




Mohammed Husein Sastranegara (Autor)
**The impact of forest use on the intertidal crab
community in managed mangroves of Cilacap,
Central Java, Indonesia**

Moh. Husein Sastranegara

**The impact of forest use on the intertidal crab
community in managed mangroves of
Cilacap, Central Java, Indonesia**



 Cuvillier Verlag Göttingen

<https://cuvillier.de/de/shop/publications/3044>

Copyright:

Cuvillier Verlag, Inhaberin Annette Jentsch-Cuvillier, Nonnenstieg 8, 37075 Göttingen,
Germany

Telefon: +49 (0)551 54724-0, E-Mail: info@cuvillier.de, Website: <https://cuvillier.de>

ACKNOWLEDGEMENTS

The Development of Undergraduate Education (DUE) Batch II of the “Universitas Jenderal Soedirman (UNSOED)” gift me an opportunity to follow a doctorate degree program. I am grateful for the kind support of Dr. E. Yuwono as the DUE Director.

Great thanks always sends to my supervisor Prof. Dr. M. Mühlenberg who gift me many concepts of nature conservation with supporting Dr. H. Fernon as my tutor. Moreover, many information were coming from Dr. J. Slowik, Dr. E. Gottschalk, Dr. M. Waltert, Dr. H. Hondong, Dr. A. Barkow, all doctorate candidates and all administration staff in the Centre of Nature Conservation, Faculty of Biology, “Georg-August-Universität Göttingen (GAUG)”.

Thanks to Prof. Dr. P.K.L. Ng as a crab scientist and the Director of the Raffles Museum of Biodiversity Research, Department of Biological Sciences, the National University of Singapore (NUS) who gift me many information on crab taxonomy and relating on it with supporting Ms. D. Wowor as my tutor. For (mail) discussions, I thank to Prof. Dr. P.K.L. Ng (NUS), Prof. Dr. L.B. Holthuis (“Nationaal Natuurhistorisch Museum, Universiteit Leiden”), Prof. M. Vanini (“Museo di Storia Naturale ‘La Specola’, Università Degli Studi Di Firenze”) and Dr. F. Dahdouh-Guebas (“Vrije Universiteit Brussel, VUB”). I would also like to thank Ir. D. Haryadi, Soehardi, B.Sc and Busro from the State Forest Corporation and local people such as Sagi, Yudi and Heri. These people helped me in some where for doing my research.

In this moment, I want to say a deep apologize to my family, Dra. S. Murtiyati, Hafiyyan Sastranegara, Hanifan Sastranegara and Hawariyyun Sastranegara, because I already left you all in Indonesia to go abroad for getting a doctorate degree in Germany.

M.H. Sastranegara

CONTENTS

ACKNOWLEDGMENTS

1. INTRODUCTION	1
2. BACKGROUND AND OBJECTIVES	4
3. STUDY AREA	8
3.1. The Segara-Anakan Cilacap management areas	8
3.1.1. Mangrove and its fauna	9
3.1.2. Environmental quality	10
3.1.3. The east swamp-managed area	10
3.2. The study plot	13
4. METHODS	18
4.1. Sampling methods	18
4.2. Percent mangrove canopy cover	19
4.3. Sediment texture	19
4.4. Water quality	20
4.5. Intertidal crab identification and verification	21
4.6. Calculated parameters	21
5. RESULTS	26
5.1. Percent mangrove canopy cover	26
5.2. Sediment texture	29
5.3. Water quality	31
5.4. The sampled intertidal crab community	34
5.4.1. Abundance	34
5.4.2. Species richness and diversity	36
5.4.3. Habitat specificity and geographic distribution	47
5.4.4. Seasonality	53
5.5. Environmental variables	54