CROP RESIDUE DECOMPOSITION PROGRAM

Restore Your Soil
Recover Your Nutrients

MetaGrow$_{TM}$ Decomposer is the most diverse crop decomposer microbial inoculant available and it is the best tool to convert your crop residues into free nutrients for your next crop. Our Decomposition Program includes two proven microbial food products to ensure successful colonization of an extremely diverse microbial community for crop residue decomposition.

Decompose Crop Residue

◊   Faster and more consistent planting without clogging crop debris

Recover Nutrients for the next crop (free fertilizer)

◊   Release N, P, K, S, Ca, etc. into non-leachable plant available forms

◊   Fix Nitrogen for the next crop

Improve Soil Structure

◊   Better seed/soil contact and higher germination rate

◊   Improved soil tilth for better aeration, water infiltration and seedling emergence

Establish Beneficial Soil Biology (including fungi)

◊   Develop a large beneficial microbe population

◊   Provide protection for the next crop

CROP RESIDUE DECOMPOSITION PROGRAM

Post-harvest programs have been proven to be profitable and long-term sustainable practices. Decomposed crop residues recover nutrients for the next crop while improving soil structure and organic matter content. The crop residue feeds an active microbe community that enables higher yields with lower crop inputs next season.

The MetaGrow program is based on the principle that maximum microbial diversity provides the foundation for healthy and resilient crops. Broad spectrum microbe inoculants and foods re-establish healthy soil microbial diversity and large active populations.

Healthy soil microbe communities provide a myriad of beneficial functions, including balanced and timely plant nutrition, improved photosynthetic efficiency, increased plant immune function and improved physiological efficiencies. When plants achieve proper biolog-ically supported nutrition, most production problems naturally go away.

> ## Plant Nutrition:
> ## Plant Directed and Microbe Delivered

DECOMPOSITION PROGRAM COMPONENTS

MetaGrow~TM~ Decomposer

Shelf-stable, liquid inoculant with 1000's of microbe species that decompose cellulose and lignins into plant nutrients and soil humus. Humus captures and sequesters carbon in the soil which increases soil nutrient and water holding capacity, improves seed/soil contact and reduces pest and pathogen over-wintering habitat. It creates a healthier living soil and makes nutrients available for the next crop. In addition to decomposition, it includes a dozen N-fixing microbe species.

MetaGrow~TM~ MFOOD 2.3 – 0.9 – 3.5 with 3.5%

Calcium, 1.2% Sulfur and 6% Humic Acid. **MFOOD** is 3 products in one. First it wakes up the MetaGrow microbes and provides them habitat to colonize the soil efficiently. Second it boosts native soil microbial population size and diversity by feeding them a diverse complex food which re-leases metabolites to benefit plant functions. Third it is a complete organic plant fertilizer.

Pacific Gro Oceanic or other fish hydrolysate

Fish hydrolysate fertilizer with nitrogen in L-amino acid form The amino acids are immediately available to microbes, cor-recting the high C:N ratio of residues and increasing the rate of carbon digestion. Beneficial fungi, which are important contributors to decomposition, particularly benefit from the fish oils in the hydrolysate.

APPLICATION GUIDANCE

Mix components and add sufficient water to cover residue.

Use high end of rates of MetaGrow and Pacific Gro for high volume crop residue or woody stalk debris.

Use high rate of sugar and molasses in colder temperatures.

Apply soon after harvest, sprayed directly onto residue with as much coverage as practical, preferably during other field operations such as chopping, crimping or disking.

MetaGrow Decomposer	2—3 gal/acre
MetaGrow MFOOD	0.2—0.6 lbs/acre
Fish Hydrolysate	1—3 gal/acre
Sugar (optional)	0.25—1 lbs/acre
Molasses (optional)	0.25—1 gal/acre
Water	sufficient for coverage

To increase fungal diversity, also use **MetaGrow F** at 1—2 gal/acre, replacing some of the **MetaGrow Decomposer**