IGNITE S²
SOIL AND STARTER SUPPLEMENT™

BETTER RESIDUE MANAGEMENT

WHY FUSS OVER RESIDUE?

Crop residue contains tremendous fertilizer value for the following crop when it is managed properly. However, if crop residue is ignored and not treated properly, it can actually do harm to the following crop and reduce yields by contributing to disease pressure and nutrients becoming tied up, limiting the growth of young seedlings and their yield potential.

You will be ahead of the game next year by applying IgniteS² to crop stubble this fall. **IgniteS² will stimulate an explosion of microbial life in the soil, which in turn, significantly speeds up the decomposition of the crop residue.**

This increases the amount of available nutrients for next year's crop and also adds valuable organic matter to the soil. In addition, the tilth of the soil will be improved, which can contribute to better water percolation and drainage. This will also help the soil warm up faster next spring! An additional benefit is that IgniteS² has shown the ability to clean up chemical residues and diminish the adverse effects that herbicide carryover can have on the following crop.

IgniteS² is a product of Agri-Gro Marketing, Inc. To learn more visit our web site www.agrigro.com

Managing Residue for Profit

Tips and management ideas effective in converting any type of residue to humus:

Shatter or at least crimp the stalk with the combine. You can save a separate shredder pass by using aggressive combine rolls (such as Pixall Knife Rolls) or spinning shredder blades under your combine head (such as a Harvestec corn head). In Europe, where soggy fall weather makes late tillage difficult, the majority of farmers' corn heads are equipped with such shredder blades. Shattering stalks and spreading them evenly with your combine helps jumpstart the biological process during mild early fall temperatures. Plant decomposition continues until the soil is frozen.

As soon as possible after harvest, apply 1-2 pints of IgniteS² per acre to speed stalk digestion. Any required Agri-Cal™ liquid calcium can also be applied at this time. Microbes can quickly colonize the more easily digestible inner stalk material. As the fungi, bacteria and actinomycetes multiply, they gradually attack the tough inner cellulose and lignin of the stalk rind. Soil organisms first consume sugars and amino acids in the stalk. Fueled with that energy, they devour starches, proteins, and cellulose. The tough, complex lignin is the last component they attack.

Mix residue into the aerobic zone of your soil. If you have a no-till environment, make sure residue is shredded and spread evenly on the soil with 1-2 pints of **IgniteS²** sprayed over the top. Under no-till circumstances, fungi typically do more of the digestive work. They look for food above the surface and can thrive on nutrients with a fairly low ratio of nitrogen to carbon. One visible clue to active biological breakdown is the webs of actinomycetes colonizing the residue. These organisms wrap around stalks and nothing washes them off. That rich, earthy odor is another clue that actinomycetes are active.

How Much Did You Pay for Your Residue?

Tim Tesreau
Agri-Gro Marketing Inc

According to A&L Agricultural Laboratories' agronomy handbook, a 200-bushel corn crop leaves stover that when properly utilized contains: 116 lbs of nitrogen, 27 lbs of phosphate, 209 lbs of potash, 47 lbs of magnesium, 38 lbs of calcium, and 18 lbs of sulfer per acre. **Are you going to wait and fight this residue next spring as a liability or put it to work now as an asset that will pay dividends for years to come?** The equivalent of 80% of nitrogen applied on corn typically remains immobilized in the residue. Without proper biological conversion of this residue it will literally burn off into the atmosphere. Can you afford to lose a 116-27-209 analysis of free fertilizer per acre?

Corn growers are finding that the corn borer resistant stalks of Bt corn are also slower to decompose into humus unless you assist their breakdown with a biological "digester" such as IgniteS². Last spring, some farmers couldn't get field cultivators through last year's Bt stalk residue. This resulted in increased tillage costs, nutrients being tied up to break down last year's residue and affected the new crop's ability to absorb much needed nutrients for early growth.