There are More Microplastics in Our Farm Soil Than Our Ocean

Microplastics in our environment have been a concern for quite some time. These tiny 5mm pieces of plastics are everywhere, from the highest to the lowest points of the Earth. Most of the concern around microplastics is focused on ocean contamination.

Anywhere from 93,000 to 236,000 tons of microplastics end up in the ocean each year. Unfortunately, while we talk about the microplastics in the ocean, anywhere from 107,000 to 730,000 tons of microplastics are dumped onto agricultural soils in Europe and the U.S each year.

Related: ***Why Composting is the Most Important Thing You Can Do for the Environment***

Microplastics end up on farmland through processed sewage sludge, plastic mulches, slow-release fertilizers, and protective coating on seeds. In fact, many of the microplastics ending up in the ocean are land-based, coming from agricultural areas.

Research conducted by Mary Beth Kirkham has shown that microplastics affect the way the plants grow significantly. Plants grown with microplastics have higher levels of cadmium contamination. Cadmium is a carcinogen found in the environment due to human activity. It comes from batteries, car tires, and is naturally occurring in the phosphate rock used to make agricultural fertilizers.

> *Sixteen days into Kirkham's microplastics and cadmium experiment, her plastic-treated wheat plants began to yellow and wilt. Water had been pooling on the top of the soil in*

the plastic treated plants, but to keep her experiment consistent, she had to give all the plants the same amount of water.

There is an Alarming Amount of Microplastics in Farm Soil—and Our Food Supply

Related: *How to Detox From Plastics and Other Endocrine Disruptors*