Fence rows provide insights into restoring healthy soils, expert says

“Any farmer can tell you his or her fence rows have the best soil on the farm,” says Jim Hoorman, an assistant professor and Extension educator for Ohio State University.

“The organic matter there, where the soil was built naturally, may be 5 to 6 percent or higher depending on soil type,” Hoorman says. But organic matter levels have been cut in half on tilled soils.

“And the critical part of what’s missing is the active organic matter that comes from live roots. So what we’re trying to do is create farm fields with soil like the fence rows,” he says.

That means eliminating tillage and creating continuous living cover on the land. Hoorman has worked with farmers who have regained organic matter to levels as high as 5 percent with the system.

“Three of our primary goals for healthier soils and sustained yields are to get rid of compaction (improve soil structure), add organic matter, and jump-start microbial activity in the soil,” Hoorman says. “With that in mind, the best place to start no-till is in a long-term alfalfa field or in a CRP grass field where you already have healthy microbial populations.

“On the other hand, if you start in fields where you’ve been tilling for years, you have layers of compaction with the wrong microbes. The transition can be made, but it takes longer and it takes more nitrogen.”

For more information on how to “Unlock the Secrets in Your Soil,” call or visit your local USDA Natural Resources Conservation Service office or visit www.nrcs.usda.gov.

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