

Soybean Checkoff Capitalizing on Growing Aquaculture Markets

Soy Included in More Fish and Shrimp Diets

SIOUX FALLS (June 10, 2010) – Soybean meal takes to the lakes, rivers and seas, as well as the barns and feedlots, as the prominent poultry and livestock feed grows in popularity in fish and shrimp diets as well. The growing demand for commercially raised aquatic products presents significant opportunity for soy-based aquaculture feeds for fish and shrimp species.

Currently, the greatest demand for soy use in aquaculture rests in the China freshwater sector, which produces 63 percent of global aquaculture. Estimates show the Chinese aquaculture industry uses up to 6.5 million metric tons, or the equivalent of 280 million bushels of soybeans.

“The amount of soybean meal used for aquaculture in China exceeds the soybean production of Indiana,” says Joe Meyer, United Soybean Board (USB) director and a soybean farmer from Williamsburg, Ind. “The soybean checkoff continues to work to expand the aquaculture industries in other areas, such as Southeast Asia, Central America and the Middle East.”

Soy-based feeds and production technologies developed in China and through collaborative research with the soybean checkoff are currently being used in 18 countries. Some of the aquaculture technologies developed in China include:

- A pond production system that produces a single fed species, together in the same pond ecosystem as another species that lives off other organic matter in the ecosystem for maximum efficiency.
- A cage technology that is sustainable and environmentally friendly for lakes and rivers.
- An ocean cage technology that is storm resistant and allows fish to be raised in cleaner offshore environments.

“The whole fish-feeding industry is in its infancy, and we’re still determining soy inclusion levels in diets and market opportunities for many species,” says Meyer. “Global demand for seafood continues to increase, with the United States consuming about \$15 billion worth of seafood annually. At the same time, the wild catch of seafood is leveling off or decreasing, so there is a large opportunity for aquaculture.”

The challenges of a reduced wild catch affect the cost and supply of fish meal for aquatic diets. Increased costs of fish meal, as well as other plant ingredients, like canola meal and cotton meal, mean more soy products will be used in aquaculture this year.

The increased use of soy protein concentrate (SPC), a product with higher protein levels than soybean meal, will allow even more soy to be fed to fish and shrimp, as more fish and shrimp producers become aware of the advantages of using SPC to partially or completely replace fish meal for different fish species and shrimp. Estimated SPC production for 2010 will be about 30,000 tons, according to the U.S. Soybean Export Council, which carries out checkoff-funded aquaculture promotion efforts abroad

“Protein levels for fish nutrition are much higher than what we would expect for poultry and livestock, so SPC allows us to develop aquafeeds that meet the nutrient requirements of a number of species of fish and shrimp that have a limited tolerance for soybean meal,” says Meyer.

The success of the soy in aquaculture program shows another example of USB working with state soybean checkoff boards to leverage checkoff dollars for the best results. State soybean checkoff boards from Illinois, Indiana, Iowa, Nebraska, Pennsylvania, Kentucky, South Dakota, Ohio, and Minnesota have all partnered with USB to fund aquaculture-related research and international marketing efforts.

“The work on soy in aquaculture has only begun,” says Meyer. “We expect to see continued expansion of the aquaculture industry in Southeast Asia, Vietnam, Thailand, India and other markets.”

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