JIFSAN Good Aquacultural Practices Program

Traceability: From Farm to Table

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What is Traceability?

Traceability is the ability to follow and document the origin and history of a food or feed product. Traceability systems are record keeping systems used for tracking the flow of product through the production process and supply chain.

Why Traceability?

Traceability helps companies track multiple products, monitor food safety and food quality issues, and control distribution of unsafe or poor quality products. An effective traceability program can minimize the potential for negative news, reduce product recalls, and control liability issues.

Traceability and Control Measures

Traceability systems must be paired with a real-time delivery system or other inventory control procedures, and be based on a real-time basis in order for the system to work effectively. The producer needs to link the tracking system to an effective safety control system (AgBiotech Bulletin 2003).

In 2004, the U.S. Food and Drug Administration (USFDA) issued Section 306 of Title 3: "establishment and maintenance of records" (FDA 2004). "All producers, distributors, importers, transporters and packers of food are required to establish and maintain records, sufficient to identify the immediate previous sources and immediate subsequent recipients of the food" (Peterson and Green 2006).

Almost all grains and oilseeds in the USA are traceable from production to consumption. In the cattle and beef sectors, producers are working on implementing a voluntary National Animal Identification System to track and identify animals from farm to retailers. The National Pork Producers Council announced plans to implement a mandatory swine identification program with implementation by Dec. 2007. Traceability systems are also in place for the produce industry. In addition, Wal-Mart is requiring its 100 largest suppliers to use radio frequency identification tags (RFID) to trace and track all products sold to their stores.

In the E.U., traceability is covered by the General Food Law, which entered into force Jan. 1, 2005. This law addresses withdrawal of dangerous food products, and operator responsibilities and requirements applicable to imports and exports. It applies to all food, animal feed, food-producing animals and all types of food chain operators from the farming sector to processing, transport, storage, distribution and retail to the consumer, as well as public water systems such as those provided by towns or other municipalities. This law requires that information on the name and address of the producer, and the nature of the products and dates of transaction must be systematically registered within each operator's traceability system. These records must be kept on file for a period of five years and on request must be immediately made available to the competent authorities (Petersen and Green 2006).

Traceability is not mandatory in Japan for seafood products, but there are record keeping requirements for seafood processors. Traceability is mandatory for beef (Peterson and Green 2006). Similarly, in Canada although traceability is not required for seafood products, record keeping requirements are in place to address wholesomeness, labeling, packaging, health and safety issues (Petersen and Green 2006).

Tracking Methods

A standardized method for tracking products has not been established. Traceability methods include paper trails, linear bar codes (EAN.UCC System), radio frequency identification tags (RFID), two dimensional symbologies (2-D Bar Codes), and real time locating systems (Petersen and Green 2006).

AgBiotech Bulletin. 2003. *Food traceability from the farm to the fork*. Vol. 11., Issue 10.

FDA Booklet. 2004. *What you need to know about establishment and maintenance of records*. http://www.cfsan.fda.gov/

Peterson, A., D. Green. 2006. *Seafood Traceability: A practical guide for the U.S. industry.* North Carolina Sea Grant. UNC-SG-06-04. 28 pp.