



Itaconix Receives Federal Grant To Produce Super Absorbent And Detergent Polymers From Hardwood Biomass Waste

Media Contact: [Erika Mantz](#)

603-862-1567

UNH Media Relations

Oct. 26, 2009

DURHAM, N.H. – Itaconix LLC today announced that it received a \$1.8 million research grant from the U.S. Department of Energy and U.S. Department of Agriculture through the Joint Biomass Research and Development Initiative. The award, announced at the University of New Hampshire, will fund efforts by Itaconix, in partnership with Microbia, Inc. and the University of Maine, to produce Itaconix's green polymers from itaconic acid fermented with sugars extracted from hardwood biomass.

Based in New Hampshire, Itaconix develops, produces and markets a new generation of super absorbents and dispersants made from renewable resources. These products are based on green chemistry developed initially at UNH, and will replace petroleum-based chemicals used in diapers and detergents. The company produces its polymers from itaconic acid that is currently fermented with corn glucose as the feedstock.

The goal of the Joint Biomass Research and Development Initiative is to develop the necessary technologies and capabilities to produce green fuels and chemicals from biomass instead of diverting corn away from food use. The University of Maine has technologies to extract sugars from wood for fermentation. Microbia has the metabolic engineering capabilities to improve the production of itaconic acid during fermentation from this feedstock. Itaconix uses its proprietary manufacturing processes to polymerize itaconic acid into super absorbents and dispersants.

"We are introducing Itaconix™ Super Absorbent and Itaconix™ Dispersant, which are friendly to the environment and reduce the use of petroleum in major consumer products," says John R. Shaw, principal of Itaconix. "The research possible through this biomass initiative offers another major step toward sustainability and away from petroleum dependence by allowing us to use biomass wood and not divert corn away from food uses."

"Itaconix's products offer an exciting new potential use of our technologies for extracting sugars from wood," says Hemant Pendse, chair of the University of Maine's Chemical and Biological Engineering Department and managing director of the university's Forest Bioproducts Research Initiative. "This opportunity to utilize biomass wood for polymers in leading consumer products is an important new strategic direction for our efforts at the University of Maine."

"Our goal is to pioneer the use of sugars extracted from sustainable feedstocks such as lignocellulosic and waste biomass to replace both food-based sugars and petroleum in the production of industrial chemicals," says Marcus Lovell Smith, chief executive officer of

Microbia, Inc. "We are excited to contribute our expertise to working with Itaconix and the University of Maine to make this possible for detergent and diaper applications."

About Itaconix

Itaconix LLC develops, produces and markets a new generation of super absorbents, dispersants, binders, and adhesives made from renewable resources to replace petroleum-based chemicals used in detergents, pigments, diapers, and water treatment. For more information, visit www.itaconix.com.

Media contact: John R. Shaw, (603) 929-1230 or jshaw@itaconix.com.

About Microbia

Microbia, Inc. is a biotechnology-based chemical company focused on commercializing monomers, polymers and intermediate chemicals from renewable resources by applying its proprietary metabolic engineering platform to fermentation-based manufacturing operations. Based in Lexington, Massachusetts, Microbia was established in 2006 as an operationally independent subsidiary of Ironwood Pharmaceuticals. For more information, visit www.microbia.com.

Media contact: Marcus Lovell Smith, (781) 259-7600 or mlovellsmith@microbia.com.

The University of New Hampshire, founded in 1866, is a world-class public research university with the feel of a New England liberal arts college. A land, sea, and space-grant university, UNH is the state's flagship public institution, enrolling more than 12,200 undergraduate and 2,200 graduate students.