



# Bionetix Newsletter

May, 2012

## Bionetix International: ISO 9001:2008 Compliant

Bionetix International, a Subsidiary of Cortec® Corporation, recently announced that their Quality Management System is compliant with the International Standard ISO 9001:2008 and has once again passed a surveillance audit with no non-conformities. This is the fifth year with SGS Systems & Services Certification Canada Incorporated as a Bionetix's partner in this process. With 60,000 customers worldwide, SGS is the world's preferred certifying body and stresses that in today's global business environment, effective management systems greatly contribute to building a distinctive competitive advantage.

Bionetix International has demonstrated their commitment to quality and to the continuous improvement of their management system by successfully maintaining certification. The importance of this system and its success not only lies in the quality of our products, but also positions us to achieve our strategic goals for the future.



## Product Spotlight

### STIMULUS: Bio-Stimulant and Odor Control

The major component of STIMULUS inhibits the activity of the enzyme urease, which facilitates the conversion of nitrogen and urea to ammonia. In wastewater bio-solids, the lack of odor being generated by the sludge material is generally attributed to activity against the anaerobic bacteria. The mode of action is believed to be a weakening of the cell wall by the surfactants, and a disruption of their environment severe enough to cause a reduction or elimination of the populations. The components are powerful surfactants composed of an aglycone and linked to one or more sugar chains, which form glycosides. The glycosides provide the sugar to the composting process and become a feed source for the aerobic bacteria.



**Bio-solids:** The nutrient-rich organic materials resulting from the treatment of sewage sludge

**Aglycone:** non-sugar compound remaining after replacement of the glycosyl group from a glycoside by a hydrogen atom

**Glycosides:** compound formed from a simple sugar and another compound by replacement of a hydroxyl group in the sugar molecule

## Aqua-Feed: Feed Supplement for Aquaculture

Aquaculture, particularly shrimp culture, has faced serious losses over the last decade due to the occurrence of diseases including white spot, yellow head and vibriosis. Mass mortality has occurred among cultured fresh water shrimp because of pathogenic yeast, bacteria and viral infections. Results of the study of shrimp mortality have revealed that environmental deterioration, which can lead to the degradation of immunity of shrimp, is the main cause. Studies of the enhancement of the immune mechanism of aquatic animals have been very successful in preventing the mass mortality of shrimp caused by pathogenic infections.

Bio-converter technology assists in keeping aquaculture ponds clean and improves aquatic life. Ponds used for fish or prawn farming care are consistently contaminated with bio-mass, left over food, dead animal matter, shells, fecal matter, etc. These contaminants reduce the level of oxygen and produce methane, ammonia, nitrate and H<sub>2</sub>S gases that are harmful to aquaculture and promote various diseases. With the use of AQUA-FEED, the degrading bacteria convert these gases into water, carbon dioxide and free nitrogen, some of which are consumed by zooplankton and the rest released into the atmosphere.

Beneficial bacteria have been demonstrated to be effective in the prevention of pathogenic infection in shrimp, and may also enhance their growth rate. With the use of effective bacteria, the soil and water quality of cultured ponds are significantly improved.



## BCP54Tablets: Fish Farm Bioaugmentation

### Bioaugmentation with BCP54T can:

- Increase fish and shrimp farm yield;
- Lower pH;
- Reduce sludge;
- Improve effluent quality;
- Reduce odors;
- Breakdown ammonia and other toxins.

Maintaining the clarity of fish farms is often difficult, especially in warm weather, due to excess suspended solids. This can be a commercial as well as an aesthetic problem when aerated ponds are used for fish farming.

Bioaugmentation will reduce cloudiness and promote settling of suspended solids in the water system. BCP54 will work at low oxygen levels since it contains both aerobic and facultative anaerobic bacteria to digest and displace the filamentous micro-organisms that are naturally present.



**Bio-converter:** conversion of organic waste materials into an energy source by a fermentation process involving living organisms

**Bio-mass: (should be one word: biomass):** biological material from living, or recently living organisms

**Bioaugmentation:** the introduction of microorganisms to treat polluted sites

**Filamentous Bacteria:** Organisms that grow in a thread or filamentous form

## CorrBlock™: Anticorrosive Blocks for Water Treatment Systems

CorrBlock™ is suitable for open loop re-circulation cooling systems and waste water systems. The product can be placed in make-up water, cooling tower basins, returned water circuits or waste water system. Each CorrBlock™ weighs 400g/14.11oz and is made to treat 4000Ltr/1056.7gal of running water. The exact amount of CorrBlock™ needed for a system should be determined based on water volume, flow rate, water temperature and water chemistry.

In typical use CorrBlock™ should be replaced every 1-2 months. When a CorrBlock™ is dissolved, a new block can be easily added to provide continued protection. CorrBlock™ is suitable for use in metalworking machines that are water cooled. CorrBlock™ is generally compatible with coolant, however testing is recommended.



## Hygiea 8500C: Liquid Hydrocarbon Detergent With Proven VpCI®

Hygiea 8500C is a product co-formulated by Bionetix International and Cortec® Corporation combining Bionetix's Hygiea 8500 and Cortec's Vapor phase Corrosion Inhibitor (VpCI®). This product, specifically designed for parts washers, is a phosphate free combination of the excellent cleaning properties of Hygiea 8500, a very effective hydrocarbon cleaner and an effective multi-metal corrosion inhibitor from Cortec®. The bacteria and enzymes in this cleaner break down hydrocarbons in a very safe and effective manner while providing corrosion protection to parts. Residual bacteria will continue to work by degrading oils and greases in "inaccessible areas" after initial cleaning. The use of this multi-purpose cleaner/corrosion inhibitor reduces pollution liability and significantly lowers disposal cost. This low temperature cleaner (to be used at below 80°F) saves enormous amounts of heat energy and water (due to evaporation). The extensive laboratory work at Bionetix has shown that Cortec's corrosion inhibiting additives do not negatively affect the biological activity of Hygiea 8500.



## Urinal Baggy's: Solid Deodorant and Cleaner

Soluble cleaning blocks dissolve in water and contain a unique formula to clean away scaling problems, curing odors and preventing blockages.

### A combination of:

- protease enzymes, which target all proteins
- beneficial microorganisms
- proprietary blend of surfactants

Urinal Baggy's are unique in design, they promote less handling and are formulated with bacillus spores for cleaning, aeration, and odor control. Each 200g/7.06oz baggy lasts for approximately thirty days or 1,000 flushes. They are completely biodegradable and contain no acids or paradichlorobenzene. The Baggy's are four times as strong, last as long as regular traditional products, are non-toxic, noncorrosive, and safe for all drain-lines and septic systems.



**Protease:** enzyme that breaks down all protein by peptide bond cleavage



## The Bionetix Lab Team

Bionetix International is delighted to support its laboratory facility with Research and Development innovations and quality control. The Bionetix lab team performs outstanding work everyday fostering pioneering research such as continuously developing new products for diverse and specific applications and new case studies to show the effectiveness of all our products. We constantly focus on fulfilling our specific client needs all over the world. We are currently working on a dosage calculator that assists in determining the correct initial and maintenance dosages of Bionetix products. This will be available via our website at [www.bionetix-international.com](http://www.bionetix-international.com). Hopefully this is a step closer to making your business flow in a good direction.

Edward Bertges, Operations Manager, overlooks all processes to ensure that the best services are provided to our customers. Please contact Edward for any inquiries. On another note, we are very pleased to announce Monica Yang's return from maternity leave after having her baby boy Alex. She is back as Office Manager and is here to coordinate the system function allowing us to provide our clients with the best customer service possible. Dr. Ali Bayane, our QC and R&D Manager, has oversight on the experimental R&D side of the house and is always available to answer your questions about these processes. You can now contact Diana Di Marco, our Support Technician, to receive optimum technical support on our products or for any sample requests.

**Monica Yang** / Office Manager / ext. 582 / [myang@bionetix.ca](mailto:myang@bionetix.ca)

**Dr. Ali Bayane** / QC and R&D Manager / ext. 579 / [abayane@bionetix.ca](mailto:abayane@bionetix.ca)

**Diana Di Marco** / Technical Support / ext. 584 / [ddmarco@bionetix.ca/supportsbionetix](mailto:ddmarco@bionetix.ca/supportsbionetix)

**Ed Bertges** / Operations Manager / ext. 578 / [info@bionetix](mailto:info@bionetix)

Bionetix wants to assist its customers to be profitable and successful with our excellent service, timely delivery, and continuous high quality and innovative products. We are interested in an update on your sales as well as how successful you have been in your countries because we want to focus on increasing distribution in countries all over the world. Let us know of your troubles and we will be happy to assist you.

Our laboratory team, customer services, and technical support are always available to answer any questions and are glad to receive any suggestions for new applications. Let us help you to be successful; our success goal is to help you reach yours. Please take advantage of our free sample program to help in your sales processes.



21 040 rue Daoust  
Ste-Anne-de-Bellevue, Quebec, Canada, H9X 4C7  
Phone (514) 457-2914, Fax (514) 457-3589  
[www.bionetix-international.com](http://www.bionetix-international.com), E-mail: [support@bionetix.ca](mailto:support@bionetix.ca)

Created: 05/2012



4119 White Bear Parkway, St. Paul, MN 55110 USA  
Phone (651) 429-1100, Fax (651) 429-1122  
Toll Free (800) 4-CORTEC  
[www.cortecvci.com](http://www.cortecvci.com), E-mail: [info@cortecvci.com](mailto:info@cortecvci.com)

Printed on 100% post compostable  recycled paper