

David G. Hallauer  
District Extension Agent  
Crops & Soils/Horticulture

### Soybean Residue – Worth More Than You Might Think

If you were to look at a corn and soybean field side by side, there wouldn't be any doubt which one had more residue. Every 40 bushels of corn results in approximately one ton of residue produced. By comparison, every 30 bushels of soybeans produced results in one ton of residue. When you factor in potential yields of those two crops, simple math tells us what we see visually: corn produces more residue than soybeans.

That doesn't mean that soybean residue is unimportant. A look at residue removal (if completely removed by baling, etc...) from University of Nebraska Extension publication G1846 – *Harvesting Crop Residues* – shows that soybeans remove the same amount of nitrogen (17 lb/ton) as corn does. That residue also houses three pounds per ton of phosphorous and 13 pounds per ton of potassium. That means that the residue left behind from a 50-bushel bean crop is holding almost 30 pounds of N, five pounds of P and just over 20 pounds of K.

The nutrient value isn't the only benefit. UNL research suggests that at least two tons per acre of residue should be left on the field if you are trying to maintain soil organic matter. If you are trying to prevent soil erosion, levels *above* two tons per acre are suggested. Prevention of evaporative soil losses from residue presence are a bonus as well.

Soybean residue *is* important. We may not see much out there at first glance, but it's value is likely more than we think.

### Controlling Volunteer Trees

Volunteer trees can be a landscape mess. If they try to grow in the lawn, we can mow them off multiple times and they tend to go away. If in a landscape or windbreak, however, it's a different story. If transplanting them isn't a desirable option, the dormant season is often a good time for removal, but does require some understanding of how that tree is growing.

For starters, remember that most trees re-sprout after cutting. Redcedar is an exception, but most deciduous trees re-sprout unless cut repeatedly. Siberian elm, hackberry, ash, oak, and maple, for example, all re-sprout and will need to be dug out or the cut stump treated with herbicide after cutting.

Before using any herbicides, however, remember as well that true volunteer trees are those that come from seed, and not those that originate from the roots of an existing tree (suckers). The practices that work on volunteer trees are not always recommended for suckers, so knowing if you have a volunteer tree versus a sucker versus even a root grafted tree (that shares material between root systems) is important. Herbicides applied as a stump treatment to root grafted trees or suckers can result in death of the main tree. Only volunteer trees should be considered for any herbicide treatments.

If nuisance trees are one of your winter projects, start determining now what type of tree you are dealing with. A good control program is one that removes the volunteer tree, but doesn't harm the other desirable trees in the landscape.