Sea Grant
National Sea Grant College Program

MARINE TOXINS

Ciguatera Loss Reduced By More Than $500,000

Puerto Rico has quarantined sales of the tropical reef fish species that frequently carry a dangerous poison, ciguatera.

Despite the quarantine, these fish continue to be sold illegally to consumers in Puerto Rico and the United States, causing outbreaks of ciguatera poisoning. In the United States, Puerto Rico and the U.S. Virgin Islands, morbidity rates of diagnosed cases of ciguatera poisoning range from 10 to 27 people per thousand each year.

Ciguatera fish poisoning causes expensive, though usually treatable, health problems. Losses in worktime and medical expenses from ciguatera poisoning in Puerto Rico average $1,000 per case. But the region's fishing and seafood industries are also damaged when ciguatera outbreaks cause consumers to avoid buying seafood.

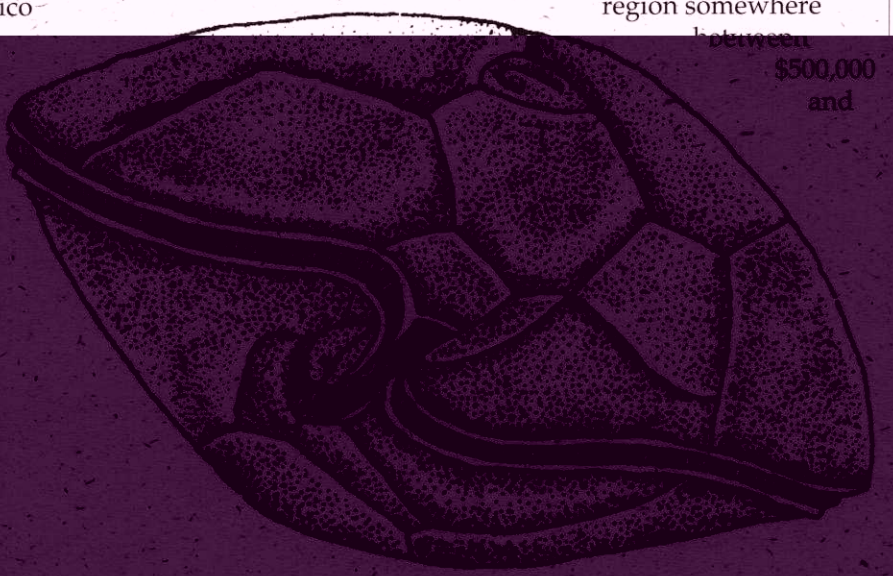
In a comprehensive initiative, the University of Puerto Rico Sea Grant College Program has addressed the problem of ciguatera poisoning through research and education, significantly decreasing the number of poisoning cases and reducing recent economic losses to the regional fishing industry.

Sea Grant Advisory Service agents throughout Puerto Rico and the U.S. Virgin Islands disseminate information about ciguatera to prevent consumer panic when seasonal outbreaks of poisoning occur. Sea Grant researchers also discuss the results of their investigations on ciguatera with health professionals.

In seminars, workshops and presentations in hospitals, Sea Grant researchers instruct physicians and nurses on the symptoms and treatment of ciguatera fish poisoning, which in the past has not been recognized or treated properly. Sea Grant agents and researchers have trained fishery industry inspectors to identify and test fish likely to carry ciguatera, which has helped reduce ciguatera poisoning by at least 10 percent in Puerto Rico alone.

Today, the public is reducing consumption of species likely to contain ciguatera toxins. Meanwhile, consumers are increasingly buying "safer" species of tropical reef fish and other seafood, such as tuna, octopus and shellfish. As a result, the regional decline in fish and seafood sales has leveled off, and work-time losses and medical expenses due to ciguatera poisoning have decreased.

Puerto Rico Sea Grant's research and education about ciguatera poisoning has saved the region somewhere between $500,000 and



Gambierdiscus toxicus

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