



**The following suggestions are the ways in which we know that we can help you create the maximum revenue per acre with the lowest input costs.**

If you no-till, we suggest that you start the first year of spreading Ecochar in the fall at the rate of 1 ton / acre (or equal to the agronomic rate for nutrients, whichever is less) before you plant your cover crop. Ecochar has nutrients encapsulated from the organic feedstock that is processed through our Gasification System to produce Ecochar.

The facility processing these products uses 100% renewable power and dries predominantly using recovered heat from the carbonization system (low / no fossil fuel use, renewable heat treatment / drying). This facility is part of a carbon negative biochar production facility.

Ecochar has encapsulated nutrients from the type of feedstock processes and will adsorb the nutrients in the soil. These nutrients are released by the microbes in the soil when the plant calls for them. The char base stays in the soil forever providing moisture retention, surface area for beneficial microbes, and cation exchange capacity.

(Wood char (carbon) does not have self-contained nutrients in the char and will adsorb nutrients in the soil but holds them and does not release those nutrients when the plant calls for them until a certain saturation of nutrients are built up. Wood has a char value but does not have the self-contained high nutrient value nor the immediate nutrient release than that of Ecochar).

A whole house cleanout of chicken litter has a C/N ratio of approximately 35:1 to 40:1. It has 2 ½% to 3% nitrogen that is basically not available. It has been found that nitrogen is not sufficient because none of the nitrogen is available as it is being bound up by carbon.

**(See other side)**

When you plant your legume cover crop in the fall and it matures, (either fall or spring – dependent on the type of farming such as food or grain crops), to the point when the plant is in the “milk” or “dough” stage of seed maturity or when  $\frac{3}{4}$  of the plants are flowering if not a cereal crop, we suggest that you terminate the legume with a crimper. Crimping is time selective and must be done before the seed matures.

The roller crimped cover crop would act as your pre-emergent because it would block out the weed seed while your crop is coming through. You will greatly reduce or eliminate the use of herbicides realizing savings in your input costs for herbicides, fuel and time. Pesticide use should also decrease over a 3 year period because of the increasing organic matter, increasing the microbial population.

Ecochar is for soil microbes and soil carbon as it increases the soil carbon so it will hold moisture and hold nutrients. Spreading Ecochar in the fall gets the microbes going so they are highly populated coming into the spring and can do a better job of producing nutrients to the plants.

To spread additional nutrients on your soil, we will be offering a dry Soil Amendment Blend that we suggest you spread in the spring before planting. It does have NPK and micronutrient value.

In applying the Ecochar to the soil in the fall and spreading the Soil Amendment in the spring, it helps you to reduce or eliminate extra cost of commercial fertilizer and additional nitrogen. Over a period of time it should greatly reduce or eliminate the need for pesticides and herbicides.

If you are interested in our ideas for this type of management strategy, please contact us as we look forward to visiting with you.

Thank you, Bob

570-765-2020