Farming for the microbes that care for us

Estimates vary, but if you could weigh all the organisms in the top six inches of soil on an acre of land, you’d find they would weigh between 2,500 pounds to more than 5,000 pounds, depending on how healthy the soil is. That is a LOT of life.

What these low-lying creatures lack in size, they make up for in numbers. Consider bacteria, the soil microbes with the highest numbers, for example. You can fit 40 million of them on the end of one pin. In fact, there are more soil microorganisms (microbes for short) in a teaspoonful of soil than there are people on the earth.

For those producers who understand the benefits of healthy, living soil, farming centers around feeding the organisms that build healthy soils.

These farmers understand that tillage, the turning of the soil that has been the standard for growing crops for years and years, is disruptive to soil microbes and destructive to the soil system.

Instead, they disturb the soil as little as possible. And, they grow a diversity of living plants in the soil as much of the time as practical, covering the soil and offering food to soil microbes through living roots. Those soil organisms, in turn, cycle nutrients back to the plant, allowing it to grow and flourish.

It’s a natural, symbiotic system that leads to healthy soils and more sustainable and profitable agriculture.

To learn more about soil health, and to meet some of the farmers who are “Unlocking the Secrets in the Soil,” visit www.nrcs.usda.gov.

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