

SEMINAR

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Hosted by Dr Tang Qian

CONSERVATION OF ASIAN HORSESHOE CRABS – CHALLENGES AND FUTURE PROSPECTS



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Dr. Akbar John is an Associate Professor and Senior Research Fellow at Faculty of Science, International Islamic University Malaysia (IIUM). He got his PhD in Biotechnology Sciences from IIUM in 2014. He is a dedicated marine biologist and has published more than 90 research articles and two books. He is now a member of IUCN Species Specialist Commission on the horseshoe crabs. He has been currently working on establishing the Global tissue repository of extant xiphosurans in collaboration with number of institutes/agencies including the U.S. geological survey, National University of Singapore, Chinese University of Hong Kong. His research focus is on molecular ecology and conservation of marine arthropods in particular chelicerate and he is welcoming any collaborations of related topics.

Horseshoe crabs are one of the oldest living fossils represent with four extant species namely *Limulus polyphemus*, *Tacchyplesus tridentatus*, *T. gigas* and *Carcinoscorpius rotundicauda*. The wild populations of horseshoe crabs in Asia are facing serious threat due to a steep increase in the harvest for biomedical bleeding programs and cross-border trade for human consumption. In addition, habitat degradation, shoreline development in spawning and nursery beaches and weak legislative measures triggered decline in their wild population size. Currently, IUCN Redlist assessment has classified *T. tridentatus* as an 'Endangered' and *L. polyphemus* as 'Vulnerable', while the other two species, indigenous in Southeast Asia, are still under 'Data Deficient'. Present conservation efforts aim to invoke public awareness against consuming horseshoe crabs. Citizen science programs have shown positive impact on perspective changes among the school children and public. However, market demand is still increasing due to various reasons especially the biomedical companies does not want to negotiate in supply chain break. An active involvement of IUCN species survival commission horseshoe crab specialist group (SSG) is worth mentioning in the global conservation of these species. With this backdrop, this presentation will highlight the challenges and scope of horseshoe crab research in Asia.