

POPULATION GENETIC DIFFERENTIATION OF MUD CRAB, *SCYLLA SERRATA* IN INDONESIA

Suganda Diky¹ and Marc Kochzius²

¹ Ecological Marine Management (ECOMAMA), Faculty of Science and Bioengineering Science
Vrije Universiteit Brussel, Pleinlaan 2, 1050 Brussels, Belgium
E-mail: dsuganda@vub.ac.be or jilun_alfarid@yahoo.com

² Marine Biology, Free University of Brussels (VUB), Pleinlaan 2, 1050 Brussels, Belgium

Scylla serrata is a commercially important mud crab species that is widely distributed and commonly found in most estuarine habitat of Indonesian coastal waters. The planktonic larval phase suggests high dispersal potential and possibility of extensive gene flow between population on a geographic mesoscale. This study investigates the phylogeographic distribution of *Scylla serrata* in Indonesia and further aims to compare its genetic population structure and connectivity pattern throughout Indo-West Pacific based on the previous existing studies. The samples used in this study were collected from several local fish markets in Indonesia from July to September 2010. Those selected sampling locations were namely: Sungai Liat (Sumatera Island), Pontianak (Borneo Island), Samarinda (Borneo Island), Labuan (Java Island), Tangerang (Java Island), Cirebon (Java Island), Pelabuhan Ratu (Java Island), Brondong (Java Island), Sidoarjo (Java Island), and Mataram (West Nusa Tenggara Island) (n = varies from 11 to 20). One cheliped was taken from each individual crab sample, then preserved in 95% ethanol solution and stored at 6°C. Mitochondrial DNA cytochrome oxidase subunit I (COI) gene will be used as a gene marker in this study. Molecular genetic analysis will be conducted in Plant Biology and Nature Management (APNA) Laboratory at the VUB Etterbeek campus from October 2010 to February 2011.

References

Fratini S. and M. Vannini. 2002. Genetic differentiation in the mud crab *Scylla serrata* (Decapoda: Portunidae) within the Indian Ocean. *Mar Biol. Ecol.* 272:103–116.