



: AgriEnergy Resources
Soil Fertility &
Biological Solutions
For Plant & Soil Health



It all starts with RESIDUE

The best thing about farming is that we're never out of work. As soon as harvest operations are completed, the next growing season begins.

For example, how you manage the crop residue this Fall has a direct impact on the next crop. We've often discussed the practical benefits of using **Residue** in a residue management program such as recycling nutrients, making soil easier to work, and reducing the trash that plugs tillage.



Residue contains fungi that specialize in degrading cellulose and lignin, but it also contains bacteria that stimulate the beneficial decay organisms native to most farm soils.

We've also talked about **Residue** helping to clean up pesticide carryovers and its role in bio-sanitation. But maybe, we've not said enough about its value in **improving soil aggregation and tilth**.



LESS of this

**RESIDUCE improves
Soil Aggregation and Tilth**



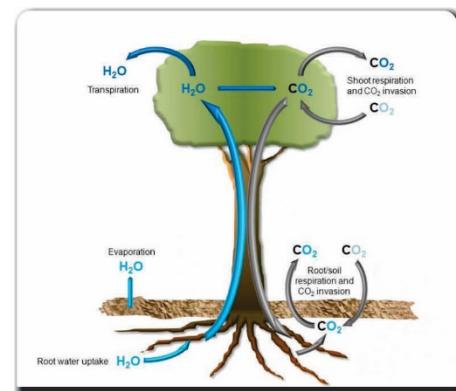
MORE of this



By increasing soil aggregation and tilth, Residue directly benefits your crop:

- Water infiltration rates work to the growers benefit by increasing a heavy soil's ability to retain moisture... and a sandy soil's ability to reduce water loss
- Improved soil conditions benefit the crop by extending the saturation time with heavy precipitation, and increasing water retention in dry conditions
- Increases the rate that nutrients are cycled into the soil...and reduces the rate of nutrient loss from leaching
- Easier root penetration, and more extensive root exploration and nutrient acquisition
- Improved exchange of gasses between the soil atmosphere* and the outside air. Buildup of CO₂, methane, ethylene, and other gasses in the soil atmosphere suppresses crop growth, and at the same time may stimulate weed growth.

**The term soil atmosphere is used to highlight the reality that air down in the soil has different percentages of N₂, O₂, CO₂, etc., than the outside air. The soil atmosphere is always higher in CO₂*



Using Residue to transition the hydrophobic carbon in your residues into hydrophilic forms is a first step toward improving the nutrition and growing environment of your crop... especially for water, the most important of all nutrients.



815.872.1190

Call us today for assistance with integrating RESIDUCE into your Fall applications.