

BUKTI KORESPONDENSI
ARTIKEL JURNAL INTERNASIONAL BEREPUTASI

Judul : Development of Sumbawa honey as tonic to stimulate stamina during the COVID-19 pandemic in West Nusa Tenggara
Jurnal : Pharmacy Education (2022) 22(2) 50 - 54
<https://doi.org/10.46542/pe.2022.222.5054>
Penulis : Baiq Leny Nopitasari, Shah Iqbal Ikraman Akbar, Alvi Kusuma Wardani*

No	Perihal	Tanggal
1.	Bukti revisi abstrak yang sudah diupload	6 Agustus 2021
2.	Bukti penerimaan abstrak artikel untuk dipresentasikan secara oral pada Pertemuan Ilmiah Tahunan Virtual IAI 2021 "THE OPPORTUNITIES OF PHARMACISTS DIGITAL SERVICE IN PANDEMIC RECOVERY"	10 Agustus 2021
3.	Bukti proofreading manuskrip	24 Agustus 2021
4.	Bukti konfirmasi hasil review manuskrip pertama dan komentar reviewer	22 Oktober 2021
5.	Bukti reminder untuk submit revisi manuskrip sebelum deadline	8 November 2021
6.	Bukti manuskrip yang diresubmit pertama	12 November 2021
7.	Bukti konfirmasi hasil review manuskrip kedua dan komentar reviewer	14 November 2021
8.	Bukti manuskrip yang diresubmit kedua	15 November 2021
9.	Bukti penerimaan manuskrip untuk dipublikasi	21 November 2021
10.	Bukti pembayaran biaya publikasi	25 November 2021
11.	Bukti konfirmasi proses copy editing dan galleys	17 Desember 2021
12.	Bukti artikel sudah terpublikasi	9 Maret 2022

**1. Bukti revisi abstrak yang sudah diupload
(6 Agustus 2021)**



Baiq Leny Nopitasari <baiqleny.nopitasari@gmail.com>

[PIT Virtual IAI 2021] Revisi Abstrak

3 messages

Rudi Hendra <rhendra@iai.id>

Fri, Aug 6, 2021 at 10:55 AM

To: baiqleny.nopitasari@gmail.com, adin.hakim@poltekkesjkt2.ac.id

Kepada,

Yth Bapak/Ibu

Bersama dengan ini kami ucapkan atas kesediaan bapak/ibu untuk berpartisipasi dalam PIT Virtual IAI 2021. Setelah kami periksa, abstrak bapak/ibu ditulis dalam Bahasa Inggris, oleh karena itu kami mohon kepada bapak/ibu untuk dapat merevisi abstraknya ke dalam Bahasa Indonesia.

Bapak/Ibu dapat mengirimkan kembali abstrak dalam Bahasa Indonesia melalui email ini.

Atas perhatiannya, kami ucapkan terima kasih

Seksi Ilmiah
PIT Virtual IAI 2021

Baiq Leny Nopitasari <baiqleny.nopitasari@gmail.com>

Sat, Aug 7, 2021 at 1:40 PM

To: Rudi Hendra <rhendra@iai.id>

Salam Pak Rudi...

Berikut saya kirim ulang abstrak saya yang sudah berbahasa indonesia. Mohon diproses sesuai dengan prosedur yang berlaku pada kegiatan ilmiah PIT IAI 2021. Terimakasih...

[Quoted text hidden]

--

Baiq Leny Nopitasari, S.Farm., M.Farm., Apt

**Abstrak PIT 2021 Baiq Leny Nopitasari.doc**

40K

Rudi Hendra <rhendra@iai.id>

Sat, Aug 7, 2021 at 3:51 PM

To: Baiq Leny Nopitasari <baiqleny.nopitasari@gmail.com>

Baik, Terima kasih ibu.

[Quoted text hidden]

--

Dr. Rudi Hendra Sy., M.Sc., Apt
Bidang Digitalisasi & Sistem Informasi kefarmasian
Ikatan Apoteker Indonesia

Pertemuan Ilmiah Tahunan Virtual IAI 2021
THE OPPORTUNITIES OF PHARMACISTS' DIGITAL SERVICE IN
PANDEMIC RECOVERY
26-28 AGUSTUS 2021

Kategori: FT

Development of Sumbawa Honey as Tonic to Stimulate Stamina During the Covid-19 Pandemic in West Nusa Tenggara

Baiq Leny Nopitasari,^a Shah Iqbal Ikraman Akbar,^b Alvi Kusuma Wardani*^c

^aDepartment of Clinical Pharmacy and Pharmacology, Faculty of Health Sciences, Universitas Muhammadiyah Mataram, West Nusa Tenggara, Indonesia; ^bDepartment of Pharmacy, Faculty of Health Sciences, Universitas Muhammadiyah Mataram, West Nusa Tenggara, Indonesia; ^cDepartment of Phytochemical and Pharmacognosy, Faculty of Health Sciences, Universitas Muhammadiyah Mataram, West Nusa Tenggara, Indonesia.

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ABSTRACT

Introduction: Covid-19 is a disease caused by infection with a new type of coronavirus called SARS-CoV-2. The positive cases of Covid-19 are increasing day by day, both in the world, in Indonesia, and in the West Nusa Tenggara region. Covid-19 is a self-limiting disease, which can heal by itself as long as the human body's power is sufficient to fight the infectious agent. One of way to increase human immunity is to maintain the stamina. Sumbawa honey is one type of honey that is very popular inside and outside the island of Sumbawa even to foreign countries as a stamina enhancer. **Aim:** This study aimed to examine the ability of Sumbawa honey as a tonic. **Methods:** This research was a true experimental model with natatory exhaustion method. The parameter measured was the fatigue time of the test animals. The longer the fatigue time, the higher the tonic effect produced. **Results:** The results of the one-way ANOVA test show significant differences in all groups ($p < 0.05$). Sumbawa honey at a dose of 75 g/70 kg BW with a positive control group which gives a significant difference in value ($p = 0.017$). It is hoped that Sumbawa honey can be an alternative to traditional therapy to meet the intake of body stamina and maintain a healthy body, especially during the Covid-19 pandemic. **Conclusion:** Sumbawa honey is proven to have activity as a tonicum and the optimal dose of Sumbawa honey which has an effect as a tonic is 75 grams/kgBW given once a day.

Keyword: Sumbawa honey; Tonic; Covid-19; Natatory exhaustion.

2. Bukti penerimaan abstrak artikel untuk dipresentasikan secara oral pada Pertemuan Ilmiah Tahunan Virtual IAI 2021 "THE OPPORTUNITIES OF PHARMACISTS DIGITAL SERVICE IN PANDEMIC RECOVERY"

(10 Agustus 2021)



Baiq Leny Nopitasari <baiqleny.nopitasari@gmail.com>

Letter of Acceptance PIT IAI 2021

1 message

Ikatan Apoteker Indonesia <billing@iai.id>

Tue, Aug 10, 2021 at 10:42 AM

Reply-To: Ikatan Apoteker Indonesia <billing@iai.id>

To: "apt. Baiq Leny Nopitasari, M.Farm" <baiqleny.nopitasari@gmail.com>

Cc: b4nch4@gmail.com



Kepada

Yth **apt. Baiq Leny Nopitasari, M.Farm,**Kode Abstrak: **OP2021038**

Pertama-tama kami ucapkan terima kasih atas partisipasi Bapak/Ibu di Pertemuan Ilmiah Tahunan Virtual IAI 2021 "THE OPPORTUNITIES OF PHARMACISTS DIGITAL SERVICE IN PANDEMIC RECOVERY", 26-28 AGUSTUS 2021. Berdasarkan hasil seleksi yang dilakukan oleh Seksi Ilmiah, abstrak dengan judul **Development of Sumbawa Honey as Tonic to Stimulate Stamina During the Covid-19 Pandemic in West Nusa Tenggara**, dinyatakan **DITERIMA** untuk dipresentasikan sebagai ORAL Presentation.

Diharapkan kepada Bapak dan Ibu agar dapat menyelesaikan proses registrasi dan pembayaran sebelum tanggal 20 Agustus 2021 untuk menghindari pembatalan penerimaan abstrak. Selanjutnya, Bapak/Ibu dapat memperhatikan informasi lebih lanjut terkait presentasi oral atau poster di <https://www.iai.id/pit2021/abstract>

Peserta oral dan poster presentasi dapat mempublikasikan hasil penelitiannya pada jurnal internasional atau nasional bereputasi yang telah ditentukan, informasi dan prosesnya dapat dilihat pada alamat: <https://www.iai.id/pit2021/fullpaper>

Narahubung:

1. apt. Dr. Yusran Syah, M.Sc. (081802759919)
2. apt. Ike Dhiah Rochmawati, M.Farm.Klin. (0811314411)

Demikianlah hal ini kami sampaikan, atas perhatian dan kerjasamanya kami ucapkan terimakasih.

With kindest regards

apt. Andi Hermansyah, M.Sc., Ph.D
Seksi Ilmiah
PIT Virtual IAI 2021

**3. Bukti proofreading manuskrip
(24 Agustus 2021)**

PROOFREADER STATEMENT

Understanding here :

Name : Wahyu Tejo, S.S

Position : English Teacher and Translator of CILACS UII

as a proofreader of the document:

“DEVELOPMENT OF SUMBAWA HONEY AS TONIC TO STIMULATE STAMINA DURING THE COVID-19 PANDEMIC IN WEST NUSA TENGGARA”

explained that the aforementioned documents have been read and evaluated in grammar and punctuation without changing the meaning & information from the original document.

Yogyakarta, August 25, 2021

Proofreader



Wahyu Tejo, S.S

Development of Sumbawa Honey as Tonic to Stimulate Stamina during the Covid-19 Pandemic in West Nusa Tenggara

Baiq Leny Nopitasari¹, Shah Iqbal Ikraman Akbar¹, Alvi Kusuma Wardani^{2*}

¹*Department of Clinical Pharmacy and Pharmacology, Faculty of Health Sciences, University of Muhammadiyah Mataram, West Nusa Tenggara, Indonesia.*

²*Department of Phytochemical and Pharmacognosy, Faculty of Health Sciences, University of Muhammadiyah Mataram, West Nusa Tenggara, Indonesia*

*E-mail: alvikusuma99@gmail.com

ABSTRACT

Introduction: Covid-19 is a disease caused by infection with a recent type of coronavirus called SARS-CoV-2. The positive cases of Covid-19 have been increasing particularly in the West Nusa Tenggara region. Covid-19 is a self-limiting disease healing by itself as long as the immune of human body is sufficient to fight the infectious agent. One method performed to increase human immunity can be to maintain the stamina. Sumbawa honey is one type of honey which is tremendously popular inside and outside the island of Sumbawa even to foreign countries as a stamina enhancer. **Objective:** The objective of this study is to examine the ability of Sumbawa honey as a tonic. **Methods:** This research is an experimental model with natatory exhaustion method. The parameter measured was the fatigue time of the test animals. The longer the fatigue time, the higher the tonic effect produced. **Results:** The results of the one-way ANOVA test display significant differences in all groups ($p < 0.05$). Sumbawa honey at a dose of 75 g/70 kg BW with a positive control group provided a significant difference in value ($p = 0.017$). It is expected that Sumbawa honey can be an alternative to traditional therapy to meet the intake of body stamina and maintain a healthy body, particularly during the Covid-19 pandemic. **Conclusion:** Sumbawa honey is evident to own activity as a tonicum and the optimal dose of Sumbawa honey possessing an effect as a tonic is 75 grams/kgBW applied once a day.

Key words: Sumbawa honey, Tonic, Covid-19, Natatory exhaustion.

INTRODUCTION

Coronavirus Disease 2019 (covid-19) is a new type of disease which had never been previously identified in humans. The virus causing COVID-19 is called Sars-CoV-2. Corona virus is zoonotic (transmitted between animals and humans). Common symptoms of COVID-19 infection include acute respiratory distress such as fever, cough and shortness of breath. The average incubation period is 5-6 days with the longest incubation period which was 14 days. In severe cases of COVID-19, it causes pneumonia, acute respiratory syndrome, kidney failure, and even death (Ministry of Health, 2020). Based on a report obtained from the West Nusa Tenggara (NTB) Provincial Health Office, as of July 16, 2020, the number of positive cases infected with COVID-19 in the world was 13,745,330 cases with the number of cases in Indonesia was 81,668 cases, while the data in NTB was 1,669. The data has continued to increase every day (<https://corona.ntbprov.go.id/>). This disease also spreads quickly and covers a wide area. Even though COVID-19 is a self-limiting disease, it is still unidentified about this disease. Diseases included in self-limiting diseases are those healing by itself as long as the human body's power is adequate to fight the infectious agent. In increasing the human immune system, an agent which possesses an immunostimulant effect is required (Ministry of Health, 2020).

Sumbawa honey is one type of honey which is tremendously popular inside and outside the island of Sumbawa even to foreign countries. Sumbawa forest bee honey is mostly produced by *apis dorsata* bees (Hani, 2006). Sumbawa honey has been consumed and produced for generations by the community from ancient times, thus until now, Sumbawa honey is extensively used as a treatment for the community, particularly in the people of West Nusa Tenggara. Islam has taught many methods of treatment as implemented by the Prophet Muhammad. One of them is the treatment with honey. He stated, "You should employ medicines such as honey and read the Qur'an" (HR. Ma'ud). Honey is a medicine for all kinds of diseases, while the Qur'an is a medicine for diseases existing in the soul. Allah says in QS An-Nahl (16:68) which means "Your Lord inspired the bee, saying: "Set up hives in the mountains and in the trees and in the trellises that people put up" (Ihsan, 2011).

Honey is a sweet viscous substance created by bees through the fermentation of flower nectar in the digestive tract of bees after undergoing changes (Rahman, 2012).

Generally, honey is efficacious for producing energy, increasing endurance, and increasing stamina in the body. The magnesium mineral content in honey is the same as the magnesium content in blood serum, which is around 1.70-2.43 mg/dl. Honey also contains food elements administered as a natural tonic (Baskhara, 2008). Furthermore, honey contains acetylcholine. Acetylcholine (ach) is one of the neurotransmitters which plays an essential role in the autonomic nervous system function (Sukohar, 2014). Honey possesses varied properties, one of which is the antioxidant effect because it has flavonoids (Adji, 2007). Honey with a concentration of 0.1% stimulates the activity of lymphocyte cells. The presence of lymphocyte activity indicates the body's immune response to infection, particularly in wounds. Lymphocyte cells carry out the task of maintaining specific immune responses including cellular (lymphocytic related to T cells) and humoral (related to antibodies in the blood or B cells) immune responses (Adji, 2008).

Based on this background, the objective of this study is to identify the effect of Sumbawa honey in increasing stamina by employing the in-vivo natatory exhaustion method. The findings targeted in this research were the production of scientific evidence that Sumbawa honey which is an original product from Sumbawa Island possessing a tonic effect for the prevention of Covid-19. It is because recently, the use of Sumbawa honey is merely as a stamina enhancer based on the empirical experiences.

Materials and Methods

This study employed an experimental design. The study was performed for a period of four months from January to April 2021. This study had been approved by the ethics committee of the Faculty of Medicine Universitas Islam Al-Azhar, Mataram Indonesia with number 28/EC-04/FK-06/UNIZAR/VIII/2021.

Preparation of Animals

The animals administered in this study were male white mice, Swiss Webster strain, with a body weight ranging from 20-30 grams. The 15 mice were approximately three months old. The test was administered at the Pharmacy Biology Laboratory and Pharmacology Laboratory of the Pharmacy Study Program, Faculty of Health Sciences, University of Muhammadiyah Mataram.

Dosage Calculations

Based on the dose conversion table, the body weight of an adult human was 70 kg and the dose conversion factor from a human to a mouse weighed 20 g was 0.0026. The dose determination of honey as a tonic effect was based on research by Sambodo (2009), the dose of honey employed in humans is 100-200 g BW. The doses administered in this study were 100 g/kg human body weight (KgBW), 150 g/kgBW and 200 g/kgBW.

Preparation of test Solutions

Preparation of Sumbawa Honey Solution

Sumbawa honey solution were created as much as 20 ml in each group. Sumbawa honey was weighed as much as 2 grams, 3 grams and 4 grams and then dissolved into warm CMC Na suspension up to a volume of 20 ml of solution. The dosage was provided orally to mice. The volume of dosage provided to mice was 0.5 ml at each dose concentration of 100 g/kgBW, 150 g/kgBW and 200 g/kgBW.

Preparation of royal jelly solution (as a positive control)

The royal jelly was dissolved with CMC Na up to 20 ml with a volume of 0.5 ml. The dose used was 0.78 g/kgBW.

Treatment of Animals

Adaptation and dividing animals into groups

Prior to dosing, the mice had to be fasted for 12 hours and were provided merely with aquadest. Providing dosage to animals were performed orally. Oral is the administration of drugs through the esophagus employing a blunt needle. Mice were divided into five groups consisting of three mice from each group. The first group was provided with a solution of Sumbawa honey with a concentration of 25 g/70 kgBW, the second group was provided with a solution of Sumbawa honey with a concentration of 50 g/70 kgBW, while the third group was provided with a Sumbawa honey solution with a concentration of 75 g/70 kgBW, the fourth group was provided solution of royal jelly as a positive control and the fifth group was provided a solution of CMC Na as a negative control.

Observation of Fatigue Time

All animals before being provided treatment were swimming in the reservoir. After the examined animal was tired (leaving its head under the water surface with the head and tail vertical position for more than seven seconds), it was lifted from the

reservoir, and the time was recorded as the first fatigue time (T1). The mice were then rested for 40 minutes while drying. After the rest period was over, the mice were provided with a dose treatment and then rested again for 30 minutes for absorption time. Thirty minutes later, the mice were swum again until fatigue occurred, and the time was recorded as the second fatigue time (T2). The difference in fatigue time between before (T1) and after (T2) treatment was recorded as quantitative data to be analyzed further.

Results and Discussion

In this study, the animals employed were male white mice Swiss strains weighing between 24-30 grams. Before treatment, the mice were first fasted for 12 hours or overnight only provided to drink aquadest. This method reduces the food influence consumed by the test animals. The positive control administered was royal jelly. The solvent employed in this study was CMC-Na also performed as a negative control. CMC-Na was selected because it is a universal solvent, does not change the pH of the solution, is cheap and easy to obtain. The negative control was intended to see that the CMC-Na solvent employed was not efficacious as a tonic.

The research data in the form of fatigue time of the test animals in each group is presented in table 1 below. From the table above, it is implied that Sumbawa honey has very good tonic activity. From the three test groups, it is identified that group III with treatment concentration of 75 grams/70 kgBW displayed the highest average fatigue time. All treatment groups displayed a higher average fatigue time compared to the positive control group. The magnitude of the tonic effect caused by Sumbawa honey was because of the presence of several compounds reported as triggers for the tonic effect. Some of the compounds in honey with the highest concentration of all components are 50% containing polysaccharides (Stockton, 2009) and 50% of amino acids (Szczena, 2006). The polysaccharides and amino acids contained in honey are considered to be responsible for the tonic effect of the mice.

Polysaccharides possess an action mechanism as an energy source in which there are texture of boosters which cannot be digested by the body, but are dietary fiber stimulating digestive enzymes. Polysaccharides comprise of longer chains of monosaccharides. Monosaccharides consists of important sugar components which are glucose, fructose and galactose. The dominant type of sugar in almost all honey is levulose and merely a small portion of honey contains dextrose higher than levulose. In

digestion, glucose or dextrose is broken down into glucose and fructose. Fructose or levulose is present with glucose in fruit and vegetables, particularly in honey (Winarno, 2004 cit Septorini, 2008). Thus, fructose from the carbohydrates contained in honey restoring stamina was drained during the mice swimming process.

Amino acids derived from food (diet) and the breakdown of body proteins were than carried by the blood circulation into the storehouse of amino acids, which were blood and tissue fluids, ultimately employed to replace damaged tissues and, if necessary, it can be converted into energy sources. Qamer et al., (2007) corroborated that samples of Pakistani honey from *Apis mellifera* bee species with 17 amino acids contained 83% proline in 35.6 mg/100 g, the most dominant from sunflower honey followed by 26% aspartic acid in 8,7 mg/100 g and 17% glutamic acid in 5.8 mg/100 g of *phulai* honey.

The results of the one-way ANOVA test in table 2 present significant differences in all groups ($p < 0.05$). The three differences include Sumbawa honey at a dose of 75 g/70 kg BW with a negative control group providing a significant difference in value of $p = 0.008$, and Sumbawa honey at a dose of 75 g/70 kg BW with a positive control group which provides a significant difference in value of $p = 0.017$. The results of this test can be implied that the preparation of Sumbawa honey at a dose of 75 g/70 kg BW possesses an effect as an energy booster (tonic). It is expected that Sumbawa honey can be an alternative to traditional therapy in all circles of society to fulfill the intake of body stamina and maintain a healthy body from decreased daily physical activity , particularly during the current Covid-19 pandemic.

Conclusion

Based on the research which has been performed, it can be concluded that Sumbawa Honey is proven to have activity as a stamina enhancer (*tonicum*) which can be employed as an alternative to multivitamins for the prevention of Covid-19. The optimal dose of Sumbawa honey which has an effect as a tonic is 75 grams/kgBW provided once a day.

August 24, 2021

PROOFREADER STATEMENT

The information appearing herein has been read & evaluated in grammar & punctuation without changing the meaning & information from the original document by Center for International language & Cultural Studies of Islamic University of Indonesia CILACS UII
Jl. DEMANGAN BARU NO 24
YOGYAKARTA, INDONESIA.
Phone/Fax: 0274 540 255

**4. Bukti konfirmasi hasil review manuskrip
pertama dan komentar reviewer
(22 Oktober 2021)**

**Review Form Response Full Article PIT Virtual IAI 2021
Pharmacy Education Journal in collaboration with
The Indonesian Pharmacists Association (IAI)**

Manuscript title	:	Development of Sumbawa Honey as tonic to stimulate stamina during the COVID-19 pandemic in west Nusa Tenggara
Originality of the work and Scientific merit	:	Good
Title describes the content of paper properly and clearly	:	Good
Appropriateness of abstract	:	Fair
Description of the problem and solution offered	:	Good
Description of experimental design	:	Good
Presentation of experiment results (clear and systematic)	:	Good
Discussion and interpretation of results	:	Good
Statistical treatment of data (if necessary)	:	Fair
Relevance of data and conclusion	:	Good
Appropriateness and relevance of citation and references	:	Good
Quality of figures and tables	:	Fair
Overall quality of the paper	:	Good
RECOMMENDATION	:	Accepted with major revision

Additional Comment:

Manuscript article entitled: "Development of Sumbawa Honey as tonic to stimulate stamina during the COVID-19 pandemic in west Nusa Tenggara." The authors examined the ability of Sumbawa Honey as a tonic to stimulate stamina during the COVID-19 pandemic located in West Nusa Tenggara. The work presented is interesting. Some reviewer comments to improve the quality of the article, so that it can be published, as follows:

1. The authors should check the English grammar carefully (include errors, typos, etc.). If necessary, the author uses native as proofread to improve the quality of articles in English.
2. In the method section the author should explain in detail the honey sample used, including where it was obtained, the shape of the container used, and other chemicals used in the study..

3. Results and Discussion should be made separately in accordance with the guidelines..
4. In the discussion, the author should explain the impact of these findings on humans, the environment, and science. In addition, the authors must also describe the solutions provided based on the findings in this paper.
5. Overall, to be published in the target journal, the author must revise it extensively according to the guidelines.



Baiq Leny Nopitasari <baiqleny.nopitasari@gmail.com>

[PIT Virtual IAI 2021] Decision on Manuscript "Development of Sumbawa Honey as tonic to stimulate stamina during the COVID-19 pandemic in west Nusa Tenggara"

1 message

Rudi Hendra <rhendra@iai.id>

Fri, Oct 22, 2021 at 7:41 PM

To: Baiq Leny Nopitasari <baiqleny.nopitasari@gmail.com>

Dear Baiq Leny Nopitasari

Your manuscript, "Development of Sumbawa Honey as tonic to stimulate stamina during the COVID-19 pandemic in west Nusa Tenggara" which you submitted to the Pharmacy Education Journal in collaboration with The Indonesian Pharmacists Association (IAI), has been peer reviewed, and the reviewer comments are attached.

The reviews are generally favourable, implying that your paper may be suitable for publication with **major correction**. Kindly consider these suggestions, and we eagerly await your revision. We will revise your revision in light of peer review comments, and once the manuscript satisfies the requirement, it will be submitted to the editor of Pharmacy Education Journal. We will notify you if any changes or additional information become available.

When revising your manuscript, please highlight the changes you make using MS Word's track changes mode or by using bold or coloured text to expedite the processing. Please click on the link below to submit your revision:

<https://forms.gle/TbBy9vp1moYUBWvx8>

Due date: **November 12th 2021**

Thank you

Sincerely

Scientific Committee
PIT Virtual IAI 2021

**Development of Sumbawa Honey as tonic to stimulate stamina during the COVID-19 pandemic in west Nusa****Tenggara.pdf**

160K

**5. Bukti reminder untuk submit revisi manuskrip
sebelum deadline
(8 November 2021)**



Baiq Leny Nopitasari <baiqleny.nopitasari@gmail.com>

[PIT Virtual IAI 2021] Reminder to submit the revised manuscript before deadline

2 messages

Rudi Hendra <rhendra@iai.id>

Mon, Nov 8, 2021 at 6:10 PM

To: rahman_apt@yahoo.co.id, Adin Hakim Kurniawan <adin.hakim@poltekkesjkt2.ac.id>, anila-i-s@ff.unair.ac.id, anna pradiningsih <annapradiningsih@gmail.com>, anton.farmasi@unej.ac.id, AGUS SULAEMAN <agus.sulaeman@bku.ac.id>, "Hilwan Y. Teruna" <hyteruna@lecturer.unri.ac.id>, Baiq Leny Nopitasari <baiqleny.nopitasari@gmail.com>, Budipratiwi Wisudyaningsih <wisudyaningsih@unej.ac.id>, cyntiya@gmail.com, catur dian <catur.dian.setiawan-2019@fkm.unair.ac.id>, dewi@usd.ac.id, Yusransyah Y <yusransyah@iai.id>, zaenalkomar11918@gmail.com, fifteen.farmasi@unej.ac.id, firmangustaman@stikes-bth.ac.id, fransiska_farmasi@yahoo.co.id, gesnita-n@ff.unair.ac.id, keniida@stikes-bth.ac.id, Ledianasariunair@gmail.com, lestyowulandari@unej.ac.id, liapuspitasi0107@gmail.com, lusinurdianti83@gmail.com, "Dr. apt. Lutfi Chabib, M.Sc." <lutfi.chabib@uii.ac.id>, Mahacita Andanalusia <citaandanalusia@gmail.com>, nanny setiawati <caecil_nanny@yahoo.co.id>, vinipertiwi84@gmail.com, rahmatmasdin@gmail.com, prima.nitha@yahoo.co.id, raharnis@yahoo.com, sinta.rachmawati@unej.ac.id, woro_yaning@ugm.ac.id, yohanapatty24@gmail.com, yulist_r@yahoo.co.id, yuni-p@ff.unair.ac.id, yunita-n@ff.unair.ac.id

Dear Authors

We're writing to remind you to submit your revised manuscript by the deadline specified in the previous email. We kindly request that authors submit the revised manuscript by the deadline to avoid rejection and to expedite publication, as we are currently receiving more submissions than anticipated.

When revising your manuscript, please use MS Word's track changes mode or bold or colored text to expedite the processing. To submit your revision, please click on the following link:
<https://forms.gle/TbBy9vp1moYUBWvx8>

Sincerely Yours

Scientific Committee

PIT Virtual IAI 2021

Adin Hakim Kurniawan <adin.hakim@poltekkesjkt2.ac.id>

Tue, Nov 9, 2021 at 5:34 AM

To: Rudi Hendra <rhendra@iai.id>

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I will send it soon.

[Quoted text hidden]

**6. Bukti manuskrip yang diresubmit pertama
(12 November 2021)**



Baiq Leny Nopitasari <baiqleny.nopitasari@gmail.com>

[PIT Virtual IAI 2021] Revision submission confirmation

1 message

rhendra@iai.id <rhendra@iai.id>
To: baiqleny.nopitasari@gmail.com

Fri, Nov 12, 2021 at 12:43 PM

Dear
Baiq Leny Nopitasari

We appreciate your submission of your manuscript titled " Development of Sumbawa Honey as Tonic to Stimulate Stamina during the Covid-19 Pandemic in West Nusa Tenggara "
We will revise your manuscript in light of the reviewers' comments and will contact you if additional information is required.

Sincerely
Scientific Committee
PIT Virtual IAI 2021

 **submit confirmation Baiq Leny Nopitasari.pdf**
149K

Dear

Baiq Leny Nopitasari

We appreciate your submission of your manuscript titled " **Development of Sumbawa Honey as Tonic to Stimulate Stamina during the Covid-19 Pandemic in West Nusa Tenggara** "

We will revise your manuscript in light of the reviewers' comments and will contact you if additional information is required.

Sincerely

Scientific Committee

PIT Virtual IAI 2021

Development of Sumbawa Honey as Tonic to Stimulate Stamina during the Covid-19 Pandemic in West Nusa Tenggara

Baiq Leny Nopitasari¹, Shah Iqbal Ikraman Akbar¹, Alvi Kusuma Wardani^{2*}

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Abstract

Introduction: Covid-19 is a disease caused by infection with a recent type of coronavirus called SARS-CoV-2. The positive cases of Covid-19 have been increasing, particularly in the West Nusa Tenggara region. Covid-19 is a self-limiting disease, healing by itself as long as the immune of human body is sufficient to fight the infectious agent. One method performed to increase human immunity can be to maintain the stamina. Sumbawa honey is one type of honey which is tremendously popular inside and outside the island of Sumbawa even to foreign countries as a stamina enhancer. **Objective:** The objective of this study is to examine the ability of Sumbawa honey as a tonic. **Methods:** This research is an experimental model with natatory exhaustion method. The parameter measured was the fatigue time of the test animals. The longer the fatigue time, the higher the tonic effect produced. **Results:** The results of the one-way ANOVA test display significant differences in all groups ($p < 0.05$). Sumbawa honey at a dose of 75 g/70 kg BW with a positive control group provided a significant difference in value ($p = 0.017$). It is expected that Sumbawa honey can be an alternative to be a traditional therapy to meet the intake of body stamina and maintain a healthy body, particularly during the Covid-19 pandemic. **Conclusion:** Sumbawa honey is evident to own activity as a tonicum and the optimal dose of Sumbawa honey possessing an effect as a tonic is 75 grams/kgBW applied once a day.

Keywords: Sumbawa honey; Covid-19; Natatory exhaustion; Tonic.

Introduction

Coronavirus Disease 2019 (covid-19) is a new type of disease which had never been previously identified in humans. The virus causing COVID-19 is called Sars-CoV-2. Corona virus is zoonotic (transmitted between animals and humans). Common symptoms of COVID-19 infection include acute respiratory distress such as fever, cough and shortness of breath. The average incubation period is 5-6 days with the longest incubation period which was 14 days. In severe cases of COVID-19, it causes pneumonia, acute respiratory syndrome, kidney failure, and even death (Ministry of Health, 2020). Based on a report obtained from the West Nusa Tenggara (NTB) Provincial Health Office, as of July 16, 2020, the number of positive cases infected with COVID-19 in the world was 13,745,330 cases with the number of cases in Indonesia was 81,668 cases, while the data in NTB was 1,669. The data has continued to increase every day (<https://corona.ntbprov.go.id/>). This disease also spreads quickly and covers a wide area. Even though COVID-19 is a self-limiting disease, it is still unidentified about this disease. Diseases included in self-limiting diseases are those healing by itself as long as the human body's power is adequate to fight the infectious agent. In increasing the human immune system, an agent which possesses an immunostimulant effect is required (Ministry of Health, 2020).

Sumbawa honey is one type of honey which is tremendously popular inside and outside the island of Sumbawa even to foreign countries. Sumbawa forest bee honey is mostly produced by *apis dorsata* bees (Hani, 2006). Sumbawa honey has been consumed and produced for generations by the community from ancient times thus until now, Sumbawa honey is extensively used as a treatment for the community, particularly in the people of West Nusa Tenggara. Islam has taught many methods of treatment as implemented by the Prophet Muhammad. One of them is the treatment with honey. He stated, "You should employ medicines such as honey and read the Qur'an" (HR. Ma'ud). Honey is a medicine for all kinds

of diseases, while the Qur'an is a medicine for diseases existing in the soul. Allah says in QS An-Nahl (16:68) which means "Your Lord inspired the bee, saying: "Set up hives in the mountains and in the trees and in the trellises that people put up" (Ihsan, 2011).

Honey is a sweet viscous substance created by bees through the fermentation of flower nectar in the digestive tract of bees after undergoing changes (Rahman, 2012). Generally, honey is efficacious for producing energy, increasing endurance, and increasing stamina in the body. The magnesium mineral content in honey is the same as the magnesium content in blood serum, which is around 1.70-2.43 mg/dl. Honey also contains food elements administered as a natural tonic (Baskhara, 2008). Furthermore, honey contains acetylcholine. Acetylcholine (ach) is one of the neurotransmitters which plays an essential role in the autonomic nervous system function (Sukohar, 2014). Honey possesses varied properties, one of which is the antioxidant effect because it has flavonoids (Adji, 2007). Honey with a concentration of 0.1% stimulates the activity of lymphocyte cells. The presence of lymphocyte activity indicates the body's immune response to infection, particularly in wounds. Lymphocyte cells carry out the task of maintaining specific immune responses including cellular (lymphocytic related to T cells) and humoral (related to antibodies in the blood or B cells) immune responses (Adji, 2008).

Based on this background, the objective of this study is to identify the effect of Sumbawa honey in increasing stamina by employing the in-vivo natatory exhaustion method. The findings targeted in this research were the production of scientific evidence that Sumbawa honey which is an original product from Sumbawa Island possessing a tonic effect for the prevention of Covid-19. It is because recently, the use of Sumbawa honey is merely as a stamina enhancer based on the empirical experiences.

Materials and Methods

This study employed an experimental design. The study was performed for a period of four months from January to April 2021. This study had been approved by the ethics committee of the Faculty of Medicine Universitas Islam Al-Azhar, Mataram Indonesia with number 28/EC-04/FK-06/UNIZAR/VIII/2021.

Preparation of tools and materials

The tools used in this study were scales, beaker glass, stirring rod, measuring cup, dropper, sonde, stopwatch, oral syringe, water tank, mercury thermometer, and artificial wave maker (Aquilla P1200). The materials used in this study were swiss webster strain male mice, Sumbawa honey, CMC Na, and royal jelly. The Sumbawa honey used comes from the forest of Moyo sub-district, Sumbawa Besar district.

Preparation of Animals

The animals administered in this study were male white mice, Swiss Webster strain, with a body weight ranging from 20-30 grams. The 15 mice were approximately three months old. The test was administered at the Pharmacy Biology Laboratory and Pharmacology Laboratory of the Pharmacy Study Program, Faculty of Health Sciences, University of Muhammadiyah Mataram.

Dosage Calculations

Based on the dose conversion table, the body weight of an adult human was 70 kg and the dose conversion factor from a human to a mouse weighed 20 g was 0.0026. The dose determination of honey as a tonic effect was based on research by Sambodo (2009), the dose of honey employed in humans is 100-200 g BW. The doses administered in this study were 25 g/kg human body weight (KgBW), 50 g/kgBW and 75 g/kgBW.

Preparation of test Solutions

Preparation of Sumbawa Honey Solution

Sumbawa honey solution were created as much as 20 ml in each group. Sumbawa honey was weighed as much as 2 grams, 3 grams and 4 grams and then dissolved into warm CMC Na suspension up to a volume of 20 ml of solution. The dosage was provided orally to mice. The volume of dosage provided to mice was 0.5 ml at each dose concentration of 25 g/kgBW, 50 g/kgBW and 75 g/kgBW.

Preparation of royal jelly solution (as a positive control)

The royal jelly was dissolved with CMC Na up to 20 ml with a volume of 0.5 ml. The dose used was 0.78 g/kgBW.

Treatment of Animals

Adaptation and dividing animals into groups

Prior to dosing, the mice had to be fasted for 12 hours and were provided merely with aquadest. Providing dosage to animals were performed orally. Oral is the administration of drugs through the esophagus employing a blunt needle. Mice were divided into five groups consisting of three mice from each group. The first group was provided with a solution of Sumbawa honey with a concentration of 25 g/70 kgBW, the second group was provided with a solution of Sumbawa honey with a concentration of 50 g/70 kgBW, while the third group was provided with a Sumbawa honey solution with a concentration of 75 g/70 kgBW, the fourth group was provided a solution of royal jelly as a positive control and the fifth group was provided a solution of CMC Na as a negative control.

Observation of Fatigue Time

All animals before being provided treatment were swimming in the reservoir. After the examined animal was tired (leaving its head under the water surface with the head and tail vertical position for more than seven seconds), it was lifted from the reservoir, and the time was recorded as the first fatigue time (T1). The mice were then rested for 40 minutes while drying. After the rest period was over, the mice were provided with a dose treatment and then

rested again for 30 minutes for absorption time. Thirty minutes later, the mice were swum again until fatigue occurred, and the time was recorded as the second fatigue time (T2). The difference in fatigue time between before (T1) and after (T2) treatment was recorded as quantitative data to be analyzed further.

Results

The research data in the form of fatigue time of the test animals in each group is presented in table 1 below. From the table, it is implied that Sumbawa honey has very good tonic activity. From the three test groups, it is identified that group III with treatment concentration of 75 grams/70 kgBW displayed the highest average fatigue time. All treatment groups displayed a higher average fatigue time compared to the positive control group.

The results of the one-way ANOVA test in table 2 present significant differences in all groups ($p < 0.05$). The three differences include Sumbawa honey at a dose of 75 g/70 kg BW with a negative control group providing a significant difference in value of $p = 0.008$, and Sumbawa honey at a dose of 75 g/70 kg BW with a positive control group which provides a significant difference in value of $p = 0.017$. The results of this test can be implied that the preparation of Sumbawa honey at a dose of 75 g/70 kg BW possesses an effect as an energy booster (tonic).

Discussion

In this study, the animals employed were male white mice Swiss strains weighing between 24-30 grams. Before treatment, the mice were first fasted for 12 hours or overnight only provided to drink aquadest. This method reduces the food influence consumed by the test animals. The positive control administered was royal jelly. The solvent employed in this study was CMC-Na also performed as a negative control. CMC-Na was selected because it is a universal solvent, does not change the pH of the solution, is cheap and easy to obtain. The

negative control was intended to see that the CMC-Na solvent employed was not efficacious as a tonic.

The magnitude of the tonic effect caused by Sumbawa honey was because of the presence of several compounds reported as triggers for the tonic effect. Some of the compounds in honey with the highest concentration of all components are 50% containing polysaccharides (Stockton, 2009) and 50% of amino acids (Szczesna, 2006). The polysaccharides and amino acids contained in honey are considered to be responsible for the tonic effect of the mice.

Polysaccharides possess an action mechanism as an energy source in which there are texture of boosters which cannot be digested by the body, but are (dietary fiber) stimulating digestive enzymes. Polysaccharides comprise of longer chains of monosaccharides. Monosaccharides consists of important sugar components, which are glucose, fructose and galactose. The dominant type of sugar in almost all honey is levulose and merely a small portion of honey contains dextrose higher than levulose. In digestion, glucose or dextrose is broken down into glucose and fructose. Fructose or levulose is present with glucose in fruit and vegetables, particularly in honey (Winarno, 2004 cit Septorini, 2008). Thus, fructose from the carbohydrates contained in honey restoring stamina was drained during the mice swimming process.

Amino acids derived from food (diet) and the breakdown of body proteins were than carried by the blood circulation into the storehouse of amino acids, which were blood and tissue fluids, ultimately employed to replace damaged tissues and, if necessary, it can be converted into energy sources. Qamer et al., (2007) corroborated that samples of Pakistani honey from *Apis mellifera* bee species with 17 amino acids contained 83% proline in 35.6 mg/100 g, the most dominant from sunflower honey followed by 26% aspartic acid in 8.7 mg/100 g and 17% glutamic acid in 5.8 mg/100 g of *phulai* honey.

It is expected that Sumbawa honey can be an alternative to traditional therapy in all circles of society to fulfill the intake of body stamina and maintain a healthy body from decreased daily physical activity, particularly during the current Covid-19 pandemic.

Conclusion

Based on the research which has been performed, it can be concluded that Sumbawa Honey is proven to have activity as a stamina enhancer (*tonicum*) which can be employed as an alternative to multivitamins for the prevention of Covid-19. The optimal dose of Sumbawa honey which has an effect as a tonic is 75 grams/kgBW provided once a day.

Acknowledgements

This article was presented at the 2021 Annual Scientific Conference of the Indonesian Pharmacist Association. Also we thank to Department of Clinical Pharmacy and Pharmacology for laboratory facilities to conduct this research.

Conflict of Interest

The authors declare that there's no conflict of interest.

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Table 1. Data on fatigue time of test animals before and after treatment in each group (n=3)

Groups	Mice	T1	T2	T2-T1	Fatigue Time Average
Group I	1	28"	169"	141"	107±51,54"
	2	91"	139"	48"	
	3	47"	180"	133"	
Group II	1	83"	221"	138"	152±70,06"
	2	72"	300"	228"	
	3	67"	157"	90"	
Group III	1	86"	235"	149"	213±57,33"
	2	48"	307"	259"	
	3	137"	369"	232"	
Positive Control	1	78"	133"	55"	52±9"
	2	90"	132"	42"	
	3	144"	203"	59"	
Negative Control	1	123"	175"	52"	47±6"
	2	114"	162"	48"	
	3	40"	80"	40"	

"": second

Table 2. One way Anova Analysis

Parameter	Groups	One-way anova Test (sig)
Fatigue Time	Group I	0,05*
	Group II	
	Group III	
	Positive Control	
	Negative Control	

*: The data is significantly different ($p \leq 0,05$)

**7. Bukti konfirmasi hasil review manuskrip
kedua dan komentar reviewer
(14 November 2021)**



Baiq Leny Nopitasari <baiqleny.nopitasari@gmail.com>

[PIT virtual IAI 2021] Manuscript Revision needed

1 message

Rudi Hendra <rhendra@iai.id>

Sun, Nov 14, 2021 at 10:42 AM

To: Baiq Leny Nopitasari <baiqleny.nopitasari@gmail.com>

Dear Baiq Leny Nopitasari

Thank you for your revision.

We have checked your revision. However there is a minor revision that needs to be done.

Please help us by revising your manuscript, **highlighting the changes you make using MS Word's track changes mode or by using bold or coloured text to expedite the processing**. So it is easy for to check your manuscript.

Please click on the link below to submit your revision:

<https://forms.gle/TbBy9vp1moYUBWvx8>Due date: **November 20th 2021**

Sincerely,

Scientific Committee
PIT Virtual IAI 2021

IAI SPECIAL EDITION

RESEARCH ARTICLE

Development of Sumbawa honey as tonic to improve endurance in West Nusa Tenggara

Baiq Leny Nopitasari, Shah Iqbal Ikraman Akbar, Alvi Kusuma Wardani

Faculty of Health Sciences, University of Muhammadiyah Mataram, West Nusa Tenggara, Indonesia

Keywords

COVID19
Nataatory exhaustion
Sumbawa honey
Tonic

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Abstract

Introduction: COVID19 is a disease caused by infection with a recent type of coronavirus called SARS-CoV-2. The positive cases of COVID19 have been increasing, particularly in the West Nusa Tenggara region, Indonesia. COVID19 is a self-limiting disease, and can be overcome by the innate immune system of an otherwise healthy patient. Stamina is related to strength, and so is linked in many traditions to the immune response; Therefore, a method to increase immunity can be linked to maintain the stamina. Sumbawa honey is a type of honey which is tremendously popular both locally within the island of Sumbawa and internationally, for its use as a stamina enhancer. **Objective:** This study will examine the potential of Sumbawa honey as a tonic for improving stamina. **Methods:** This research is an experimental model with nataatory exhaustion method. The parameter measured was the fatigue time of the test animals. The greater the difference in fatigue time, the higher the tonic effect produced. **Results:** The results of the one-way ANOVA test display significant differences in all groups ($p < 0.05$). Sumbawa honey at a dose of 75g/70kgBW with a positive control group provided a significant difference in value ($p = 0.017$). It is expected that Sumbawa honey can be an alternative treatment, a traditional therapy, to help maintain a healthy body, particularly during the COVID19 pandemic. **Conclusion:** Sumbawa honey has significant activity as a tonicum and the optimal dose of Sumbawa honey possessing an effect as a tonic is 75g/kgBW applied once a day.

Introduction

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of treatment as implemented by the Prophet Muhammad (peace be upon him). One of the treatments advocated is treatment with honey. The Prophet (peace be upon him) is reported to have stated, 'You should employ medicines such as honey and read the Qur'an' (HR. Ma'ud). Honey is a medicine for all kinds of diseases, while the Qur'an is a medicine for diseases existing in the soul. Allah says in the Qu'ran Chapter An-Nahl (16:68) 'Your Lord inspired the bee, saying: 'Set up hives in the mountains and in the trees and in the trellises that people put up'' (translation by Ihsan, 2011).

Honey is a sweet viscous substance created by bees through the fermentation of flower nectar in their digestive tract (Rahman, 2012). Generally, honey is efficacious for producing energy, **increasing endurance, and increasing stamina**. The magnesium mineral content in honey is the same as the magnesium content in blood serum, which is around 1.70-2.43mg/dl. Honey also contains food elements administered as a natural tonic (Baskhara, 2008). Furthermore, honey contains acetylcholine. Acetylcholine (ach) is one of the neurotransmitters which plays an essential role in the autonomic nervous system function (Sukohar, 2014). Honey possesses varied properties, **including an antioxidant effect due to the flavonoids in contains** (Adji, 2007). Honey at a concentration of 0.1% stimulates the activity of lymphocyte cells. The presence of lymphocyte activity indicates the body's immune response to infection, particularly in wounds. Lymphocyte cells carry out the task of maintaining specific immune responses including cellular (lymphocytic related to T cells) and humoral (related to antibodies in the blood or B cells) immune responses (Adji, 2008).

Based on this background, the objective of this study is to identify the effect of Sumbawa honey in increasing stamina by employing the *in-vivo* natatory exhaustion method. This research aims to contribute to the production of scientific evidence that Sumbawa honey, which is an original product from Sumbawa Island, could possess a tonic effect for the prevention of COVID19. **This research comes in the context of the recent use of Sumbawa honey as a stamina enhancer based on empirical experiences.**

Materials and methods

This study employed an experimental design. The study was performed for a period of four months from January to April 2021. This study had been approved by

the ethics committee of the Faculty of Medicine Universitas Islam Al-Azhar, Mataram Indonesia with number 28/EC-04/FK-06/UNIZAR/VIII/2021.

Preparation of tools and materials

The tools used in this study were scales, beaker glass, stirring rod, measuring cup, dropper, sonde, stopwatch, oral syringe, water tank, mercury thermometer, and artificial wave maker (Aquilla P1200). The materials used in this study were Swiss Webster strain male mice, Sumbawa honey, CMC Na, and royal jelly. The Sumbawa honey used comes from the forest of Moyo sub-district, Sumbawa Besar district.

Preparation of animals

The animals administered in this study were white male mice, Swiss Webster strain, with a body weight ranging from 20 - 30g. The 15 mice used in the investigation were approximately three months old. The test was administered at the Pharmacy Biology Laboratory and Pharmacology Laboratory of the Pharmacy Study Programme, Faculty of Health Sciences, University of Muhammadiyah Mataram, **Indonesia**.

Dosage calculations

Based on the dose conversion table, the body weight of an adult human was 70kg and the dose conversion factor from a human to a mouse weighing 20g was 0.0026. The dose determination of honey as a tonic effect was based on research by Sambodo (2009), the dose of honey employed in humans is 100 - 200g/BW. The doses administered in this study were 25g/kg human body weight (kgBW), 50g/kgBW and 75g/kgBW.

Preparation of test solutions

Preparation of Sumbawa Honey solution

Sumbawa honey solutions were created **to a volume of 20ml for** each group. Sumbawa honey was weighed as 2g, 3g and 4g and then dissolved into warm CMC-Na suspensions up to a volume of 20ml of solution. The dosage was then provided orally to the mice. The volume of dosage provided to mice was 0.5ml at dose concentrations of 25g/kgBW, 50g/kgBW and 75g/kgBW **respectively per group.**

Preparation of royal jelly solution (as a positive control)

The royal jelly was dissolved with CMC-Na **up to 20ml with a volume of 0.5ml**. The dose used was 0.78g/kgBW.

Please rephrase – meaning is unclear. Dissolved in 20ml, then made into a volume of 0.5ml?

Treatment of animals

Adaptation and dividing animals into groups

Prior to dosing, the mice were **fasted** for 12 hours and were provided merely with aquadest. The dosage was administered orally, *i.e.* through the esophagus employing a blunt needle. The mice were divided into five groups, **consisting of three mice per group**. The first group was provided with a solution of Sumbawa honey with a concentration of 25g/70kgBW, the second group was provided with a solution of Sumbawa honey with a concentration of 50g/70kgBW, while the third group was provided with a Sumbawa honey solution with a concentration of 75g/70kgBW, the fourth group was provided a solution of royal jelly as a positive control and the fifth group was provided **only** a solution of CMC-Na as a negative control.

Observation of Fatigue Time

All animals before being provided treatment were swimming in the reservoir. After the examined animal was tired (leaving its head under the water surface with the head and tail vertical position for more than seven seconds), it was lifted from the reservoir, and the time

was recorded as the first fatigue time (T1). The mice were then rested for 40 minutes while drying. After the rest period was over, the mice were provided with a dose treatment and then rested again for 30 minutes for absorption time. Thirty minutes later, **the mice were replaced in the reservoir to swim** again until fatigue occurred, and the time was recorded as the second fatigue time (T2). The difference in fatigue time between before (T1) and after (T2) treatment was recorded as quantitative data to be analysed further.

Results

The research data in the form of fatigue time of the test animals in each group is presented below in Table I. From the table, it can be implied that Sumbawa honey has a very good tonic activity. From the three test groups, it is identified that Group III with treatment concentration of 75g/70kgBW displayed the highest average fatigue time. All treatment groups displayed **an higher average difference in** fatigue time compared to the positive control group.

Table I. Data on fatigue time of test animals before and after treatment in each group (n = 3)

Groups	Mice	T1	T2	T2-T1	Average difference in Fatigue time ± IQR
Group I	1	28'	169'	141'	107 ± 51.5'
	2	91'	139'	48'	
	3	47'	180'	133'	
Group II	1	83'	221'	138'	152 ± 70.1'
	2	72'	300'	228'	
	3	67'	157'	90'	
Group III	1	86'	235'	149'	213 ± 57.3'
	2	48'	307'	259'	
	3	137'	369'	232'	
Positive Control	1	78'	133'	55'	52 ± 9'
	2	90'	132'	42'	
	3	144'	203'	59'	
Negative Control	1	123'	175'	52'	47 ± 6'
	2	114'	162'	48'	
	3	40'	80'	40'	

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The results of the one-way ANOVA test in Table II present significant differences in all groups ($p < 0.05$). The three differences include Sumbawa honey at a dose of 75g/70kgBW with a negative control group providing a significant difference in value of $p = 0.008$, and Sumbawa honey at a dose of 75g/70kgBW with a positive control group which provides a significant difference in value of $p = 0.017$. The results of this test can be implied that the preparation of Sumbawa honey

at a dose of 75g/70 kg BW possesses an effect as an energy booster (tonic).

Table II. One way Anova Analysis

Parameter	Groups	One-way anova Test (sig)
Difference in Fatigue Time	Group I	0.05*
	Group II	
	Group III	
	Positive Control	
	Negative Control	

*: The data is significantly different ($p \leq 0.05$)

Discussion

In this study, the animals employed were white male mice, Swiss strains, weighing between 24-30g. Before treatment, the mice were fasted for 12 hours or overnight and only provided aquadest to drink during this period. This method reduces the food influence consumed by the test animals. The positive control administered was royal jelly. The solvent employed in this study was CMC-Na, and a negative control was performed using this solvent. CMC-Na was selected because it is a universal solvent, does not change the pH of the solution, it is cheap and it is easy to obtain. The negative control was intended to see that the CMC-Na solvent employed was not efficacious as a tonic.

The magnitude of the tonic effect caused by Sumbawa honey was because of the presence of several compounds reported as triggers for the tonic effect. Some of the compounds in honey with the highest concentration of all components are 50% containing polysaccharides (Stockton, 2009) and 50% of amino acids (Szczena, 2006). The polysaccharides and amino acids contained in honey are considered to be responsible for the tonic effect of the mice.

Polysaccharides are an energy source and contain dietary fiber which cannot be digested by the body, but stimulate digestive enzymes. Polysaccharides are comprised of long chains of monosaccharides. Monosaccharides are important sugar components, such as glucose, fructose and galactose. The dominant type of sugar in almost all honey is levulose and merely a small portion of honey contains a higher portion of dextrose than levulose. In digestion, glucose and dextrose are broken down into glucose and fructose. Fructose or levulose is present with glucose in fruit and vegetables, particularly in honey (Winarno, 2004 cited in Septorini, 2008). Thus, fructose from the carbohydrates contained in honey restoring stamina was drained during the mice swimming process.

Amino acids derived from food and the breakdown of body proteins were than carried by the blood and, ultimately employed to replace damaged tissues and, if necessary, they can be converted into energy sources. Qamer and colleagues (2007) corroborated that samples of Pakistani honey from *Apis mellifera* bee species with 17 amino acids contained 83% proline in 35.6mg/100g, the most dominant from sunflower honey followed by 26% aspartic acid in 8.7mg/100g and 17% glutamic acid in 5.8mg/100g of *phulai* honey.

It is expected that Sumbawa honey can be an alternative to traditional therapy in all circles of society to fulfill the intake of body stamina and maintain a healthy body from decreased daily physical activity, particularly during the current COVID19 pandemic.

Conclusion

Based on the research which has been performed, it can be concluded that Sumbawa Honey is proven to have activity as a stamina enhancer (*tonicum*) which can be employed as an alternative to multivitamins for the prevention of COVID19. The optimal dose of Sumbawa honey which has an effect as a tonic is 75g/kgBW provided once a day.

Acknowledgements

This article was presented at the 2021 Annual Scientific Conference of the Indonesian Pharmacist Association. Also we thank to Department of Clinical Pharmacy and Pharmacology for laboratory facilities to conduct this research.

Conflict of Interest

The authors declare that there is no conflict of interest.

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**8. Bukti manuskrip yang diresubmit kedua
(15 November 2021)**

Confirmation of publication

Participants

Celeste Watson (celestewatson)
Baiq Leny Nopitasari (bnopitasari)

Messages

Note	From
<p>Dear Baiq,</p> <p>We are pleased to confirm that your paper entitled: "The effect of stress level on the therapeutic outcomes of type 2 diabetes mellitus at the regional public hospital of West Nusa Tenggara province" has been published and is available on our website for access and download. The DOI is: https://doi.org/10.46542/pe.2021.212.6770</p> <p>We would like to encourage the authors to share this publication through your social media. Feel free to tag us at our Twitter account: @PharmEd_journal</p> <p>Thank you for your submission and for choosing Pharmacy Education.</p> <p>Best regards,</p>	<p>celestewatson 28-07-2021 22:09</p>



Baiq Leny Nopitasari <baiqleny.nopitasari@gmail.com>

[PIT Virtual IAI 2021] Revision submission confirmation

1 message

rhendra@iai.id <rhendra@iai.id>
To: baiqleny.nopitasari@gmail.com

Mon, Nov 15, 2021 at 3:32 AM

Dear
Baiq Leny Nopitasari

We appreciate your submission of your manuscript titled " Development of Sumbawa Honey as Tonic to Stimulate Stamina during the Covid-19 Pandemic in West Nusa Tenggara "
We will revise your manuscript in light of the reviewers' comments and will contact you if additional information is required.

Sincerely
Scientific Committee
PIT Virtual IAI 2021

 **submit confirmation Baiq Leny Nopitasari.pdf**
149K

Dear

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We will revise your manuscript in light of the reviewers' comments and will contact you if additional information is required.

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PIT Virtual IAI 2021

IAI SPECIAL EDITION

RESEARCH ARTICLE

Development of Sumbawa honey as tonic to improve endurance in West Nusa Tenggara

Baiq Leny Nopitasari, Shah Iqbal Ikraman Akbar, Alvi Kusuma Wardani
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Keywords

COVID19
Nataatory exhaustion
Sumbawa honey
Tonic

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Abstract

Introduction: COVID19 is a disease caused by infection with a recent type of coronavirus called SARS-CoV-2. The positive cases of COVID19 have been increasing, particularly in the West Nusa Tenggara region, Indonesia. COVID19 is a self-limiting disease, and can be overcome by the innate immune system of an otherwise healthy patient. Stamina is related to strength, and so is linked in many traditions to the immune response; Therefore, a method to increase immunity can be linked to maintain the stamina. Sumbawa honey is a type of honey which is tremendously popular both locally within the island of Sumbawa and internationally, for its use as a stamina enhancer. **Objective:** This study will examine the potential of Sumbawa honey as a tonic for improving stamina. **Methods:** This research is an experimental model with nataatory exhaustion method. The parameter measured was the fatigue time of the test animals. The greater the difference in fatigue time, the higher the tonic effect produced. **Results:** The results of the one-way ANOVA test display significant differences in all groups ($p < 0.05$). Sumbawa honey at a dose of 75g/70kgBW with a positive control group provided a significant difference in value ($p = 0.017$). It is expected that Sumbawa honey can be an alternative treatment, a traditional therapy, to help maintain a healthy body, particularly during the COVID19 pandemic. **Conclusion:** Sumbawa honey has significant activity as a tonicum and the optimal dose of Sumbawa honey possessing an effect as a tonic is 75g/kgBW applied once a day.




Introduction

Coronavirus Disease 2019 (COVID19) is a new disease which had never been previously identified in humans. The virus causing COVID19 is Sars-CoV-2. COVID19 is a zoonotic disease (transmitted between animals and humans). Common symptoms of COVID19 infection include acute respiratory distress such as fevers, coughs and shortness of breath. The average incubation period is between five to six days with the longest known incubation period as 14 days. In severe cases of COVID19, it causes pneumonia, acute respiratory syndrome, kidney failure, and even death (Ministry of Health, 2020). Based on a report obtained from the West Nusa Tenggara (NTB) Provincial Health Office, as of the 16th July, 2020, the number of positive cases infected with COVID19 globally was 13,745,330 cases, with the number of cases in Indonesia amounting to 81,668 cases, while the data in NTB was 1,669 cases. These numbers have continued to increase

every day (Dinas Kesehatan, n.d.). This disease is also rapidly transmitted between people. Even though COVID19 is a self-limiting disease, it is still unidentified about this disease. Diseases included in self-limiting diseases are those healing by itself as long as the human body's power is adequate to fight the infectious agent. In increasing the human immune system, an agent which possesses an immunostimulant effect is required (Ministry of Health, 2020).

Sumbawa honey is a type of honey which is tremendously popular both within the island of Sumbawa and internationally. Sumbawa forest bee honey is mostly produced by the *apis dorsata* bees (Hani, 2006). Sumbawa honey has been consumed and produced for generations by the local Island community, Sumbawa honey is extensively used as a treatment by the locals, particularly in the people of West Nusa Tenggara. Islam has taught many methods

of treatment as implemented by the Prophet Muhammad (peace be upon him). One of the treatments advocated is treatment with honey. The Prophet (peace be upon him) is reported to have stated, 'You should employ medicines such as honey and read the Qur'an' (HR. Ma'ud). Honey is a medicine for all kinds of diseases, while the Qur'an is a medicine for diseases existing in the soul. Allah says in the Qu'ran Chapter An-Nahl (16:68) 'Your Lord inspired the bee, saying: 'Set up hives in the mountains and in the trees and in the trellises that people put up'' (translation by Ihsan, 2011).

Honey is a sweet viscous substance created by bees through the fermentation of flower nectar in their digestive tract (Rahman, 2012). Generally, honey is efficacious for producing energy, **increasing endurance, and increasing stamina**. The magnesium mineral content in honey is the same as the magnesium content in blood serum, which is around 1.70-2.43mg/dl. Honey also contains food elements administered as a natural tonic (Baskhara, 2008). Furthermore, honey contains acetylcholine. Acetylcholine (ach) is one of the neurotransmitters which plays an essential role in the autonomic nervous system function (Sukohar, 2014). Honey possesses varied properties, **including an antioxidant effect due to the flavonoids in contains** (Adji, 2007). Honey at a concentration of 0.1% stimulates the activity of lymphocyte cells. The presence of lymphocyte activity indicates the body's immune response to infection, particularly  wounds. Lymphocyte cells carry out the task of  maintaining specific immune responses including cellular (lymphocytic related to T cells) and humoral (related to antibodies in the blood or B cells) immune responses  (Adji, 2008).

Based on this background, the objective of this study is to identify the effect of Sumbawa honey in increasing stamina by employing the *in-vivo* natatory exhaustion method. This research aims to contribute to the production of scientific evidence that Sumbawa honey, which is an original product from Sumbawa Island, could possess a tonic effect for the prevention of COVID19. **This research comes in the context of the recent use of Sumbawa honey as a stamina enhancer based on empirical experiences.**

Materials and methods

This study employed an experimental design. The study was performed for a period of four months from January to April 2021. This study had been approved by

the ethics committee of the Faculty of Medicine Universitas Islam Al-Azhar, Mataram Indonesia with number 28/EC-04/FK-06/UNIZAR/VIII/2021.


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The tools used in this study were scales, beaker glass, stirring rod, measuring cup, dropper, sonde, stopwatch, oral syringe, water tank, mercury thermometer, and artificial wave maker (Aquila P1200). The materials used in this study were Swiss Webster strain male mice, Sumbawa honey, CMC Na, and royal jelly. The Sumbawa honey used comes from the forest of Moyo sub-district, Sumbawa Besar district.

Preparation of animals

The animals administered in this study were white male mice, Swiss Webster strain, with a body weight ranging from 20 - 30g. The 15 mice used in the investigation were approximately three months old. The test was administered at the Pharmacy Biology Laboratory and Pharmacology Laboratory of the Pharmacy Study Programme, Faculty of Health Sciences, University of Muhammadiyah Mataram, **Indonesia**.

Dosage calculations


Based on the dose conversion table, the body weight of an adult human was 70kg and the dose conversion factor from a human to a mouse weighing 20g was 0.0026. The dose determination of honey as a tonic effect was based on research by Sambodo (2009), the dose of honey employed in humans is 100 - 200g/BW.  The doses administered in this study were 25g/kg human body weight (kgBW), 50g/kgBW and 75g/kgBW.

Preparation of test solutions

Preparation of Sumbawa Honey solution

Sumbawa honey solutions were created **to a volume of 20ml for** each group. Sumbawa honey was weighed as 2g, 3g and 4g and then dissolved into warm CMC-Na suspensions up to a volume of 20ml of solution. The dosage was then provided orally to the mice. The volume of dosage provided to mice was 0.5ml at dose concentrations of 25g/kgBW, 50g/kgBW and 75g/kgBW **respectively per group.**

Preparation of royal jelly solution (as a positive control)

 The royal jelly was dissolved with CMC-Na **up to 20ml with a volume of 0.5ml**. The dose used was 0.78g/kgBW.

Please rephrase – meaning is unclear. Dissolved in 20ml, then made into a volume of 0.5ml?

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Adaptation and dividing animals into groups

Prior to dosing, the mice were **fasted** for 12 hours and were provided merely with aquadest. The dosage was administered orally, *i.e.* through the esophagus employing a blunt needle. The mice were divided into five groups, **consisting of three mice per group**. The first group was provided with a solution of Sumbawa honey with a concentration of 25g/70kgBW, the second group was provided with a solution of Sumbawa honey with a concentration of 50g/70kgBW, while the third group was provided with a Sumbawa honey solution with a concentration of 75g/70kgBW, the fourth group was provided a solution of royal jelly as a positive control and the fifth group was provided **only** a solution of CMC-Na as a negative control.

Observation of Fatigue Time

All animals before being provided treatment were swimming in the reservoir. After the examined animal was tired (leaving its head under the water surface with the head and tail vertical position for more than seven seconds), it was lifted from the reservoir, and the time

was recorded as the first fatigue time (T1). The mice were then rested for 40 minutes while drying. After the rest period was over, the mice were provided with a dose treatment and then rested again for 30 minutes for absorption time. Thirty minutes later, **the mice were replaced in the reservoir to swim** again until fatigue occurred, and the time was recorded as the second fatigue time (T2). The difference in fatigue time between before (T1) and after (T2) treatment was recorded as quantitative data to be analysed further.

Results

The research data in the form of fatigue time of the test animals in each group is presented below in Table I. From the table, it can be implied that Sumbawa honey has a very good tonic activity. From the three test groups, it is identified that Group III with treatment concentration of 75g/70kgBW displayed the highest average fatigue time. All treatment groups displayed **an higher average difference in** fatigue time compared to the positive control group.

Table I. Data on fatigue time of test animals before and after treatment in each group (n = 3)

Groups	Mice	T1	T2	T2-T1	Average difference in Fatigue time ± IQR
Group I	1	28'	169'	141'	107 ± 51.5'
	2	91'	139'	48'	
	3	47'	180'	133'	
Group II	1	83'	221'	138'	152 ± 70.1'
	2	72'	300'	228'	
	3	67'	157'	90'	
Group III	1	86'	235'	149'	213 ± 57.3'
	2	48'	307'	259'	
	3	137'	369'	232'	
Positive Control	1	78'	133'	55'	52 ± 9'
	2	90'	132'	42'	
	3	144'	203'	59'	
Negative Control	1	123'	175'	52'	47 ± 6'
	2	114'	162'	48'	
	3	40'	80'	40'	

' : second

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The results of the one-way ANOVA test in Table II present significant differences in all groups ($p < 0.05$). The three differences include Sumbawa honey at a dose of 75g/70kgBW with a negative control group providing a significant difference in value of $p = 0.008$, and Sumbawa honey at a dose of 75g/70kgBW with a positive control group which provides a significant difference in value of $p = 0.017$. The results of this test can be implied that the preparation of Sumbawa honey



at a dose of 75g/70 kg BW possesses an effect as an energy booster (tonic).

Table II. One way Anova Analysis

Parameter	Groups	One-way anova Test (sig)
Difference in Fatigue Time	Group I	0.05*
	Group II	
	Group III	
	Positive Control	
	Negative Control	

*: The data is significantly different ($p \leq 0.05$)

Discussion

In this study, the animals employed were white male mice, Swiss strains, weighing between 24-30g. Before treatment, the mice were fasted for 12 hours or overnight and only provided aquadest to drink during this period. This method reduces the food influence consumed by the test animals. The positive control administered was royal jelly. The solvent employed in this study was CMC-Na, and a negative control was performed using this solvent. CMC-Na was selected because it is a universal solvent, does not change the pH of the solution, it is cheap and it is easy to obtain. The negative control was intended to see that the CMC-Na solvent employed was not efficacious as a tonic.

The magnitude of the tonic effect caused by Sumbawa honey was because of the presence of several compounds reported as triggers for the tonic effect. Some of the compounds in honey with the highest concentration of all components are 50% containing polysaccharides (Stockton, 2009) and 50% of amino acids (Szczesna, 2006). The polysaccharides and amino acids contained in honey are considered to be responsible for the tonic effect on the mice.

Polysaccharides are an energy source and contain dietary fiber which cannot be digested by the body, but stimulate digestive enzymes. Polysaccharides are comprised of long chains of monosaccharides. Monosaccharides are important sugar components, such as glucose, fructose and galactose. The dominant type of sugar in almost all honey is levulose and merely a small portion of honey contains a higher portion of dextrose than levulose. In digestion, glucose and dextrose are broken down into glucose and fructose. Fructose or levulose is present with glucose in fruit and vegetables, particularly in honey (Winarno, 2004 cited in Septorini, 2008). Thus, fructose from the carbohydrates contained in honey restoring stamina was drained during the mice swimming process.

Amino acids derived from food and the breakdown of body proteins were then carried by the blood and, ultimately employed to replace damaged tissues and, if necessary, they can be converted into energy sources. Qamer and colleagues (2007) corroborated that samples of Pakistani honey from *Apis mellifera* bee species with 17 amino acids contain 83% proline in 35.6mg/100g, the most dominant from sunflower honey followed 26% aspartic acid in 8.7mg/100g and 17% glutamic acid in 5.8mg/100g of *phulai* honey.

It is expected that Sumbawa honey can be an alternative to traditional therapy in all circles of society to fulfill the intake of body stamina and maintain a healthy body from decreased daily physical activity, particularly during the current COVID19 pandemic.

Conclusion

Based on the research which has been performed, it can be concluded that Sumbawa Honey is proven to have activity as a stamina enhancer (*tonicum*) which can be employed as an alternative to multivitamins for the prevention of COVID19. The optimal dose of Sumbawa honey which has an effect as a tonic is 75g/kgBW provided once a day.

Acknowledgements

This article was presented at the 2021 Annual Scientific Conference of the Indonesian Pharmacist Association. Also we thank to Department of Clinical Pharmacy and Pharmacology for laboratory facilities to conduct this research.

Conflict of Interest

The authors declare that there is no conflict of interest.

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**9. Bukti penerimaan manuskrip untuk
dipublikasi
(21 November 2021)**

Dear

Baiq Leny Nopitasari

We appreciate your submission of your revised manuscript titled " **Development of Sumbawa Honey as Tonic to Stimulate Stamina during the Covid-19 Pandemic in West Nusa Tenggara** "

Your manuscript has been accepted for publication in the Pharmacy Education Journal (PEJ). Before your manuscript is submitted to the PEJ editor teams, we would like to remind you to transfer the publication charge fee of **Rp.1,700,000,-** to CIMB Niaga account no. 800049498500 (Pharma Tekno Solusi PT) and upload the payment proof to **<https://forms.gle/hFMx49aVr8A5vnDR6>** by **November 27th 2021**.

Kindly contact us if you have any additional questions.

Sincerely

Scientific Committee

PIT Virtual IAI 2021



**10. Bukti pembayaran biaya publikasi
(25 November 2021)**

11/25/2021

RECEIPT

We have received Rp.1,700,000, (one million seven hundred thousand rupiah) from **Baiq Leny Nopitasari** for the publication charge fee with the title “**Development of Sumbawa Honey as Tonic to Stimulate Stamina during the Covid-19 Pandemic in West Nusa Tenggara**”, which will be published in the Pharmacy Education Journal.

Kindly contact us if you have any additional questions.

Sincerely

Scientific Committee

PIT Virtual IAI 2021



**11. Bukti konfirmasi proses copy editing dan
galley
(17 Desember 2021)**



Baiq Leny Nopitasari <baiqleny.nopitasari@gmail.com>

[PIT Virtual IAI 2021] Update Pharmacy Education Journal Process

2 messages

Rudi Hendra <rhendra@iai.id>

Fri, Dec 17, 2021 at 4:38 PM

To: rahman_apt@yahoo.co.id, Adin Hakim Kurniawan <adin.hakim@poltekkesjkt2.ac.id>, AGUS SULAEMAN <agus.sulaeman@bku.ac.id>, anila-i-s@ff.unair.ac.id, anna pradiningsih <annapradiningsih@gmail.com>, anton.farmasi@unej.ac.id, Baiq Leny Nopitasari <baiqleny.nopitasari@gmail.com>, Budipratiwi Wisudyarningsih <wisudyarningsih@unej.ac.id>, catur dian <atur.dian.setiawan-2019@fkm.unair.ac.id>, Cyntiya Rahmawati <cyntiya.apt@gmail.com>, dernawati001@gmail.com, dewi@usd.ac.id, ramayuda.f@gmail.com, fauzanzein@bku.ac.id, ferdyfirmansyah@mail.com, fifteen.farmasi@unej.ac.id, keniida@stikes-bth.ac.id, Fonny Cokro <fonny.cokro@atmajaya.ac.id>, fransiska_farmasi@yahoo.co.id, gesnita-n@ff.unair.ac.id, gusti-n-v-a@ff.unair.ac.id, hennylucida@gmail.com, "Hilwan Y. Teruna" <hyteruna@lecturer.unri.ac.id>, idaayumanik85@gmail.com, Kos Kosasih <kos_qs1@yahoo.com>, Ledianasariunair@gmail.com, lestyowulandari@unej.ac.id, liapuspitasi0107@gmail.com, lusinurdianti83@gmail.com, "Dr. apt. Lutfi Chabib, M.Sc." <lutfi.chabib@uii.ac.id>, nanny setiawati <caecil_nanny@yahoo.co.id>, yunita-n@ff.unair.ac.id, Rudi Hendra <rudi.hendra@lecturer.unri.ac.id>, Muhammad Rahmat Masdin <rahmatmasdin@gmail.com>, prima.nitha@yahoo.co.id, Raharni Budiarto <raharnis@yahoo.com>, rahmat arief <rahmat@upy.ac.id>, reynelda juliani sagala <reynelda.juliani@atmajaya.ac.id>, IKE DHIAH ROCHMAWATI <ike.dhiah@staff.ubaya.ac.id>, sinta.rachmawati@unej.ac.id, Sofia240586@gmail.com, stefanuslukas@yahoo.com, trimurtia@ugm.ac.id, woro_yaning@ugm.ac.id, Yuli Haryani <yuli.haryani@lecturer.unri.ac.id>, yulist_r@yahoo.co.id, Yuni Priyandani <yuni-p@ff.unair.ac.id>, Yusransyah Y <yusransyah@iai.id>, Yustina Sri Hartini <yustinahartini@usd.ac.id>, zaenalkomar11918@gmail.com

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The PEJ will then work on copyediting and typesetting the galley for the next stage. They will make direct changes to the sentence without making any tracked changes (speed up the process for publication). Once completed, the final clean galley will be sent to the authors for approval one by one, and the PEJ will give the authors one week to provide any necessary changes (speed up the process for publication). Please keep an eye out for emails from the PEJ. The author will be notified via email at various times. However, please do not be concerned; all of the articles will be published at the same time after approval, which could be in quarter one (January-April 2022).

Please do not hesitate to contact us if you have any questions.

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Antonius NW Pratama <anton.farmasi@unej.ac.id>

Fri, Dec 17, 2021 at 4:40 PM

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Thank you for the update.

Sincerely,

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**12. Bukti artikel sudah terpublikasi
(9 Maret 2022)**

Participants

Omolayo Awolola (omolayo)

Alvi Wardani (alvikusuma)

Messages

Note	From
<p>Dear Wardani,</p> <p>We would like to invite you to do a final review of your manuscript: "IAI SPECIAL EDITION: Development of Sumbawa Honey as Tonic to Stimulate Stamina during the Covid-19 Pandemic in West Nusa Tenggara," before we publish it.</p> <p>May you have a final look and let us know if there are any changes needed by next week?</p> <p>Please note that if we do not receive any feedback by that time, we will consider this as approval for the publication of your article.</p> <p>The final galley can be seen in the "copy-edited" section.</p> <p>Thank you and we look forward to hearing from you.</p> <p>Best,</p> <p>PEJ Team.</p> <p>Pharmacy Education</p>	<p>omolayo</p> <p>09-03-2022 15:12</p>
<p>▶ Dear editor,</p> <p>Attached bellow, you can find a little revision in the tittle and references that I've reviewed.</p> <p>Please do check it.</p> <p>Thank you,</p> <p>Alvi</p> <p> alvikusuma, 1591-Article Text-9285-1-9-20220309.pdf</p>	<p>alvikusuma</p> <p>16-03-2022 04:14</p>
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Baiq Leny Nopitasari <baiqleny.nopitasari@gmail.com>

[PE] Editor Decision: Preparing for Publication

2 messages

Sherly Meilianti <sherly@fip.org>

Sat, Mar 5, 2022 at 4:04 AM

To: Anna Pradiningsih <annapradiningsih@gmail.com>, Baiq Leny Nopitasari <baiqleny.nopitasari@gmail.com>, Ida Ayu Meliana Resi Sukmaningsih <a@gmail.com>, Mahacita Andanalusia <citaandanalusia@gmail.com>, Rudi Hendra <rudi.hendra@lecturer.unri.ac.id>

Dear Anna Pradiningsih, Baiq Leny Nopitasari, Ida Ayu Meliana Resi Sukmaningsih, Mahacita Andanalusia, Rudi Hendra,

The editing of your submission, "IAI SPECIAL EDITION: The Effect of Advertising on the Purchasing Power Behavior of Facial Wash in Covid-19 Pandemic," is complete. We are now sending it to production in preparation for publication. You will be notified in due course when the galley is ready for proofreading and approval.

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Kind regards

Pharmacy Education

Sherly Meilianti <sherly@fip.org>

Sat, Mar 5, 2022 at 5:03 AM

To: Baiq Leny Nopitasari <baiqleny.nopitasari@gmail.com>, Shah Iqbal Ikraman Akbar <a@gmail.com>, Rudi Hendra <rudi.hendra@lecturer.unri.ac.id>

Dear Baiq Leny Nopitasari, Shah Iqbal Ikraman Akbar, Alvi Kusuma Wardani, Rudi Hendra,

The editing of your submission, "IAI SPECIAL EDITION: Development of Sumbawa Honey as Tonic to Stimulate Stamina during the Covid-19 Pandemic in West Nusa Tenggara," is complete. We are now sending it to production in preparation for publication. You will be notified in due course when the galley is ready for proofreading and approval.

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