Mega Green and Multi-Bloom
Are all Fish Products the Same?
(Hydrolyzed Fish vs. Fish Emulsions)

There is a very real difference between the qualities of hydrolyzed fish fertilizer and fish emulsion. In the brief synopsis that follows you will discover why the contents of hydrolyzed fish fertilizer are far superior to fish emulsion products found in today's agricultural market.

Mega Green and Multi-Bloom are two hydrolyzed fish fertilizers made entirely from freshwater catfish. Millions of pounds of catfish are filleted each year for human consumption. Once catfish are filleted, what remains is ground to one-millimeter-sized particles and quickly enters our stainless steel blender. This is where the making of an excellent fertilizer begins.

Once in the blender, the hydrolyzation process is turned over to enzymes that work their magic at about 130 degrees F. These naturally occurring enzymes work to reduce large organic molecules of protein into smaller ones (amino acids) making them much easier for plants to absorb. The enzymatic process also releases other beneficial ingredients (i.e. vitamins, growth hormones, and nutrients) which are very important for plant growth and development.

On the other hand, fish emulsions are heated to high temperatures in part to break down fish carcasses. The extreme heat destroys the natural condition of desirable organic molecules and defeats the purpose of using fish as fertilizer.

The undesirable emulsion process involves first removing the protein for fish meal that's headed to the pet food market. Next, the oil is removed to be used as cod liver oil or related products. What remains is boiled down to a 50% solution that is sold for fertilizer. Steam used to remove the protein is typically from a municipal water source, and as a result, the chlorine content in the final product may be as high as 14%.

Fish naturally contain about 2.3% nitrogen. However, it is common for emulsions to contain synthetic sources of nitrogen, such as urea, to boost the nitrogen percentage.

Emulsions are thick as molasses and may be difficult to handle. The odor is rank, like dead fish and the product is known for clogging sprayers and fouling holding tanks. Emulsions come from fish that may contain dangerous levels of mercury and PCB's. Mega Green and Multi-Bloom is made from catfish, a food recommended for expectant mothers by the USDA and FDA. This is due to the fact that catfish is virtually mercury free and there are no heavy metals.

Mega Green and Multi-Bloom fertilizer, as mentioned, is processed from start to finish at temperatures just warm enough to enhance enzymatic activity. When the enzymes complete their work, phosphoric acid is added to stabilize the mix and reduce enzymatic activity. The result is a liquid soup that's rich in protein, nutrients and beneficial organic molecules.

Once the fertilizer is complete, the mix enters a centrifuge to remove any remaining solids. This insures that both Mega Green and Multi-Bloom will pass through a 200-mesh screen. At bottling, an organic mint is added to further enhance the pleasant aroma. The result is a truly organic fertilizer that may be used for drip irrigation systems, as a soil drench or foliar application on a multitude of crops.

Take a look at the comparison below for a brief overview of the main differences between Mega Green/Multi-Bloom and fish emulsions. Please let us know if you have further questions or would like to order Mega Green or Multi-Bloom.

Seven Reasons to Choose Mega Green or Multi-Bloom over Fish Emulsions

Mega Green and Multi-Bloom	Emulsions
1. 100% fish protein	boiled, rendered, separated fish product
2. Mint-scented	rank, undesirable odor
3. Cold-processed	cooked
4. No fish meal removed	fish meal removed for pet food
5. No chlorine	chlorine levels may be high
6. No heavy metals	heavy metals present
7. Easily used in drip systems	not feasible for drip systems

Hydrolysate Company of America
P.O. Box 271, Isola, MS 38754
www.multibloom.com