



## Innovative New Uses for Soy

### Soy Fibers Represent Versatile Market



U.S. soy is a component in many products including plastics, coatings, inks, solvents, adhesives and emerging industrial opportunities. Now, use of soy in fibers represents a growing market, as well.

"Fiber-based soy chemistry has a future in many market areas," says Robina Hogan, commercialization manager with OmniTech International and fiber-

industry technical consultant for the United Soybean Board (USB). "Nonwovens, such as wipes, diapers, absorbents and medical applications, apparel and packaging materials, are our target markets."

Most likely you have shirts made at least in part of crops such as cotton, but manufacturers use soy fibers less widely in clothing and are mainly imported from overseas.

According to Hogan, funding from USB currently supports projects at the New Jersey Institute of Technology, Clemson University, North Carolina State University, Marvin Technology Associates and the University of Illinois-Chicago.

"The soy protein chemistry that we have been currently developing is targeted to reduce petrochemical products such as polypropylene, polyethylene, polyester and nylon," says Hogan. "It will, however, complement these same products in fabric construction blends along with others such as acetate and cotton."

USB's investigation into soy fibers is forward-looking: At present, only preliminary research is being conducted in future uses. The goal is to one day have U.S. soy become a material manufacturers consider when developing fiber products.

"Renewable resources are vital for the future of the world," says Hogan. "Soy chemistry in fibers and films has an opportunity to reduce the level of petrochemical requirements for industrial uses. In addition, this chemistry can complement other renewable resources such as wood-based cellulose and corn-based polymers."

USB is made up of 69 farmer-directors who oversee the investments of the soybean checkoff on behalf of all U.S. soybean farmers. Checkoff funds are invested in the areas of animal utilization, human utilization, industrial utilization, industry relations, market access and supply. As stipulated in the Soybean Promotion, Research and Consumer Information Act, USDA's Agricultural Marketing Service has oversight responsibilities for USB and the soybean checkoff.