

JUN - 4 2013



UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE
1315 East-West Highway
Silver Spring, Maryland 20910
THE DIRECTOR

Mr. John Williams
Executive Director
Southern Shrimp Alliance
P.O. Box 1577
Tarpon Springs, FL 34688

Dear Mr. Williams:

Thank you for your letter to Acting Secretary Rebecca Blank regarding the possible introduction of early mortality syndrome (EMS) of shrimp from Asia into the United States. We recognize the importance of wild shrimp production and resources to the United States and America's Gulf region in particular, and of the impact that a disease such as EMS could have if it were to become established in the United States. We are in communication with various federal collaborators to protect U.S. aquaculture and resources.

Much research has been conducted recently by Professor Donald Lightner, a leading expert on diseases of shrimp. Over the past 2 years, EMS has caused large-scale die-offs of cultivated shrimp in several countries in Asia. Infected shrimp ponds experience extremely high levels of mortality early in their growing cycle—as high as 100 percent death rates in some cases. Dr. Lightner recently discovered that the disease is caused by a strain of a bacterium commonly found in brackish coastal waters around the globe, *Vibrio parahaemolyticus*. This breakthrough finding is a crucial step in the search for effective ways to manage EMS.

This disease appears to pose no risk to human health. Some strains of *V. parahaemolyticus* do cause gastrointestinal sickness in humans through the consumption of raw or undercooked shrimp and oysters, but only strains carrying two specific genes cause human disease. According to Dr. Lightner, EMS does not contain these two genes.

EMS affects two species of shrimp commonly raised around the world—giant tiger prawn (*Penaeus monodon*) and whiteleg shrimp (*P. vannamei*). Clinical signs of the disease in shrimp include lethargy, slow growth, an empty stomach and midgut, and a pale and atrophied hepatopancreas (an internal digestive organ that serves the function of a liver), often with black streaks. Within 30 days of a pond being stocked, large-scale die-offs begin.

Countries officially reporting EMS include China, Malaysia, Thailand, and Vietnam. But anywhere giant tiger prawn and whiteleg shrimp are cultivated is potentially at risk. This includes most of Asia and much of Latin America, where shrimp farming is also important, as well as African countries where shrimp are cultivated (Madagascar, Egypt, Mozambique, and Tanzania). EMS is not known to be present in the United States. Disease spread appears to be linked to proximity to already-infected farms or the movement of infected live shrimp, usually juveniles used to stock ponds. Dr. Lightner's team was unable to reproduce EMS using frozen and thawed shrimp samples, suggesting freezing kills the responsible bacterium. Because

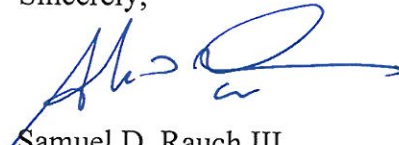


international shrimp trade is mostly in frozen form, there is apparently no or very low risk of disease transmission from these products.

The Department of Commerce is working closely with other federal agencies to evaluate and assess any potential risk of EMS. In particular the Department of Agriculture—the agency that regulates the imports of farmed animals in regard to animal health—is communicating with producers about the finding and is encouraging them to practice good preventive measures such as biosecurity. In addition, research on EMS is underway that will help inform any additional steps that may be needed in the future. At this time, given the nature of the disease and the negligible risk that processed shrimp pose to wild shrimp in the United States, there is no indication that the Department of Agriculture will impose trade restrictions on frozen, processed shrimp destined for domestic retail food sales.

I appreciate your interest in this matter. We will continue to monitor this situation and work with our federal partners to ensure the continued safety and productivity of Gulf coast seafood.

Sincerely,

A handwritten signature in blue ink, appearing to read 'Samuel D. Rauch III', with a long horizontal flourish extending to the right.

Samuel D. Rauch III
Deputy Assistant Administrator
for Regulatory Programs,
performing the functions and duties of the
Assistant Administrator for Fisheries