

Important Facts

Not just any fertilizer

Organic Gem® is a cold processed, enzymatic fresh fish fertilizer that works as an all-natural bio-stimulant. This product is different from anything on the market today due to both the raw material source and our patented processing method.

Important Facts About Organic Gem®

The Source

The single species we use is unique in that it has a skeleton made entirely of cartilage, which has 30% mucopolysaccharides (similar to sugar). Some of the cartilage gets digested into the fertilizer giving us a mucopolysaccharide content of 7-8%. This has been shown to act as a deterrent to powdery mildew in the same way as chitin.

Organic Gem is the by-product of nutraceutical processing of what was once considered a waste fish, much of which went into landfills. We extract the cartilage as a dietary supplement and a base for chondroitin sulfate using cold process enzymatic digestion so as not to de-nature the sensitive protein. What is left from this process is the most bio-active fish fertilizer possible.

Digestion

Nature intended all organic matter to enzymatically digest at the end of its life. When our product is applied to the soil the enzymes go to work on the soil and break down nutrients that are locked up in it. The enzymes give Organic Gem its unique composting effect and bio-activity.

Cold processing and enzymatic digestion are the keys to our bio-stimulating effect. We digest using the resident enzymes in the fish. Cold processing keeps these enzymes alive after digestion. We then stabilize the material with 3% food grade phosphoric acid. They become active again when Organic Gem is brought back to neutral pH with the addition of water.

Quality

Organic Gem is the only fish based fertilizer on the market that is a by-product of dietary supplement processing. This gives us the highest quality possible. In common fish fertilizers (such as fish emulsions), oils and solubles are digested using high heat, acid, or fermentation (rotting). These methods denature the proteins in the fish and make them unavailable to the plant. Under a microscope, their proteins are knotted together like a Brillo pad while those of Organic Gem are in their natural long strand state and are available to the plant.

In addition, other fish fertilizer producers are in the oil and fish meal business. After digestion they pull out the proteins for fish meal and the oils for industrial use. The "stick water" remaining is then concentrated into a fertilizer. Their method leaves the end product with a higher salt content.

Organic Gem is low odor. Due to the requirements of dietary supplement processing, only fresh fish is allowed to be used in our digestions. Our starting material is free from decomposition and processed daily using sanitary methods.

Organic Gem and the Soil

One of the best attributes of Organic Gem is that it does not leach. It remains available in the soil, due to the presence of the oils and collagens which are not removed during processing. This gives Organic Gem a time release effect, aiding its composting ability and thereby protecting local water supplies from fertilizer contamination.

One of the most dramatic indicators we have seen of the bioactivity in soil treated with Organic Gem is in the fields of hop growers for one of America's largest brewers. Using infrared aerial photography, they were able to show a 1.5 degree rise in the soil temperature in areas that were applied with Organic Gem.