

Benefits of Cover Crops Including: Improving Soil's Water Cycling Capacity

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1. Captures Carbon and Builds Soil Fertility

Multispecies cover crops provide root exudates to feed the microbiome that improves nutrient cycling, increases organic matter above and below the soil line, improves soil structure, and increases biodiversity.

2. Can Improve Crop Yield

With increased soil fertility, yields are often improved, and fertilizer costs can be dramatically reduced due to a healthy soil's innate to provide readily available nutrients.

3. Captures and Stores Rainfall More Effectively

Biologically improved soil structure and the cover crop canopy protects the soil from negative rain drop impact, increasing the soils capacity to infiltrate rainfall at a much faster rate eliminating or greatly reducing runoff. Also, the increased soil organic matter stores more water for future crop needs.

4. Conserves Soil Moisture

Through crop shading and cooling of soil temperatures in addition to increased soil water holding capacity, multispecies cover cropping can in many contexts save soil moisture. Additionally, the plants themselves collect dew, that bare ground cannot access.

5. Reduces Soil Loss

Through biological soil aggregation and plant and root presence, soil erosion is significantly reduced. At times increases in soil creation, especially at depth can be shown depending on cropping contexts.

6. Saves Farmers Money Reducing Herbicide and Pesticide Needs

With added benefits of increased soil life supported by the multispecies root exudates, nutrients are demineralized and transported, or created for the plant increasing its defenses to insect predation. The density of plant shading and some cover crop species ability to repress weed growth there can also be a reduced need for herbicides.

Cover crops can restore ecosystems, soil health, improve the water cycle and soil water storage potential, as well reduce dust, increase biodiversity, capture more CO₂ from the atmosphere, and create increased economic returns from the land.