



November 10th, 2021

This press release refers to the press release by Associates of Cape Cod, Inc. published in November 3rd, 2021. Detailed information is available on its website (https://www.acciusa.com/about-us/news-and-notices/articles/).

Seikagaku Announces Release of One Millionth Horseshoe Crab from Species Sustainability Project by Associates of Cape Cod, Inc.

Seikagaku Corporation (Tokyo, Japan; "Seikagaku") announced today that its overseas subsidiary Associates of Cape Cod, Inc.*1 (Massachusetts, U.S.A.; "ACC") had released proudly announces that it has achieved the release of its one millionth juvenile North American Horseshoe Crabs(NAHSC) to the wild, as a result of it's the first of species sustainability project October 2021.

This program was initiated by the company in 2017 in the US and expanded into Asia in 2019, with a goal of enhancing the sustainability of crab populations that are so vital to local ecosystems as well as to the manufacture of Bacterial Endotoxin Test (BET) reagents^{*2} that utilize a raw material found in crab blood.

ACC's species sustainability project sources NAHSC eggs and gametes exclusively from crabs destined for terminal use as bait by the fishing industry. Without injury to the crab, ACC staff harvest the reproductive cells, fertilize them in vitro and then culture them to juvenile horseshoe crabs all within ACC's innovative, patent pending aquaculture system at its facility in Falmouth, MA. Once the crabs reach their first and second instars (about the size of a small fingernail) the juveniles are released into the wild in a setting where they can immediately burrow to safety.

"Our horseshoe crab sustainability project is important to the company and other stakeholders of effected ecosystems", noted Dr. A.J. Meuse, President and CEO of ACC, "This project aligns closely with our overall plans to minimize our impact on the populations of the NAHSC and provided an opportunity to develop a completely new aquaculture system technology specifically designed to support the growth of horseshoe crabs. Local regulators supported our mission and granted ACC a class 1 type 4 aquaculture permit that allowed us to make this program a reality."

"The raising and releasing of more than a million horseshoe crabs into the local ecosystems is expected to continue and have a measurable and positive impact on horseshoe crab populations for years to come", said Brett Hoffmeister, LAL Production Manager, ACC and author of the pending patent aquaculture system. "As team leader, this incredible achievement would not have been possible without the hard work and dedication of the ACC employees who make up our horseshoe crab species sustainability team. We're excited to see the impact that our program will have on our local aquatic ecosystem and appreciate the vision of our corporate ownership who fully support our efforts."

Concurrently with this program, ACC launched PyroSmart NextGen[™] that it is a new endotoxindetecting reagent that is manufactured using recombinant technology without the blood harvested from horseshoe crabs in April 2021, and Seikagaku launched in May 2021 in Japan. The Seikagaku Group are implementing measures not relying on natural ingredients. Also, we will continue to actively promote activities to conserve horseshoe crabs, which make a major contribution in the medical and pharmaceutical fields, and strive to use this precious resource in a sustainable manner.



Horseshoe crab juveniles



Released horseshoe crabs juveniles

< Reference Information >

*1 Associates of Cape Cod Inc. (ACC)

Associates of Cape Cod Inc. (ACC), a wholly owned subsidiary of Seikagaku, was the first FDA-licensed LAL manufacturer. ACC was established in 1974, became a Seikagaku subsidiary in 1997, and currently plays a central role in the global Bacterial Endotoxin Testing (BET) and clinical glucan detection sectors. ACC's reagent production facility, located at their campus in Falmouth Technology Park in Massachusetts, is vertically integrated with an end-to-end manufacturing operation that extends from harvesting horseshoe crab blood cells, a reagent raw material, to manufacturing, testing, packaging/labeling and distributing endotoxin and glucan in vitro diagnostic agents. From that location, ACC also offers customers in-house contract testing services for BET and clinical glucan product testing.

*2 Bacterial Endotoxin Test (BET) reagents

Endotoxins are a component of gram-negative bacteria. Since endotoxins exhibit strong pyrogenic activity even in minute amounts and serious side effects can be triggered by endotoxin contamination of pharmaceuticals and other products, they must be rigorously controlled pursuant to regulations in the manufacture of pharmaceutical products and medical devices. BET reagents used worldwide in the quality control of pharmaceuticals, medical devices, biopharmaceuticals, and in water quality control in dialysis at hospitals.

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