

Date: Sunday, 14 November, 2021

Ref. No.: 001_SP ICMSCE21

To whom It May Concern,

This is to certify that

Jumrodah, Liliyasi, Yusuf Hilmi Adisendjaja, and Yayan Sanjaya

have submitted the paper entitled

CULTIVATION STAGES EX-SITU OF SALMACHIS SPHAEROIDES ON LARVAL DEVELOPMENT AND JUVENILE THROUGH METAMORPHOSIS FOR SUSTAINABILITY

The paper has been reviewed and accepted for publication in

Special Issue on International Conference on Mathematics and Science Education (ICMScE) 2021.

Yours Sincerely,



Associate Professor Dr. Abdulkareem Sh. Mahdi Al-Obaidi, CEng. MIMechE

Executive Editor, Journal of Engineering Science & Technology (JESTEC)

<http://jestec.taylors.edu.my>



BUKTI Publikasi JESTEC (Q3)

The screenshot shows a Gmail interface with a search bar containing "ICMSCE". The email list on the left includes "Compose", "Inbox (120)", "Starred", "Snoozed", "Sent", "Drafts (11)", and "More". The selected email is from "Jestec <jestec@taylors.edu.my>" to "me, Asep" dated "Nov 14, 2021, 7:21 AM". The email body contains the following text:

Dear Jumrodah
Attached please find the acceptance letter.
Best regards
JESTEC Editor
<http://jestec.taylors.edu.my>

From: jumrodah jumrodah <jum_rodah@student.upi.edu>
Sent: Wednesday, November 10, 2021 11:52 AM
To: Jestec <jestec@taylors.edu.my>
Cc: Asep Bayu Dani Nandiyanto <nandiyanto@upi.edu>
Subject: Full names authors and the paper title

You don't often get email from jum_rodah@student.upi.edu. [Learn why this is important](#)

...
This message (including any attachments) is intended only for the use of the individual or entity to which it is addressed and may contain information that is non-public, proprietary, privileged, confidential, and exempt from disclosure under applicable law or may constitute as attorney work product. If you are not the intended recipient, you are hereby notified that any use, dissemination, distribution, or copying of this communication is strictly prohibited. If you have received this communication in error, notify us immediately by telephone and (i) destroy this message if a facsimile or (ii) delete this message immediately if this is an electronic communication.

The screenshot shows a Gmail interface with a search bar containing "ICMSCE". The email list on the left includes "Compose", "Inbox (120)", "Starred", "Snoozed", "Sent", "Drafts (11)", and "More". The selected email is from "ICMSCE 2021 automail-noreply@upiconf.org via srv300.main-hosting.eu" to "me" dated "Thu, Jun 10, 2021, 11:18 AM". The email body contains the following text:

ICMSCE 2021 : Please Activate Your Account External → Inbox x

Dear Ms. Jumrodah Jumrodah,

Your registration to **ICMSCE 2021** has been completed, please open (copy-paste to browser) the following link to activate your account:

<https://upiconf.org/2021/icmsce/kfz/pages/activate.php?q=TQkaUsSaz>

Thank you.
Best regards,

ICMSCE 2021 Organizing Committee
Website : <http://science.conference.upi.edu>
Email : science.conference@upi.edu

<https://konfrenzi.com> | Web Systems for Scientific Conferences

Browser tabs: (1) WhatsApp, MASEIS 2019: Pa, ICMSCE 2021: x, 001 LoA_SP_ICMSCE, full_paper_abs-492.p, Paper Announcemen, Jumrodah_2019_J_Pi, Jumrodah.pdf

URL: https://mail.google.com/mail/u/1/#search/ICMSCE/FMfcgzGkXmXsbLfQwxDFtdTtXdFWWpI

Search: ICMSCE

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Universitas Pendidikan Indonesia

25 of many

ICMSCE 2021: Your Registration has been Approved

External

ICMSCE 2021 automail-noreply@upiconf.org via srv300.main-hosting.eu to me

Thu, Jun 10, 2021, 9:21 PM

Dear Ms. Jumrodah Jumrodah,

Your Registration has been Approved.
User ID: USER-605
Please use this "User ID" in all correspondence (instead of your name).

Login Link : <https://upiconf.org/2021/icmsce/kfz/kfz-page/home.php>
Login Email : jum_rodah@student.upi.edu
Login Code : ChLJmUAxN

You need the "Login Code" to login to our site, so please do not delete this email.

Please login to submit your abstract and paper.

Thank you.
Best regards,

ICMSCE 2021 Organizing Committee
Website : <http://science.conference.upi.edu>

77°F Mostly cloudy 10:55 PM 4/17/2023

Browser tabs: (1) WhatsApp, MASEIS 2019: Pa, ICMSCE 2021: x, 001 LoA_SP_ICMSCE, full_paper_abs-492.p, Paper Announcemen, Jumrodah_2019_J_Pi, Jumrodah.pdf

URL: https://mail.google.com/mail/u/1/#search/ICMSCE/FMfcgzGkXwMRLpLHSzXCWzJJNRTvWsvf

Search: ICMSCE

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Universitas Pendidikan Indonesia

24 of many

ICMSCE 2021 automail-noreply@upiconf.org via srv300.main-hosting.eu to me

Mon, Jun 28, 2021, 10:30 PM

Dear Ms. Jumrodah Jumrodah,

Payment proof for the following abstract has been confirmed.
Payment receipt can be printed directly from your account.

Abstract ID: ABS-571
Title: CULTIVATION STAGES EX-SITU OF SALMACHIS SPHAEROIDES ON LARVAL DEVELOPMENT AND JUVENIL THROUGH METAMORPHOSIS FOR SUSTAINABILITY
Author: J Jumrodah1,2,* , S Liliasari1, Yusuf H. Adisendjaja1 and Yayan Sanjaya1
Presenter: Jumrodah
Paid amount: IDR 600,000

Payment receipt can be printed directly from your account as follows:
- Login to your account
- Click "Abstract" on the top menu
- Click "Print Payment Receipt" button below your abstract

Thank you.
Best regards,

ICMSCE 2021 Organizing Committee
Homepage : <http://science.conference.upi.edu>
Email : science.conference@upi.edu

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Saturday, September 11, 2021

Letter of Acceptance

To Whom It May Concern:

This is to certify that

J JUMRODAH, S LILIASARI, YUSUF H. ADISENDJAJA, YAYAN SANJAYA

Have ~~submitted~~ the paper ~~entitled~~

CULTIVATION STAGES EX-SITU OF SALMACHIS SPHAEROIDES ON LARVAL DEVELOPMENT AND JUVENIL THROUGH METAMORPHOSIS FOR SUSTAINABILITY

The paper has been reviewed and accepted for publication

The online publication of this paper is subject to a payment of **USD753.4**.

Best regards

A handwritten signature in black ink, appearing to be a stylized name.

*Editor, Journal of Engineering Science &
Technology <http://jestec.taylors.edu.my/>*

Review Paper J.Jumrodah

Title:

CULTIVATION STAGES EX-SITU OF SEA URCHIN (*SALMACHIS SPHAEROIDES*) ON LARVAL DEVELOPMENT AND EARLY JUVENIL THROUGH METAMORPHOSIS FOR SUSTAINABLE DEVELOPMENT

REVIEWER #1-R

1. Title

- Please correct the title more concisely according to the contents of the manuscript.

Response to the Reviewer 1:

We reduce some a words, so the title:

CULTIVATION STAGES EX-SITU OF *SALMACHIS SPHAEROIDES* ON LARVAL DEVELOPMENT AND JUVENIL THROUGHT METAMORPHOSIS FOR SUSTAINABILITY

2. Abstract

- Please revise the abstract, Abstract consists of aspects of objectives, methods, results, and implications.

Response to the Reviewer 1:

we revised abstract and added from consists of aspects of objectives, methods, results, and implications.

aspects of objectives:

Purpose of this research is to determine sea urchin stages of cultivation in the laboratory and of embryonic development stages of *Salmachis sphaeroides*.

Aspect of methods:

The cultivation method consists of five stages

aspects of results:

Response to the Reviewer 1:

This research has of sea urchin is a good early models organism development, because of spawning can be one naturally and the stages of development the faster and simple and of embryonic development stages it is easy to observe.

aspects of implications:

Response to the Reviewer 1:

The results of this study can be used as a reference for sea urchin cultivation ex-situ in laboratory and a very helpful for understanding early models of organism.

- The first until third sentences in the abstract seem to have to be omitted after that add implications at the end of the abstract.

Response to the Reviewer 1:

We correct the abstract and discard sentences 1-3 sentences and we add aspects of implications at the end of the abstract:

The results of this study can be used as a reference for sea urchin cultivation ex-situ in laboratory and a very helpful for understanding early models of organism.

3. Introduction

Please correct the introduction:

- The first paragraph consists of an explanation of the title.

Response to the Reviewer 1:

We add a sentence in the second for explanation of the title:

Breeding sea urchins in the laboratory for sustanaibility is an Ex-situ activities related to real problems and is in line with is one of the SDGs educational goals, it is life under water. The ultimate goal of sustainable development is to raise global living standards by managing and utilizing the resources of the marine in a sustainable manner.

- The second paragraph consists of related or existing studies (at least 5 references). At the end of the sentence explain the differences in the research to be carried out.

Response to the Reviewer 1:

We add a sentence in the one for consists of related or existing studies:

Researchers have developed various ways to cultivation of sea urchin in laboratory with the stage a growth of *T. gratilla* [4, 5, 6], of *Salmachis sphaeroides* [7], of *E. mathei* [8].

We add a sentence in the second for explain the differences in the research to be carried out:

However, it has not been found systematically the stages of sea urchin cultivation in the laboratory to optimize the growth and development of *Salmachis sphaeroides* larvae for sustainability. In addition it will also be presented from cell cleavage to early juvenile, so that it can be used as a model to study the stages of organism development.

- The third paragraph can explain the novelty of the research.

Response to the Reviewer 1:

We add a sentence in the second for explain the novelty of the research:

However by using a natural way, namely raising the initial temperature, the parent of sea urchins is still alive and can be maintained. The given of aeration at the larval stage with small plastic paddles was stirred constantly by 5 rpm rotating motors was the optimal speed for rearing *Salmachis sphaeroides* larvae.

- The final paragraph provides a brief description of the research, such as an abstract explanation in different language styles.

Response to the Reviewer 1:

We add a sentence in the second for explanation in different language styles

We add a sentence in the second for explain the novelty of the research:

So this studies focused on first to determine of sea urchin stages of cultivation in the laboratory consists of five stages sea urchin, cultivation in the laboratory should be attention to external factors, such as sea water filter used should be clean free of fungi and bacterial contamination. Second, is to determine of embryonic development stages of *Salmachis sphaeroides*

- Don't forget to include references in each paragraph

Response to the Reviewer 1: Ok, good

4. Add a chapter on *theoretical framework* (After introduction before method)

5. Response to the Reviewer 1:

We add one paragraph for Add a chapter on *theoretical framework*:

Sea urchins as food ingredient also was used as research models in the fields of biology at development and growth organism model, cell biology, molecular biology of gene regulation, evolutionary biology, biochemistry of metabolite and marine biology, because of several advantages, it has the permeability of embryos to nucleic acid and protein

precursors, they also it easy to observe the structure and function of the cis-regulatory system (one-sided regulator), for isolation of transcription factors and for exploration of gene networks.

6. Method

- The method must explain how the stages of the research process are carried out.

Response to the Reviewer 1:

We add a sentence in the second for method must explain how the stages of the research:

This research method is a laboratory experimental research with treatment parent of sea urchin against predetermined external factors is temperature, salinity, pH, sea water filter and feed. Then observes and records each phase of its development.

7. Results and Discussion

- In the results and discussion, each explanation of the research results is compared with the theory.

Response to the Reviewer 1:

- We add a sentence in the second for: Based on observations when spawning is one parent secretes a white liquid, then the other parent is yellowish, this is because the scent of sperm cells stimulates the parent. At the time of spawning, the male parent generally releases the sperm cells and then the female parent ejects the egg cell [23, 24].

- Add at least 1 theory or reference in each paragraph of results and discussion

- Add one paragraph explanation before writing the table or figure. Example (Table or figure 1 shows) after that, enter the table or figure.

Response to the Reviewer 1:

We add a sentence in the one for paragraph explanation before writing the Figure:

Based on Fig 1a It is a male parent who is releasing a colored a like liquid, this is a sperm cell, and shown in Fig 1b. It is a female parent who is releasing eggs cell with a yellow color.

We add a sentence in the one for paragraph explanation before writing the table:

The stages of larval development in *Salmachis sphaeroides* from cell division to juvenile can be seen in Table 1.

8. Conclusions

The conclusion is corrected by presenting in the form of paragraphs instead of points

Response to the Reviewer 1:

The conclusion has been made in the form of a paragraph

The conclusion is corrected by presenting in the form of paragraphs instead of points

This research is an initial laboratory scale research that has succeeded in cultivating *Salmachis sphaeroides* in the laboratory. Sea urchin is a good early models organism development, because of spawning can be one naturally and the stages of development the faster and simple and the growth of process it is easy to observe. The success of sea urchin cultivation is because it is supported using with small plastic paddles was stirred constantly by 5 rpm rotating motors was the optimal speed for rearing *Salmachis sphaeroides* larvae, so that the survival rate of the larvae was greater when compared to using 8 rpm and 10 rpm. The larval stage of *Salmachis sphaeroides* on metamorphosed showing podia and spines (settle toward early juvenile) faster when compared to of *Salmachis sphaeroides* cultivated in different places. *Salmachis sphaeroides* of the larvae to reach aboral view of a recently metamorphosed sea urchin showing podia and spines (settle) (early juvenile) its 25 days after fertilization. Further researches are expected to can cultivate other marine biota that have economic and ecological value in a wider scope not only in the laboratory.

- Add explanation of the research objectives, methods, results and implication.
- Response to the Reviewer 1:

We add a sentence in the one for the research methods, results and implication:

Salmachis sphaeroides of the larvae to reach aboral view of a recently metamorphosed sea urchin showing podia and spines (settle) (early juvenile) its 25 days after fertilization. Further researches are expected to can cultivate other marine biota that have economic and ecological value in a wider scope not only in the laboratory.

9. References

- Add a minimum of 10 references.
- Response to the Reviewer 1: add 3 references already 9 pages
- Use the latest references up to the last 5 years.

10. Grammer

- There are still some grammatical errors. Please check and correct the manuscript.

11.

And please add some relevant references from these journals:

Indonesian Journal of Community and Special Needs Education (IJCSNE)

Indonesian Journal of Educational Research and Technology (IJERT)

ASEAN Journal of Science and Engineering Education (AJSEE)

ASEAN Journal of Science and Engineering(AJSE)

Indonesian Journal of Multidisciplinary Research (IJOMR)

Indonesian Journal of Science and Technology (IJOST)

Reviewer 2

Title: CULTIVATION STAGES EX-SITU OF SEA URCHIN (SALMACHIS SPHAEROIDES) ON LARVAL DEVELOPMENT AND EARLY JUVENIL THROUGH METAMORPHOSIS FOR SUSTAINABLE DEVELOPMENT

1. Abstract: make it short:

- purpose 1 sentence

Response to the Reviewer 2:

We add a sentence in the in the one for purpose:

Purpose of this research is to determine sea urchin stages of cultivation in the laboratory and of embryonic development stages of *Salmachis sphaeroides*.

- method 2 sentences

Response to the Reviewer 2:

We add a sentence in the in the second for method:

The cultivation method consists of five stages: preparation of feed, taking sea urchin in natural habitats, spawning and fertilization, maintenance and enlargement of larvae. Spawning method is doing by natural stimulating, is raising slowly temperature and sea water adding

- results 2 sentences

Response to the Reviewer 2:

We add a sentence in the in the second for result:

This research has of sea urchin is a good early models organism development. The success of sea urchin cultivation, because an attention to external factors, such as temperature, salinity, feed and sea water filter.

- discussion 2 sentences, explaining why the results come?

Response to the Reviewer 2:

We add a sentence in the in the one for explaining why the results come:

because of spawning can be one naturally and the stages of development the faster and simple and of embryonic development stages it is easy to observe.

- impact of this study 1 sentence

Response to the Reviewer 2:

We add a sentence in the in the one for impact:

The results of this study can be used as a reference for sea urchin cultivation ex-situ in laboratory and a very helpful for understanding early models of organism

2. Abstract: do not need some values. Change into increase or decrease

3. Introduction: Add novelties, such as “the novelties of this study were (1) xxx, (2) xxx

Response to the Reviewer 2:

We add a sentence in the in the four for Add novelties:

Several studies to spawning of sea urchins generally uses chemicals [2, 4, 7, 8], so that after spawning of sea urchins will it die. However by using a natural way, namely raising the initial temperature, the parent of sea urchins is still alive and can be maintained. The given of aeration at the larval stage with small plastic paddles was stirred constantly by 5 rpm rotating motors was the optimal speed for rearing *Salmachis sphaeroides* larvae. Meanwhile, other researches employed a speed of 10 rpm and 20 rpm [4, 7]

4. Conclusion: Make it 5 sentences

Response to the Reviewer 2:

We add a sentence in the in the five for conclusion:

This research is an initial laboratory scale research that has succeeded in cultivating *Salmachis sphaeroides* in the laboratory. Sea urchin is a good early models organism development, because of spawning can be one naturally and the stages of development the faster and simple and the growth of process it is easy to observe. The success of sea urchin cultivation is because it is supported using with small plastic paddles was stirred constantly by 5 rpm rotating motors was the

optimal speed for rearing *Salmachis sphaeroides* larvae, so that the survival rate of the larvae was greater when compared to using 8 rpm and 10 rpm. The larval stage of *Salmachis sphaeroides* on metamorphosed showing podia and spines (settle toward early juvenile) faster when compared to of *Salmachis sphaeroides* cultivated in different places. *Salmachis sphaeroides* of the larvae to reach aboral view of a recently metamorphosed sea urchin showing podia and spines (settle) (early juvenile) its 25 days after fertilization. Further researches are expected to can cultivate other marine biota that have economic and ecological value in a wider scope not only in the laboratory.

5. Recheck how to call table and figure

Response to the Reviewer 2:

We add a sentence in the in the one for to call table and figure:

The stages of larval development in *Salmachis sphaeroides* from cell division to juvenile can be seen in Table 1.

The stages of larval development in *Salmachis sphaeroides* from cell division to juvenile can be seen in Figure 2a-2j.