





Journals **▼**

Books Publishing Support



PAPER • OPEN ACCESS

Success Rate Of Mangrove Crab (Scylla Serrata) Molting With Different Salinity Treatments In **Controlled Containers**

Suyono

Published under licence by IOP Publishing Ltd

IOP Conference Series: Earth and Environmental Science, Volume 755, Annual Conference on Health and

Food Science Technology, 25 November 2020, Yogyakarta, Indonesia

Citation Suyono 2021 IOP Conf. Ser.: Earth Environ. Sci. 755 012037

DOI 10.1088/1755-1315/755/1/012037

Buy this article in print

Journal RSS

Sign up for new issue notifications

Abstract

Market demand for mud crab (Scylla serrata) is increasing so that its catch in nature is high in the long term. The growth of mud crabs (Scylla serrata) occurs through molting (molting) mechanisms. Softshell crab has a higher economic value than hard shell crab. The purpose of this study was to assess the molting rate of mud crab (Scylla serrata) with different salinity treatments in controlled containers. The study used a completely randomized design (CRD) with three treatments of 20 ppt, 25 ppt, and 30 ppt salinity with three replications. The crabs used are mud crabs (Scylla serrata) measuring 80-175 grams with the carapace still hard. The test parameters include the weight gain and absolute length of the individual, daily growth rate, molting percentage, and survival and mortality rates. Besides, the chemical-chemical parameters of the culture media water and the effectiveness of using controlled containers were also observed. The research data were analyzed descriptively quantitatively. The difference in treatment and the use of controlled containers had a significant effect on the 95% significance level ($\alpha = 0.05$) on all parameters of the response to treatment. Absolute individual weight

values 40.6 – 47.41 grams, absolute individual length 2.6 – 3.2 cm, molting percentage 75 – 100%, daily growth rate 1.3 – 1.6 grams, 75 – 100% survival and mortality of mud crab (Scylla serrata) 25-16.7%. Optimal salinity level at 20 ppt. Water quality parameters during the study were still feasible for mangrove crab (Scylla serrata) cultivation. Controlled containers using a water rotation system are quite effective for the cultivation of mud crab (Scylla serrata).

Export citation and abstract

BibTeX

RIS

← Previous article in issue

Next article in issue →



Content from this work may be used under the terms of the <u>Creative Commons</u> <u>Attribution 3.0 licence</u>. Any further distribution of this work must maintain attribution to the author(s) and the title of the work, journal citation and DOI.

You may also like

JOURNAL ARTICLES

Condition Factor and Exploitation Rates of Scylla serrata in Karang Gading Sumatera Utara

Status of mud crab (*Scylla* sp.) fishery and mangrove ecosystem of Sanleko Village, Buru District, Indonesia

Relationship between osmoregulation and growth patterns of *Scylla serrata* gonad maturity levels in tapak mangrove waters, Semarang, Indonesia

Effectiveness of Feeding Trash Fish and Spinach Extract on Mud Crab (Scylla Serrata) Feed for Molting Acceleration With the Popeye Method

The exploitations status of the orange mud crub (Scylla olivacea Herbst, 1796) in Aru Islands and adjacent waters, Maluku, Indonesia

Fishery of mud crab *Scylla serrata* of Kotania Bay, Western Seram District: potency, stock status and sustainable management

IOPSCIENCE IOP PUBLISHING **PUBLISHING SUPPORT**

Journals Copyright 2024 IOP

> **Authors Publishing**

Books

Reviewers Terms and Conditions

IOP Conference Series

Conference Organisers Disclaimer

About IOPscience

Privacy and Cookie Policy

Contact Us

Text and Data mining policy

Developing countries access

IOP Publishing open access

policy

Accessibility

IOP















