Seafood safety and security

Gires Usup

School of Environment and Natural Resources Science, Faculty of Science and Technology, Universiti Kebangsaan Malaysia, 43600 Bangi Selangor, Malaysia Email: <u>gires@ukm.edu.my</u>

Abstract

Several ASEAN countries face problems related to harmful algal blooms (HABs). These blooms can cause seafood poisoning and mass mortalities of cultured and wild fish. The presence of these harmful species necessitates a comprehensive monitoring programme to safeguard public health, aquaculture operations and also to comply with international trade requirements. Regular monitoring programmes are resource intensive in order to produce timely information that is of use to decision makers and managers. In this presentation will be provided examples of how science, technology, engineering and mathematics (STEM) can be integrated to come up with practical solutions that can significantly improve and enhance HAB monitoring programmes. These systems can provide in situ real time data and also forecasting of toxicity risks. The presentation will also highlight how non-STEM disciplines can contribute to HAB prediction, management and mitigation.