

## Plant Sensory Systems' Technology Produces Taurine in Plant Seeds

Plant Sensory Systems is First Company to Demonstrate that Taurine can be Produced in Plant Seeds

December 5, 2014 – Plant Sensory Systems, LLC announced today that *Arabidopsis* seeds with their Enhanced-Nutrition (EN) technology produce taurine (Tau). Without the EN technology, plants do not produce Tau. PSS is the first company to demonstrate that Tau can be produced in plant seeds.

The use of Tau in animal feed is an emerging market and absolutely critical within the relatively new aquaculture industry (11.4% CAGR). Recently it has been shown that plant-based feed could replace fishmeal provided Tau was added to the feed. Most high-value fish and shellfish require Tau for normal development and growth. Feed producers are turning to plant-based proteins as a cost effective and reliable source of protein to meet the growing demand for protein in animal and fish diets. However, feed manufacturers must supplement their plant-based feed with amino acids to meet the nutritional requirements of the animals since plant-based proteins are low or deficient in specific amino acids. Supplemental amino acids in feed increases production costs and most are produced by chemical synthesis, which requires carcinogenic and/or hazardous substances in the manufacturing process. Some amino acids, e.g., feed-grade synthetic Tau, which is almost exclusively manufactured in China, contains arsenic.

"Now that we have shown that we can accumulate Tau in the dried seeds of a labroatory plant system we plan to move the technology into soybean seeds, a commercial crop, and produce a safe, sustainable, cost-effective source of Tau for plant-based aquafeed," said Frank Turano, chief research officer, Plant Sensory Systems.

## **About Plant Sensory Systems**

Plant Sensory Systems, LLC is a privately held agricultural biotechnology company that develops technologies to improve crop performance for production of food, feed, fiber, biofuel and bio-based products. The company is located in Baltimore, Maryland at bwtech@UMBC Research and Technology Park. For more information visit: <a href="www.plantsensorysystems.com">www.plantsensorysystems.com</a>

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