soil 24 hours a day, seven days a week, for 52 weeks of the year.

And, I'm yet to see one complain, take a sickie or even ask for a pay rise!

This information is of a general nature - seek specific advice for your situation.

All OFS Farm Inputs improve soil health and encourage earthworms. We recommend doing our soil and plant tissue testing to ensure you add what your soil needs. If you have test results email them to us for organic or sustainable recommendations.



OFS MicroPlus has a high concentration of the beneficial microbe *Streptomyces lydicus* that has been shown to:

- Enhance plant vitality
- Encourage more vigorous root systems
- Make minerals and trace elements more available to plants
- Aid in reducing the use of chemical fungicides



TurfBelow white line untreated; Above white line treated with MicroPlus



SpinachFlag row and to right - treated with MicroPlus; left side untreated