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Kepada: Rozirwan Rozirwan <rozirwan@unsri.ac.id>

18 Januari 2022 pukul 21.13

Rozirwan Rozirwan

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Thank you,
Prof. Dr. Fikrat M. Hassan

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Dr. Rozirwan
Department of Marine Science
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Indralaya, Indonesia 30862
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rozirwan@unsri.ac.id

Prof. Dr. Fikrat M. Hassan
Editor-in-Chief
Baghdad Science Journal

Januari 18, 2022

Dear Prof. Dr. Fikrat M. Hassan

I am pleased to submit an original research article entitled “Phytochemical composition, total phenolic content and antioxidant activity of *Anadara granosa* (Linnaeus, 1758) collected from the east coast of South Sumatra, Indonesia” by Rozirwan, Nanda, Gusti Diansyah, Redho Yoga Nugroho, and Muhtadi for publication in the Baghdad Science Journal. We previously explored the antioxidant activity of several soft coral species found in the east coast of South Sumatra (Rozirwan et al. 2020), and this manuscript was constructed to explore the other benthic species, *Anadara granosa*.

In this manuscript, we show that *Anadara granosa* has a complete phytochemical composition followed by a high total phenol content. In addition, its antioxidant activity is categorized as a very potent antioxidant.

We believe that this manuscript is appropriate for publication by Baghdad Science Journal because it is appropriate with the journal’s aims and scope <https://bsj.uobaghdad.edu.iq/index.php/BSJ/about>. Our manuscript creates a paradigm for future studies of the use of *Anadara granosa* in the field of marine bioprospecting.

This manuscript has not been published and is not under consideration for publication elsewhere. We have no conflicts of interest to disclose, but we do respectfully request that Prof. Dr. Fikrat M. Hassan review our manuscript.

Thank you for your consideration

Sincerely



Dr. Rozirwan
Department of Marine Science
University of Sriwijaya



Submission Acknowledgement

Rozirwan unsri <rozirwan@unsri.ac.id>

[BSJ] Submission Acknowledgement

2 pesan

Prof. Dr. Fikrat M. Hassan <bsj-info@csu.uobaghdad.edu.iq>

18 Januari 2022 pukul 23.22

Kepada: Rozirwan Rozirwan <rozirwan@unsri.ac.id>

Rozirwan Rozirwan:

Thank you for submitting the manuscript, "Phytochemical composition, total phenolic content and antioxidant activity of Anadara granosa (Linnaeus, 1758) collected from the east coast of South Sumatra, Indonesia" to Baghdad Science Journal. With the online journal management system that we are using, you will be able to track its progress through the editorial process by logging in to the journal web site:

Submission URL: <https://bsj.uobaghdad.edu.iq/index.php/BSJ/authorDashboard/submission/6941>

Username: rozirwan

If you have any questions, please contact me. Thank you for considering this journal as a venue for your work.

Prof. Dr. Fikrat M. Hassan

Baghdad Science Journal,

Al- Jadiryia, Baghdad P.O. BOX 4732. Baghdad-Iraq

E-mail : bsj@csu.uobaghdad.edu.iq

Mobile :+964 780 070 9148

Rozirwan unsri <rozirwan@unsri.ac.id>

10 Juni 2022 pukul 15.55

Kepada: "Prof. Dr. Fikrat M. Hassan" <bsj-info@csu.uobaghdad.edu.iq>

Dear Editor-in-Chief,

I would like to inquire about the progress of my submitted manuscript entitled "Phytochemical composition, total phenolic content and antioxidant activity of Anadara granosa (Linnaeus, 1758) collected from the east coast of South Sumatra, Indonesia" to the Baghdad Science Journal (BSJ). Registered number BSJ - 6941.

I really hope the information from you.

Thank you very much.

Warm regards.



[BSJ] Editor Decision

6 pesan

Prof. Dr. Fikrat M. Hassan <fikrat@csw.uobaghdad.edu.iq>

28 Juni 2022 pukul 15.25

Kepada: Rozirwan <rozirwan@unsri.ac.id>, Nanda <nanda999@gmail.com>, Gusti Diansyah <gustidian.syah@gmail.com>, Redho Yoga Nugroho <redhoyn.29@gmail.com>, Muhtadi <muhtadiikel@gmail.com>

Rozirwan, Nanda, Gusti Diansyah, Redho Yoga Nugroho, Muhtadi:

We have reached a decision regarding your submission to Baghdad Science Journal, "Phytochemical composition, total phenolic content and antioxidant activity of Anadara granosa (Linnaeus, 1758) collected from the east coast of South Sumatra, Indonesia".

Our decision is: Revisions Required

Reviewer B:

Recommendation: Revisions Required

Reviewer Report (for Editor and Author)

good greeting

Please make all the modifications described in the attached manuscript.

Reviewer C:

Recommendation: Accept Submission

Baghdad Science Journal,

Al- Jadirya, Baghdad P.O. BOX 4732. Baghdad-Iraq

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4 lampiran**D-6941-Article Text-49956-1-18-20220210.docx**

1635K

**B-6941-Article Text-50634-1-4-20220224.docx**

1682K

**C-Correction Report- 6941-Article Text-50634-1-4-20220224.docx**

17K

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1638K

Rozirwan unsri <rozirwan@unsri.ac.id>

29 Juni 2022 pukul 05.35

Kepada: "Prof. Dr. Fikrat M. Hassan" <fikrat@csw.uobaghdad.edu.iq>

Cc: Nanda <nanda999@gmail.com>, Gusti Diansyah <gustidian.syah@gmail.com>, Redho Yoga Nugroho <redhoyn.29@gmail.com>, Muhtadi <muhtadiikel@gmail.com>

Noted with thanks.

Warm regards

[Kutipan teks disembunyikan]

Rozirwan unsri <rozirwan@unsri.ac.id>

29 Juni 2022 pukul 15.21

Kepada: "Prof. Dr. Fikrat M. Hassan" <fikrat@csw.uobaghdad.edu.iq>

Dear Prof. Dr. Fikrat M. Hassan

We have completed all revisions and uploaded the manuscript to the system with the title "Phytochemical composition, total phenolic content and antioxidant activity of Anadara granosa (Linnaeus, 1758) collected from the east coast of South Sumatra, Indonesia"

Hopefully our manuscript would be better than before as expected by the reviewers

Response to Reviewers

Reviewer #B	Response to Reviewer
Materials and Methods	
Please put an illustrative picture of <i>A. granosa</i> . . .	Revised, “We have added an illustrative picture of <i>A. granosa</i> in section Preparation of extractions”
We should be talking about preparing for exams to phytochemical . . .	Revised, “We have added more information about preparing the preliminary phytochemical test in the paragraph”
Correction of word “wet”	Revised, “We have fixed it to frish as per reviewer request”
Reference No. 17 does not contain the year . . .	Revised, “We have deleted the reference because it is too old”
More than a quarter of the total of 43 references are old Please replace with other references that are supposed to be from 2018 to till now , five years before 2022 . . .	Revised, “We have replaced the references below 2018 with new references”
Reviewer #C	
The abbreviations (Abs, % Inh) should be explained in Table 3 under the table . . .	Revised, “We have explained the abbreviations (Abs, % Inh) under the Table 3 ”
Minor correction of grammar errors and spelling english	Revised, “We have fixed all the error ”



[BSJ] New notification from Baghdad Science Journal

1 pesan

Asst. Prof. Dr. Ramia Fua'd Mirza <ramia.mirza@gmail.com>
Balas Ke: "Prof. Dr. Fikrat M. Hassan" <fikrat@csu.uobaghdad.edu.iq>
Kepada: Rozirwan Rozirwan <rozirwan@unsri.ac.id>

12 Agustus 2022 pukul 21.30

You have a new notification from Baghdad Science Journal:

You have been added to a discussion titled "Finished and Done" regarding the submission "Phytochemical composition, total phenolic content and antioxidant activity of Anadara granosa (Linnaeus, 1758) collected from the east coast of South Sumatra, Indonesia".

Link: <https://bsj.uobaghdad.edu.iq/index.php/BSJ/authorDashboard/submission/6941>

Prof. Dr. Fikrat M. Hassan

Baghdad Science Journal,
Al- Jadirya, Baghdad P.O. BOX 4732. Baghdad-Iraq
E-mail : bsj@csu.uobaghdad.edu.iq
Mobile :+964 780 070 9148



Revision 3

Rozirwan unsri <rozirwan@unsri.ac.id>

[BSJ] New notification from Baghdad Science Journal

1 pesan

Asmaa M. Salih Almohaidi <asmaams_bio@csu.uobaghdad.edu.iq>
Balas Ke: "Prof. Dr. Fikrat M. Hassan" <fikrat@csu.uobaghdad.edu.iq>
Kepada: Rozirwan Rozirwan <rozirwan@unsri.ac.id>

15 Agustus 2022 pukul 14.11

You have a new notification from Baghdad Science Journal:

There is new activity in the discussion titled "Finished and Done" regarding the submission "Phytochemical composition, total phenolic content and antioxidant activity of Anadara granosa (Linnaeus, 1758) collected from the east coast of South Sumatra, Indonesia".

Link: <https://bsj.uobaghdad.edu.iq/index.php/BSJ/authorDashboard/submission/6941>

Prof. Dr. Fikrat M. Hassan

Baghdad Science Journal,
Al- Jadirya, Baghdad P.O. BOX 4732. Baghdad-Iraq
E-mail : bsj@csu.uobaghdad.edu.iq
Mobile :+964 780 070 9148



Revision 3

Rozirwan unsri <rozirwan@unsri.ac.id>

[BSJ] New notification from Baghdad Science Journal

1 pesan

Salah Abdulla Hasoon <salahabd55@gmail.com>

17 Agustus 2022 pukul 19.07

Balas Ke: "Prof. Dr. Fikrat M. Hassan" <fikrat@csu.uobaghdad.edu.iq>

Kepada: Rozirwan Rozirwan <rozirwan@unsri.ac.id>

You have a new notification from Baghdad Science Journal:

You have been added to a discussion titled "correction" regarding the submission "Phytochemical composition, total phenolic content and antioxidant activity of Anadara granosa (Linnaeus, 1758) collected from the east coast of South Sumatra, Indonesia".

Link: <https://bsj.uobaghdad.edu.iq/index.php/BSJ/authorDashboard/submission/6941>

Prof. Dr. Fikrat M. Hassan

Baghdad Science Journal,

Al- Jadirya, Baghdad P.O. BOX 4732. Baghdad-Iraq

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[BSJ] Primarily acceptance Letter

2 pesan

Prof. Dr. Fikrat M. Hassan <fikrat@csw.uobaghdad.edu.iq>
Balas Ke: "Prof. Dr. Fikrat M. Hassan" <fikrat@csw.uobaghdad.edu.iq>
Kepada: Rozirwan Rozirwan <rozirwan@unsri.ac.id>

17 Agustus 2022 pukul 23.47

Dear Rozirwan Rozirwan,

We have reached a decision regarding your submission to Baghdad Science Journal, "Phytochemical composition, total phenolic content and antioxidant activity of Anadara granosa (Linnaeus, 1758) collected from the east coast of South Sumatra, Indonesia".

Our decision is to: a primarily accept the submission.

Please, complete the fee publication, for more information on [Fees of Publication](#)

The publication fee is \$150

Prof. Dr. Fikrat M. Hassan
fikrat@csw.uobaghdad.edu.iq

Baghdad Science Journal,

Al- Jadirya, Baghdad P.O. BOX 4732. Baghdad-Iraq

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Rozirwan unsri <rozirwan@unsri.ac.id>

18 Agustus 2022 pukul 13.43

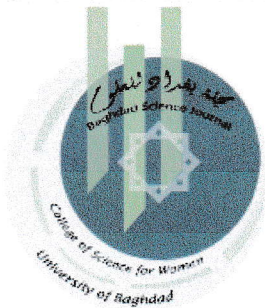
Kepada: "Prof. Dr. Fikrat M. Hassan" <fikrat@csw.uobaghdad.edu.iq>

Hereby this mail, we would like to inform you that we have done the payment for publication fee to Baghdad Science Journal, and here we attach its payment document. Our submitted manuscript entitled "Phytochemical composition, total phenolic content and antioxidant activity of Anadara granosa (Linnaeus, 1758) collected from the east coast of South Sumatra, Indonesia". Registered number BSJ - 6941.

Thank you very much for understanding!

Best Regards

[Kutipan teks disembunyikan]



University of Baghdad
College of Science for Women
Baghdad Science Journal

SDI/ 135

August 21, 2022

Rozirwan^{1*}, Nanda¹, Gusti Diansyah¹, Redho Yoga Nugroho², Muhtadi¹
¹ Department of Marine Science, Faculty of Math and Natural Science, Sriwijaya University, Indralaya, Indonesia.

² Environmental Management Study Program, Graduate Program, Sriwijaya University, Palembang, Indonesia.

E-mail: rozirwan@unsri.ac.id

Manuscript ID: 6941

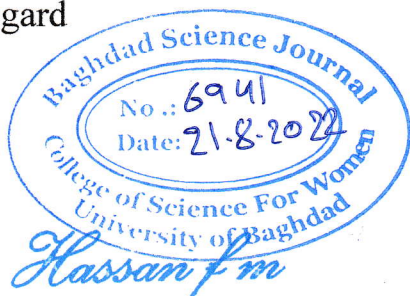
Dear Authors,

We are glad to bring for your attention that the submitted manuscript “Phytochemical composition, total phenolic content and antioxidant activity of *Anadara granosa* (Linnaeus, 1758) collected from the east coast of South Sumatra, Indonesia” has been accepted for publication in Baghdad Science Journal (Baghdad Sci. J.).

It will be published in first online May, 2023.

Thank you for considering our journal as an avenue for your publications

Regard



Prof. Dr. Fikrat M. Hassan
Editor -in Chief

College of Science for Women, University of Baghdad, Jadriah, Baghdad, Iraq.

College website: <https://csw.uobaghdad.edu.iq>

Journal website: <https://bsj.uobaghdad.edu.iq>

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P-ISSN: 2078-8665

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University of Baghdad
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Baghdad Science Journal

SDI/ 135

August 21, 2022

Rozirwan^{1*}, Nanda¹, Gusti Diansyah¹, Redho Yoga Nugroho², Muhtadi¹
¹ Department of Marine Science, Faculty of Math and Natural Science, Sriwijaya University, Indralaya, Indonesia.

² Environmental Management Study Program, Graduate Program, Sriwijaya University, Palembang, Indonesia.

E-mail: rozirwan@unsri.ac.id

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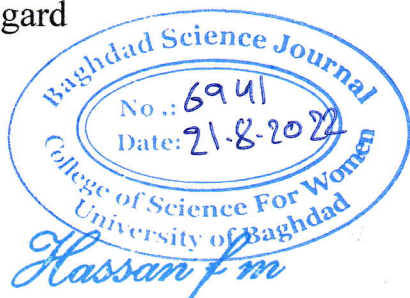
Dear Authors,

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Thank you for considering our journal as an avenue for your publications

Regard



Prof. Dr. Fikrat M. Hassan
Editor -in Chief

College of Science for Women, University of Baghdad, Jadriah, Baghdad, Iraq.

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PE/III/2022

DOI: <https://dx.doi.org/10.21123/bsj.2023.6941>

Phytochemical composition, total phenolic content and antioxidant activity of *Anadara granosa* (Linnaeus, 1758) collected from the east coast of South Sumatra, Indonesia

Rozirwan^{1*} 
Muhtadi¹ 

Nanda¹ 
Fauziyah¹ 

Redho Yoga Nugroho² 
Wike Ayu Eka Putri¹ 

Gusti Diansyah¹ 
Andi Agussalim¹ 

¹Department of Marine Science, Faculty of Math and Natural Science, Sriwijaya University, Indralaya, Indonesia.

²Environmental Management Study Program, Graduate Program, Sriwijaya University, Palembang, Indonesia.

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Abstract:

Anadara granosa is a species of the class bivalve commonly found on the east coast of South Sumatra as a fishery commodity. This species has not been widely studied as a source of new bioactive compounds that have antioxidant abilities. This study aims to analyze the antioxidant ability of *A. granosa* against DPPH radicals and its phytochemical profile qualitatively. Samples were taken at the fishing port of Sungsang Village, South Sumatra, Indonesia. Furthermore, the samples were extracted using ethanol as a solvent and tested for antioxidants against DPPH radicals, total phenol analysis, and preliminary phytochemical test. Based on the antioxidant test results, the IC₅₀ value of the ethanolic extract of *A. granosa* was 85 g/ml with ascorbic acid 2 g/ml as a comparison. Then, the ethanol extract contained a total of 10.7057 mgGAE/g phenol and the results of the phytochemical test contained bioactive compounds of alkaloids, steroids, flavonoids, saponins, and tannins. The ethanolic extract of *A. granosa* contained bioactive compounds, which were reported to have potent antioxidant activity. The results of this study were expected to be important information in the latest report of the antioxidant activity of *A. granosa* species and contributed to the development of marine natural products.

Keywords: *Anadara granosa*, Antioxidant, Bioactive compounds, Phytochemical composition, Total phenolic content

Introduction:

Benthic communities are found in the ecosystem of the east coast of South Sumatra. The east coast area dominated by mangrove ecosystems becomes a good habitat for benthic community life¹. The diversity and distribution of benthic organisms are supported by the high food sources and the availability of living places on the surface of vast mud substrates². The environment on the east coast of South Sumatra has a wide muddy landscape because it is influenced by the dynamics of the waters of major rivers such as the Musi River and Banyuasin River and the sea waters of the Bangka Strait which tend to carry a considerable sedimentation factor. The area is overgrown by dense mangroves with fluctuating environmental

physical-chemical dynamics^{3,4}. Natural fluctuations in the coastal environment cause only benthic organisms, especially certain mollusks, to survive such as marine shellfish and marine gastropods organisms.

Anadara granosa is a group of the family Arcidae, a class of bivalves, mollusk phylum known for a long time⁵. Marine mollusks have been reported to have biological activity because they contain a variety of bioactive compounds, such as gastropod groups in mangrove vegetation⁶ and coral reef ecosystem⁷, and the marine bivalves group⁸. Bioactive compounds produce essential biological activities in the form of antioxidant abilities that are attracting attention today. Antioxidants aim to capture free radicals that enter