



# Bionetix® Newsletter

July 2023

## Meet Irving Chang – New Microbiologist and Biotechnologist Specialist!



We were pleased to welcome Irving Chang as our new Microbiologist and Biotechnologist Specialist this spring! Irving has a degree in biotechnology engineering from Saint Mary's Catholic University in Peru and specialized in Genetic Resource Preservation at Kyoto Institute of Technology in Japan. He subsequently spent nine years in professional biotechnology research and/or fermentation and is currently a member of the Microbiology Association of Quebec.

Irving is passionate about learning, science, and technology. He is fascinated with how the tiniest microorganism can do so much to improve the health of the environment and will be helping us develop new products and improve capabilities of current bacteria strains. One of his goals is to get lab scale fermentation up and running to do more extensive biological R&D onsite and ultimately develop new natural biotechnologies that make life easier and help people care for the environment.

Join us in welcoming Irving to the team!



*A Subsidiary of Cortec® Canada*



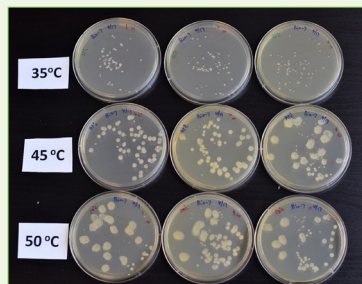
# **Bionetix**

INTERNATIONAL



## PRODUCT NEWS

### New Test Data on Product Viability at Higher Temps



Earlier this year, we decided to test some of our key bacteria strains to see how they performed at temperatures up to 50 °C (122 °F). A product containing these representative bacteria strains was incubated for 17 hours on triplicate plates of TSA (trypticase soy agar) at three temperatures—35 °C (95 °F), 45 °C (113 °F), and 50 °C (122 °F). The colonies continued to grow at all three temperatures. Growth in colony size was faster at higher temperatures, while the average number of colonies decreased.

The test confirmed that, while 25-35 °C (77-95 °F) remains the optimal growth temperature for most Bionetix® bacteria, the microorganisms remain functional at temperatures up to 50 °C (122 °F). Although many wastewater applications do not reach these temperatures, some oil and gas wastewater processing environments (e.g., thermophilic anaerobic digesters) do. While many other factors such as food, pH, and nutrients also affect bacterial growth, this test lends confidence to users considering Bionetix® bioaugmentation in similar environments! Contact us with your questions: <https://www.bionetix-international.com/contact-us/>

### BCP-EU-FB™ Now Available Beyond Europe!

This summer, we are excited to release BCP-EU-FB™, a microbial wastewater treatment previously available only to a limited European audience. The product's synergistic blend of microorganisms is a powerhouse of sludge-re-

ducing wastewater treatment efficiency with multiple side benefits. BCP-EU-FB™ is a blend of fungi, bacillus spore organisms, and enzymes that are effective in degrading many types of cellulosic and other wastes. By speeding up biodegradation, the blend lowers BOD and COD and reduces sludge production and buildup. At the same time, it helps oxidize and reduce malodorous compounds and foaming. It also appears to decrease the amount of energy used during wastewater processing, making the system more efficient overall. Learn more about this microbial blend powerhouse here: <https://www.bionetix-international.com/press-release-bionetix-international-releases-microbial-powerhouse-for-wastewater-treatment/>

**BCP-EU-FB™**  
MULTISPORE BACTERIA/FUNGI BLEND

**PRODUCT DESCRIPTION**  
BCP-EU-FB™ is a powerful microbial blend of fungi, bacteria, and enzymes that are effective in degrading many types of cellulosic and other wastes. By speeding up biodegradation, the blend lowers BOD and COD and reduces sludge production and buildup. At the same time, it helps oxidize and reduce malodorous compounds and foaming. It also appears to decrease the amount of energy used during wastewater processing, making the system more efficient overall.

**FEATURES AND BENEFITS**

- Helps oxidize and reduce malodorous compounds
- Speeds up biodegradation, lowers BOD and COD
- Reduces sludge production and buildup
- Helps reduce energy used during wastewater processing

**TYPICAL APPLICATIONS**

- Wastewater treatment
- Sludge reduction
- Odor control
- Energy savings

**SPECIFICATIONS**

Concentration	Sludge-free flowing powder
Appearance	White
Odor	None
pH (7% Solution)	6.5-8.5
Maximum Count	1 billion CFU/g, custom concentrations available

**SOIL-BAC™**  
BIOLOGICAL PLANT GROWTH ACTIVATOR

**PRODUCT DESCRIPTION**  
SOIL-BAC™ is a powerful microbial blend of bacteria, fungi, and enzymes that are effective in promoting plant growth. By speeding up biodegradation, the blend lowers BOD and COD and reduces sludge production and buildup. At the same time, it helps oxidize and reduce malodorous compounds and foaming. It also appears to decrease the amount of energy used during wastewater processing, making the system more efficient overall.

**FEATURES AND BENEFITS**

- Helps increase plant growth
- Speeds up biodegradation, lowers BOD and COD
- Reduces sludge production and buildup
- Helps reduce energy used during wastewater processing

**TYPICAL APPLICATIONS**

- Plant growth
- Sludge reduction
- Odor control
- Energy savings

**SPECIFICATIONS**

Concentration	Sludge-free flowing powder
Appearance	White
Odor	None
pH (7% Solution)	6.5-8.5
Maximum Count	1 billion CFU/g, custom concentrations available

### New SOIL-BAC™ Premium Offers Nitrogen Boost

In February, we announced the availability of a new version of SOIL-BAC™. SOIL-BAC™ Premium boosts atmospheric nitrogen fixation independent of symbiotic relationships with plants and is therefore a great option for early

spring soil treatment and throughout the growing season. SOIL-BAC™ Premium contains plant growth promoting rhizobacteria (PGPR) and mycorrhizae; as well as beneficial vitamins, trace minerals, and other nutrients essential to plant growth. It goes beyond regular SOIL-BAC™ by adding a bacteria strain that can enhance atmospheric-nitrogen-fixation while functioning as a free-living organism in the soil. Learn more about getting a nitrogen boost with SOIL-BAC™ Premium here: <https://www.bionetix-international.com/press-release-give-your-plants-a-nitrogen-boost-this-spring/>





## CASE HISTORIES

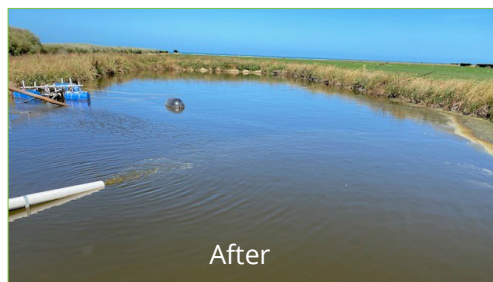
### Solving Cheese Factory Grease Trap Problems

A cheese factory in Canada had so much grease in its three in line gravity grease traps that the traps needed to be pumped out five times a year at a rate of \$3,000 each time. Since following the recommendation to install a centrifuge system would have cost more than \$10,000, the factory decided to try BIOBLOC22™ in Trap 1 and BCP22™ in Trap 2 and Trap 3. BOD dropped to 3 mg/L and, best of all, treatment only cost \$350/month—much less than the price of frequent pumping or centrifuge installation. Read more here: <https://www.bionetix-international.com/wp-content/uploads/RestrictedCaseHistories/ch049.pdf>



### Dairy Farm Effluent Pond Cleaning

One of the 10 oldest farms in New Zealand was having trouble with its effluent pond, which was used to discard manure, urine, milk, and other wastes. The pond smelled bad and had a crust on top. The water also caused blockages when used for irrigation. The farmer began applying BCP80™ and HYGIEA2400™ FF, and, after two weeks of treatment, the smell and the crust were gone. In three months, the water was almost clear blue and no longer caused irrigator blockage issues, saving the farmer time and leaving him very happy with the results. Read more here: <https://www.bionetix-international.com/wp-content/uploads/RestrictedCaseHistories/ch048.pdf>



### Overcoming Heavy Foaming in Cosmetics Industry

A toiletry manufacturer was having trouble with heavy foaming in their wastewater aeration tank, which contained a high concentration of soap, shampoo, and sanitizers. Surfactants were the suspected cause, so BCP10™ was applied in a daily shock dose for one week, followed by a weekly maintenance dose. A few months later, BOD had dropped from an average 200-400 mg/L to 81 mg/L, leaving the customer very satisfied with the results. Read more here: <https://www.bionetix-international.com/wp-content/uploads/RestrictedCaseHistories/ch047.pdf>



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## CASE HISTORIES

### Successful Use of AQUACLAR™ in Home Fish Tanks

Have you ever thought of using Bionetix® products in fish tanks? One distributor of Bionetix® wastewater treatments in Latin America (Aquasolutions, Costa Rica) decided to give AQUACLAR™ a try to see how it worked in home aquariums. He dosed the product into small 0.5 g capsules/tablets and added one tablet to every 38 L (10 gallons) of fresh water in his aquarium. The distributor reported very good results with a reduction in nitrogen. While the product is typically used in commercial applications, it shows great promise for home use, as well!



## UPCOMING EVENTS

### Bionetix® World Sales Meeting

September 20<sup>th</sup>-22<sup>nd</sup>

Hyatt Centric Ville Marie Montreal & Bionetix  
Headquarters

Sainte-Anne-de-Bellevue

Montreal, Canada

[Contact us for more info!](#)

### ISSA Show North America 2023

November 13<sup>th</sup>-16<sup>th</sup>, 2023

Mandalay Bay Convention Center

Las Vegas, NV

Booth #1012

[www.issashow.com](http://www.issashow.com)

  
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**ISSA SHOW**  
NORTH AMERICA 2023  
NOVEMBER 13 - 16 | LAS VEGAS, NV

  
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Keywords: Bionetix, wastewater, chemical wastewater, BOD overload, biofertilizer, grease traps, reducing nitrogen in fish tanks, nitrogen fixation, anaerobic digesters,

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