

Proposal #: 20GAR043-113

Project Title: Adapting High Pressure Processing (HPP) Technology to Enhance the Competitiveness of the Domestic Blue Crab Industry

Applicant: University of Maryland

Priority Addressed Priority #1 – Promotion, Development and Marketing

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Abstract: The US blue crab industry is facing tremendous challenges including strong competition from imported products with a longer shelf life. In particular, competition from Venezuelan fresh pre-cooked crabmeat has caused US blue crab processors to lose an enormous amount of market share. After a 2018 multi-state outbreak of *Vibrio parahaemolyticus* infection was linked to their product, Venezuela adopted high pressure processing (HPP) technology for use on their crabmeat. The HPP technology provides improved food safety and extended shelf life, contributing to an immediate competitive advantage for the Venezuelans. In order to help protect our domestic industry from predatory competition from foreign processors, especially those located in Venezuela, we have developed this proposal to address an urgent need within the domestic blue crab industry. The overall goal of this project is to validate the HPP technology for enhancing the microbiological quality and shelf life of domestic blue crab meat, and to establish and communicate marketing strategies that the industry can execute. We anticipate that this important research will bring validated HPP technology to the US blue crab processors, thus enhancing the competitiveness of the US blue crab industry.

Summary of potential commercial benefits to the fishing community of the research results:

- Validate HPP technology to increase the microbiological quality and shelf life of domestic blue crab meat so that the US blue crab industry can better compete with imported HPP-treated crabmeat.
 - Understand economic feasibility and profitability of HPP to domestic crabmeat processors.
 - Establish and communicate marketing strategies the industry can execute to promote HPP-treated crabmeat to wholesale and retail buyers and the general public.
 - Promote better business practices to increase market demand for US blue crab meat.
 - Improve regional and national marketing opportunities that can increase the competitiveness of US blue crab industry against imported products.
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