PRECISION ORGANICS™

Dr. Lloyd's Notes

Room & Board for Soil Microbes

The Differences Between C20™ & Bio-Char

C20™ is a carbon food source for indigenous soil microbes. It is manufactured from locally produced grain byproducts with a 50/50 ratio of readily available to slow release carbon. It increases microbial populations to create a thriving, living and productive soil that promotes root health. *(Precision Organics)*.

Biochar is charcoal used as a soil amendment. Biochar is stable, solid, rich in carbon, and can endure in soil for thousands of years. Like most charcoal, biochar is made from biomass via pyrolysis, the formal decomposition of material at elevated temperatures in an inert atmosphere. *(Wikipedia)*.

C20™

- **C:N Ratio = 20:1**
- **Feeds microbes**
- **Active natural carbon source**
- **Readily decomposes**
- **Microbes create soil colloids**
- **Colloids increase pore space**
- **Microbes loosen & decompress treated soils**
- **Nutrient mineralization (7-Days to 1.5 years)**
- **Increases soil cation exchange capacity**
- **Season-long nutrient availability**
- **Enhances microbial utilization of biochar**
- **Apply any time during the growing season**

Bio-Char

- **C:N Ratio = Variable**
- **Recalcitrant natural carbon source**
- **Does not decompose readily**
- **Creates pore space by not decomposing**
- **Microbes utilize the pore space**
- **Mineralization (up to 100's years)**
- **Increases soil cation exchange capacity**
- **Possible long-term sequestration of carbon**