

# The Living Fossil (Horseshoe crab)

**Kamaruzzaman Yunus**

**Akbar John**

**Ahmed Jalal Khan Chowdhury**

**Zaleha Kassim**



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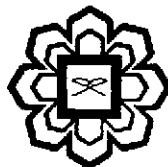
**Editors,**

**Kamaruzzaman Yunus**

**Akbar John**

**Ahmed Jalal Khan Chowdhury**

**Zaleha Kassim**



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# Table of Contents

Chapters	Titles	Page No
1.	Global distribution and Taxonomy of extant horseshoe crabs..... (5410/18557)	1
2.	Limiting factors on the global distribution of horseshoe crabs..... (5410/18558)	11
3.	Site selection and nesting behaviour of horseshoe crabs with special reference to <i>Limulus polyphemus</i> ..... (3575/18560)	19
4.	Distribution of horseshoe crabs at their nesting grounds, East coast of Peninsular Malaysia..... (5410/18560)	27
5.	Hydrology of horseshoe crab nesting ground at Pahang coast –Part 1..... (3575/18563)	35
6.	Hydrology of horseshoe crab nesting ground at Pahang coast –Part 2..... (3575/18566)	47
7.	Physicochemical parameters relationship at the horseshoe crab nesting grounds of Pahang coast, Malaysia..... (5410/18567)	57
8.	Macrobenthic diversity at the Horseshoe Crab nesting ground, Balok station, Pahang, Malaysia – Part 1..... (3575/18568)	69
9.	Macrobenthic diversity at the Horseshoe Crab nesting ground, Balok station, Pahang, Malaysia – Part 2..... (3575/18570)	83
10.	Macrobenthic diversity at the Horseshoe Crab nesting ground, Pekan station, Pahang, Malaysia – Part 1..... (5410/18571)	95
11.	Macrobenthic diversity at the Horseshoe Crab nesting ground, Pekan station, Pahang, Malaysia – Part 2..... (3575/18573)	109
12.	Influence of physicochemical parameters on the macrobenthic diversity and abundance in horseshoe crab nesting grounds, East coast of Peninsular Malaysia. .... (5410/18574)	127
13.	<i>In-vitro</i> study on the effect of salinity on the hatching success of Malaysian Horseshoe crab eggs..... (3575/18575)	137
14.	Effects of salinity on the early growth of <i>Tachypleus gigas</i> larvae - An <i>In-vitro</i> study..... (3575/18577)	147

15. Sediment characteristics of horseshoe crabs nesting ground at Balok station, Pahang, Malaysia .....	(5410/18579)	155
16. Sediment Profiling of the Estuarine Nesting Ground of Horseshoe Crabs at East Peninsular Malaysia .....	(3575/19587)	165
17. Bioaccumulation of some essential metal concentration in Malaysian horseshoe crabs ( <i>Tachypleus gigas</i> ).....	(5410/18584)	175
18. Cu and Cd Bioaccumulation in Malaysian Horseshoe Crab .....	(5410/18585)	183
19. Metal concentration in horseshoe crab nesting ground along Pahang coast, Malaysia.....	(5410/18586)	193
20. Bionomics of Malaysian horseshoe crabs <i>Tachypleus gigas</i> .....	(5410/19708)	203
21. Feeding Ecology of Mangrove horseshoe crab <i>Carcinoscorpius rotundicauda</i> .....	(5410/19717)	213
22. Emerging interest on DNA barcoding technology and its application for high-tech biodiversity studies using COI gene as a reference sequence .....	(3575/19716)	225
23. Can DNA barcode accurately delineate living fossil (Horseshoe crab) and its different developmental stages?.....	(5410/19715)	237
24. Revision on the molecular phylogeny of horseshoe crabs – Part 1.....	(5410/19717)	251
25. Revision on the molecular phylogeny of horseshoe crabs – Part 2.....	(5410/19720)	267
26. Genetic Diversity of <i>Tachypleus gigas</i> Population from West coast of peninsular Malaysia .....	(3575/19727)	275
27. Does continental drift influence in the genetic variability among the horseshoe crab population? .....	(3575/19727)	287
28. Evolution of horseshoe crabs – paleontological and Molecular viewpoint.....	(3575/19731)	297
29. Factors involving in the clot formation of horseshoe crab blood.....	(5410/19711)	307
30. Methods for bacterial endotoxin quantification in reference to horseshoe crab blood studies .....	(5410/19740)	317
31. ENDO SENSOR (TAL) production from Malaysian Horseshoe crab blood.....	(5410/19744)	325
32. Characterization of <i>Tachypleus</i> Amebocyte Lysate (TAL).....	(3575/19759)	333

33. Environmental and Pharmaceutical applications of Amebocytes Lysate (LAL/TAL) from Horseshoe crabs .....	(5410/19751)	343
34. <i>Tachypleus gigas</i> mortality due biomedical bleeding process .....	(3575/19756)	351
35. Conservation measures on horseshoe crab population – A global view.....	(5410/19759)	359
Glossary.....		369

## CHAPTER - 6

### Hydrology of horseshoe crab nesting ground at Pahang coast –Part 2

Akbar John, B., Jalal, K.C.A.

*Institute of Oceanography and Maritime studies (INOCEM), Kulliyah of Science,  
International Islamic University Malaysia, Jalan Sultan Ahmad Shah,  
Bandar Indera Mahkota, 25200, Kuantan Pahang, Malaysia*

#### Abstract

Selected hydrological parameters at the nesting grounds of horseshoe crabs along the Pahang coast were determined. A complete year data from March 2010 to February 2011 was collected using advanced multiparameter meter model Hanna HI 9828 probe. Seasonal fluctuation in the pH of the water varied from 8.65-6.61 at Balok station and 8.18-6.12 at Pekan station. Throughout the sampling period the coastal waters of both the sampling sites were well mixed. The Dissolved oxygen (DO) in the water varied from 7.75 – 4.21ml/L at Balok and 7.75ppt – 3.06ml/L at Pekan station with mean annual DO of  $6.24 \pm 0.95$ ml/L at Balok and  $5.76 \pm 1.08$ ml/L at Pekan coastal waters. No seasonal fluctuations in the selected physicochemical parameters were observed in both the sampling stations ( $P > 0.05$ ).

**Key words:** Physicochemical parameters, pH, Dissolved Oxygen and horseshoe crab nesting ground.

#### Introduction

Aquatic ecosystems are affected by several health stressors that significantly deplete biodiversity. In the future, the loss of biodiversity and its effects are predicted to be greater for aquatic ecosystems than for terrestrial ecosystems (Sala *et al.*, 2000). Rivers are subjected to various natural processes taking place in the environment, such as the hydrological cycle. As a consequence of unprecedented development, human beings are responsible for choking several lakes to death. Storm water runoff and discharge of sewage into rivers are two common ways that various nutrients enter the aquatic ecosystems resulting in the pollution of those systems (Sudhira and Kumar, 2000; Adeyemo, 2003). Beside this fact, various other studies have been