



**QUICK COMPOSTING:**

1. Decomposition of organic matter into compost requires blending of a variety of materials to provide a balanced food supply for digester microorganisms. Nitrogen is the essential element for protein synthesis for microbial growth and reproduction. Carbohydrates are required for an energy and carbon source. As a general rule, use 2/3 high carbohydrate matter (dry leaves, stems, straw, paper, etc.) to 1/3 green succulent/high nitrogen content (weeds, grass clippings, etc).

Don't forget moisture content --- too dry = slow, too wet = anaerobic

2. Mix materials to be composted thoroughly and uniformly. Break and chop the materials as much as possible. All places in the stems, skins, or leaves that have exposed or open areas are places that provide entry points for the digester microbes. The finer the material, the faster the digestion process.

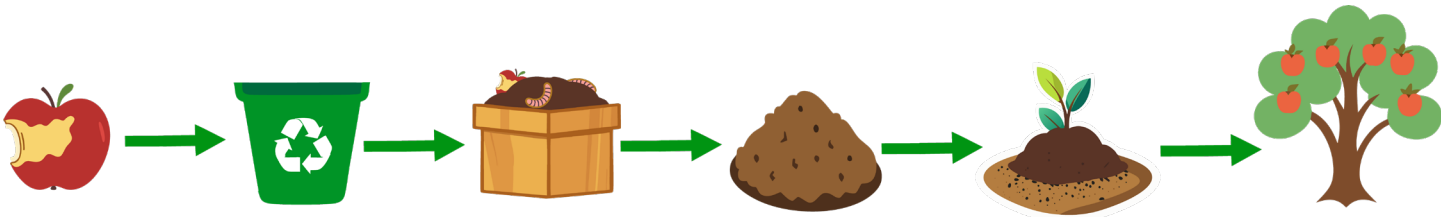
3. Add BioDigester™ at a rate of 10 grams per cubic yard of compost. BioDigester™ should be mixed with water and sprayed. For best results, use in combination with NutraNeed™ at a rate of 12.5 oz. and fish or soy protein nitrogen at 1/2 lb. per acre.

4. The fourth element essential to rapid composting is frequent aeration. The turning of the pile should be once every 7 days for 8 consecutive weeks (reapply BioDigester™ before turning in weeks 2 and 6). More or less frequent turnings may be necessary based on the rate of digestion and temperature. The compost temperature should begin to drop down from between 140°-160°F to approximately 110°F after the final turning. At this point the compost is finished and ready to use.

**DIGESTING ANNUAL CROP RESIDUE IN THE FIELD:**

For annual crops such as wheat stubble, corn stalks, rice straw and sugar cane apply BioDigester™ in the fall at a rate of 50 grams per acre to chopped field residue. Mix with water and spray. For best results, use in combination with NutraNeed™ at a rate of 12.5 oz. and 1 gallon fish or 1 lb. soy protein nitrogen per acre.

BioDigester™ will only digest dead cellulose material and will not harm live plants.



#### BEST PRACTICES AND BASIC USAGE RECOMMENDATIONS:

- To avoid plugging: If agitation systems are not mechanical, premix products before adding to tank. 50-mesh screen is recommended.
- Apply foliar sprays in early morning or evening when temperature is below 80°F.
- Do not combine microbial products with antibiotics or materials that contain chlorides, bromine, fluorine, or elemental copper. Use in separate applications at least 2 days apart.
- These products are meant to be used together as a package application and are designed to work in conjunction with each other.
- Some growers have reported cutting back on their nitrogen inputs by 40% while using these products after achieving mineral balance.
- During times and stages of high plant stress (pest pressure, disease, etc.) the recommended rates can be doubled, but do NOT exceed a 2X increase as it may result in leaf burn.
- Non-chlorinated or R/O water is best with a pH between 6.0-6.4 if possible. Water over 105°F. can cause shock and harm to beneficial microbes and enzymes.
- Continuous agitation is recommended to keep materials suspended, vortex well and often when mixing and during use.
- Microbial products should be used within 24 hours after adding water.
- Always perform a jar test to ensure that there is no precipitant formation before the first application of any product or combination of products.
- Thoroughly clean and neutralize all tanks, lines, containers and sprayers prior to mixing products, especially after use of any toxic chemicals.

This protocol is intended as support for your fertility program and not as a replacement. It is designed for simplicity and compatibility with almost any fertilizer program. Our specific recommendations to you may vary depending on your unique situation.