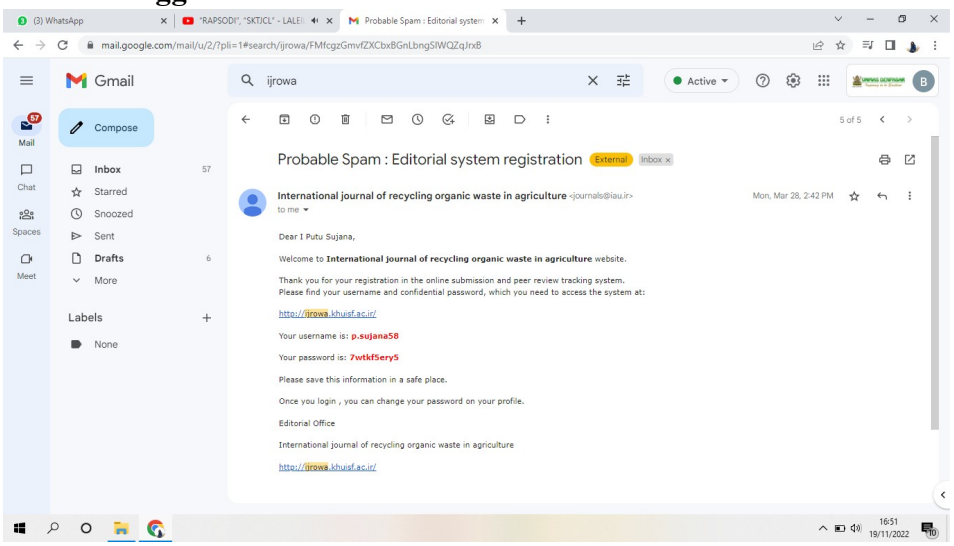
Bukti email dari IJROWA

1. Submit tanggal 28 Maret 2022



2. Revisi 1 bulan Juli terdapat masalah sehingga email hanya berupa perubahan password

23 July 2022

Dear Editor of IJROWA
Thank you for the constructive comments from the reviewers.
Please find our response below of each comment, as well as the attached revised manuscript
Reviewer 1 = Rejected

Comment

1. The quality of this paper was very poor and it was not suitable for publishing on the standard of this Journal, especially, this study was only preliminary investigated on the optimum concentration of organic waste for stimulating the growth of vegetables in hydroponic cultivation. The important detail such as checking on pathogen contamination in the product was still missing from this paper. Moreover, the statistic that was used for this experiment design must indicate the type of experimental design that the author used such as CRD or RCBD. Thus, the statistical calculation of the data in table2, 3, 4, 5 and 6 must be corrected.
Answer: in this experiment we have not analyzed the level of pathogen contamination of the biourine products that we made and used. Cow biourine is usually used for conventional crops as liquid organic fertilizer, in this paper we want to see how the potential use of cow biourine for organic hydroponic media is. The used experimental design was the RCBD Split Plot

2. In my point of view, in figure 2, the picture that the author is using must be asked for permission from the owner, it seems like the author made a copy of the picture and posted it in the manuscript. Any permission from the owner to present to the Journal ?. I suggested that the author can draw the new picture by yourself or you can make a conclusion by presenting using the table to show all values and add the reference.
Answer: Thank you for the advice provided. After some considerations we agree not to include the image.

3. There are many details in this paper that are not clear, for example, what is EM 4? Which kind of microbes consist of this product? Any reason to use this product in this experiment? The application of bio-urine product form growing vegetable was not clear, for instant, the ratio of product must be indicated
Answers:
In this study, we tried to make an organic hydroponic solution using cow biourine to replace conventional hydroponic solutions such as ABmix. The process of making biourine and the description of EM4 have been explained further in our paper. EM4 is a type of bioactivator solution that contains several types of micro-organisms that are applied in the fermentation process of organic matter to accelerate the natural decomposition process of organic matter. The types of bacteria contained in it include decomposers, lactobacillus sp,

lactic acid bacteria, photosynthetic bacteria, phosphorus solubilizing bacteria that naturally function as decomposers of organic matters, Streptomyces fungi and cellulose decomposing fungi.
Thank you for the advice

4. The author indicated at the result and discussion section that "If the EC value is high then the absorption of nutrients will be faster and vice versa". As the reviewer knows, the EC value indicates the salinity in the samples. The salinity is classified to many levels. Did you know that your sample was at which level?
Answer: we have revised the use of EC to TDS (Total dissolved solid) with ppm unit.

5. To see the toxicity and check the maturity of your product, the seed germination must be tested as well.
Answer : This test is very interesting to do, in our study we used 7 day old seeds that were sown in rockwool, then transferred to a hydroponic installation containing a solution of cow biourin as a substitute for inorganic hydroponic solutions.

6. The English writing style was poor. It was very hard to understand at many points.

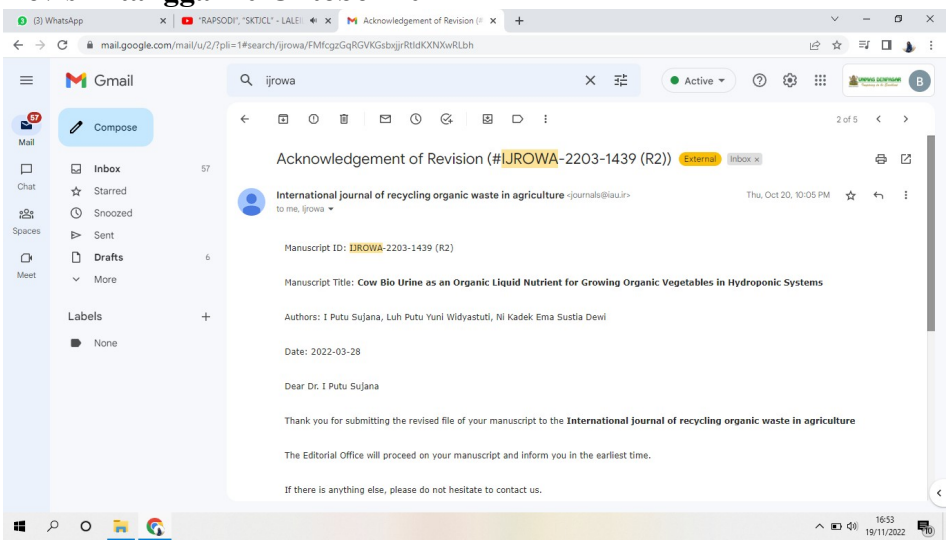
Reviewer 2 = Minor revision

I have made some corrections and I have to insert into the text. I will finish it by Sunday and submit. Meanwhile, please prepare the figure/ diagram/ Photo for the same. Meanwhile, the experimental set up of hydroponics is missing. They have used plastic bottle and plugged glasswool base to place seed. It would be nice to depict in methodology. You please ask the authors to add picture of one individual system (1 bottle with seed etc) or depict the same in diagram. It is very much necessary for the paper. thank you,
Answer: Thank you. We have carefully revised our manuscript as suggested, and hope that this version is better than the previous ones.

With thanks and best wishes,

I Putu Sujana

3. **Revisi 2 tanggal 20 Oktober 2022**



20 October 2022

Dear IJROWA editor
Thank you for the constructive comments from the reviewers as well as from the editor.
Please find our response below of each comment, as well as the attached revised manuscript.

Reviewer 1

Please see the attachment.

At this juncture, there are some errors. The authors need to clarify. As the other reviewer has commented, the plants have shown good growth even at 50 %. It may perform even at higher concentrations.

Once it is resubmitted with the answers for the comments indicated in the paper, it can be decided for its acceptance.

Need clarification – it is approximately 22 % solution. If you add 10 ml of 22 % solution and dilute it to 100 ml it becomes 2.2 g in 100 ml. It is equivalent to 22000 mg in 1000 ml (L). In otherwords, it becomes 22000 ppm. Whereas, your values in the Figure 2 (the TDS is given in 900 to 1100 ppm. It is very unlikely. Meanwhile, if you add 50 ml of 22 % solution to 100 ml, the concentration gets increased by 5 times. The values are no where near. Can you please clarify. Another thing in Fig 2, why TDS of C_1 to C_4 are at the same level while,C_5 is distinctly different than other 4. It may be necessary for inserting these corrections.

The paper may be submitted without this table, but we miss the science component. Please recheck the calculations. Where it is wrong

Answer: Thank you. We agree with you. clarification- why TDS of C_1 to C_4 are at the same level while,C_5 is distinctly different than other 4 ? The biourine solution as a hydroponic solution was given 4 times and TDS was measured at 8 DAP, 16 DAP, 24 DAP and 32 DAP. The values in table 2 show the TDS of the solution after application. It is possible that the TDS at C5 is indeed very saturated which is not absorbed by plants. We have added a brief explanation about this in our manuscript.

Reviewer 2

I have read the paper carefully. The manuscript, that shows novel aspects, study the effect of the concentration of biourine as a substitute for nutrients in the hydroponic system and to study the best concentration of biourine for the growth and yield of pakcoy, spinach and water spinach. Despite the merits of this study, the manuscript still needs thorough editing before it can be considered for publication in international journals. A key issue is convincing of the novelty of the research and discussing it concerning the existing research. This is missing from the present manuscript. Abstracts and introductions should both convey the novelty of the work.

The introduction is not cohesive. It is just a compilation of information gathered from literatures. The writing is very poor and has not been properly reviewed before submitting to journal. The justification for objects selection is needed.

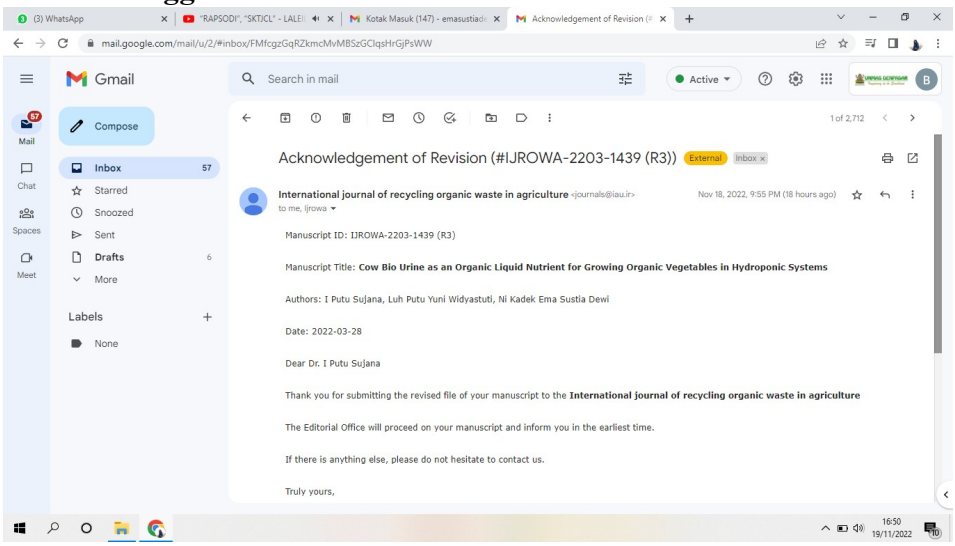
The sentence of the Introduction: "The type of modern agriculture that is needed nowadays……. to maintain continuity and quality of production as well as consumer health" is too long; please rewrite.

Scientific language of this work is so dull and requires extensive English editing.
Authors should carefully check the formatting of this work while submitting the revised version
I wish those changes will contribute to improve your paper.

Answer: Thank you. We have carefully revised our manuscript as suggested, and hope that this version is better than the previous ones.

With thanks and best wishes,

4. **Revisi 3 tanggal 18 November 2022**



Submit revisi 18 november 2022

Dear IJROWA editor

Thank you for the constructive comments from the reviewers. Please find our response below of each comment, as well as the attached revised manuscript.

Responses from the authors to reviewers' comments

Comments from Reviewer 1	Response
The manuscript has improved and can be accepted for publication. However, it is advisable to let the authors know that they must indicate the changes made in some way, for example with color. And another thing: when they point out an acronym, they must say that it is the first time they have mentioned it.	Thank you for your advice. The manuscript has been revised using track changes.

Reviewer 2

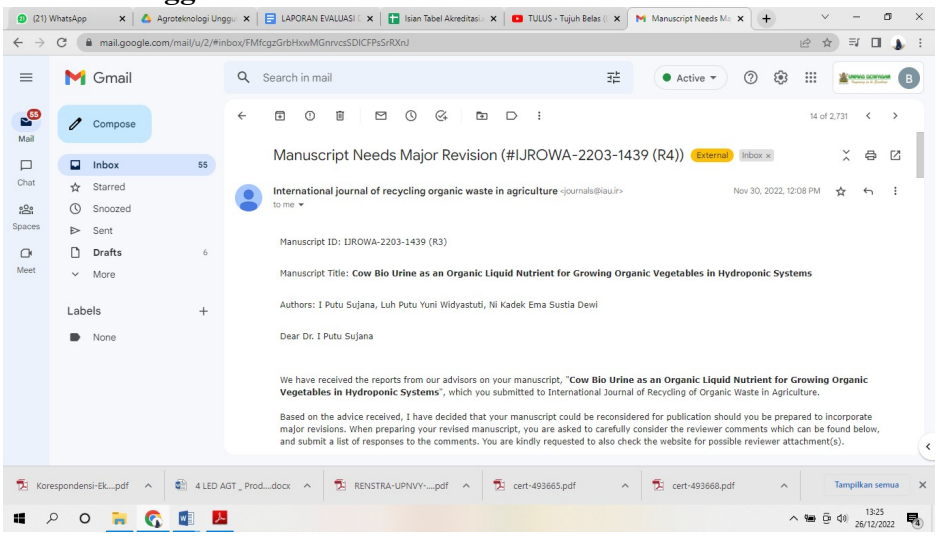
Comments from Reviewer 2	Response
Reviewer's report: The manuscript entitle may be correct as "**Cow urine as Organic Liquid Nutrient for Growing Organic Vegetables in Hydroponic Systems**." accepted after major corrections.	We think the title of the manuscript can't just replace with "**Cow urine as Organic Liquid Nutrient for….**, we use a fermented cow urine product which we call bio urine for this research. Hence we propose that the phrase **"Cow Bio Urine"** would still be in the title.

➢ In the abstract and paper, cow urine is a biourine and used any one name.	Has been corrected
➢ Why cow urine diluted 10%.....50% with distilled water?	An explanation has been added in material and method. Line 85-91
➢ Write about experimental crops (Pakcoy, spinach and water spinach) and its important in intro.	Has been added in second paragraph Line 39-Line 41
➢ In Figure 2. (A) Total Dissolved Solid (TDS) of cow biourine during plant growth, (B) pH of cow biourine solution during growth…..what we observe ?	We add cow bio urine nutrient solution every week and measure TDS and pH. we observe whether the amount of TDS we add will always be constant during plant growth, and the pH measurement aims to see if there is a change in the pH of the solution every week. Where plants will especially be sensitive to changes in pH.
➢ In 50% solution of biourine show highest TDS and pH? Explain.	Because the initial pH of bio urine is around 8, adding water will help lower the pH of the bio urine nutrient solution as well as the TDS in the nutrient stock solution that we use. The explanation has been added in material and method. Line 85-91
➢ "The TDS of the C5 ranged from 1100-1150 ppm so that it can be absorbed by plants – especially vegetables, and the pH was neutral."……. These crops have ability to change pH 8 to neutral?	An explanation has been added in line 148-149.
➢ "This shows that by increasing the concentration of the biourine, the dry weight and fresh weight are increasing."…..why not observed on 60% biourine…..may be chances to increase….?	It's already in the suggestions L233-235
➢ I want to known; undoubtedly your	Thank you, large-scale applications can

work is good but how applicable in large scale?	be applied when there are large cow farms that provide raw materials for the manufacture of bio urine. Farmers and hydroponic entrepreneurs can work together. The farmer can also open an organic hydroponic business by managing their own livestock waste and making bio urine. We add some idea for small farmer and community L219-221
There were 4 replicates for experiments and not mentioned Mean with Standard deviation/error in any tables 2, 3.	Has been added in supplementary table
➢ **Some references mentioned in text but not correct show in reference list:**	Has been revised

With thanks and best wishes.

5. Revisi 4 tanggal 30 November 2022



Terdapat kesamaan isi email, padahal sudah direvisi. Jadi dilakukan pengiriman ulang sebagai revisi 4

Submit revisi 8 Desember 2022

Dear IJROWA editor

Thank you for the constructive comments from the reviewers. Please find our response below of each comment, as well as the attached revised manuscript.

Responses from the authors to reviewers' comments

Comments from Reviewer 1	Response
The manuscript has improved and can be accepted for publication. However, it is advisable to let the authors know that they must indicate the changes made in some way, for example with color. And another thing: when they point out an acronym, they must say that it is the first time they have mentioned it.	Thank you for your advice. The manuscript has been revised using track changes.

Reviewer 2

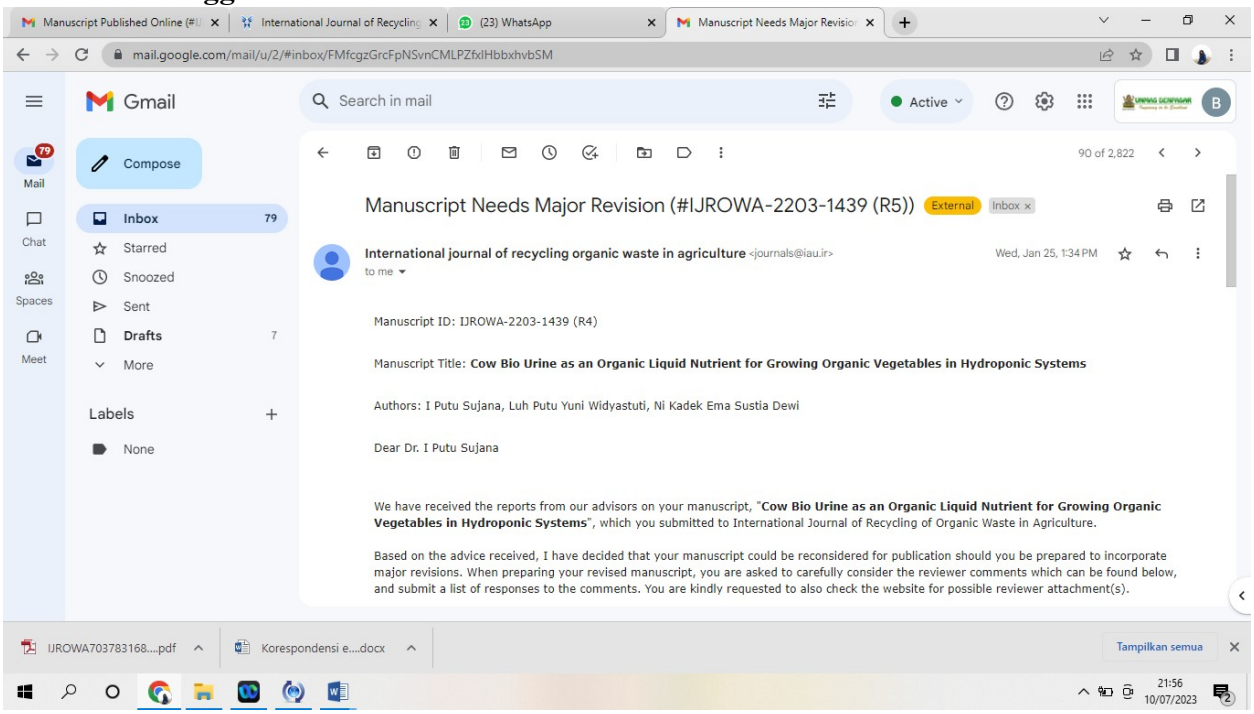
Comments from Reviewer 2	Response
Reviewer's report: The manuscript entitle may be correct as "**Cow urine as Organic Liquid Nutrient for Growing Organic Vegetables in Hydroponic Systems**."	We think the title of the manuscript can't just replace with "Cow urine as Organic Liquid Nutrient for…., we use a fermented cow urine product which we call bio urine for this research. Hence we

accepted after major corrections.	propose that the phrase “Cow Bio Urine” would still be in the title.
➢ In the abstract and paper, cow urine is a biourine and used any one name.	Has been corrected
➢ Why cow urine diluted 10%.....50% with distilled water?	An explanation has been added in materials and methods. Lines 85-91. Cow bio urine is a liquid organic fertilizer that we used as substitute for inorganic hydroponic solutions (table 1), so it needs to be dissolved with distilled water to form a concentrated that desired solution. Concentration of 10%…50% is the treatment we use and we have explained how to prepare the solution in (Line 85-91)
➢ Write about experimental crops (Pakcoy, spinach and water spinach) and its important in intro.	Has been added in second paragraph Line 39-Line 41
➢ In Figure 2. (A) Total Dissolved Solid (TDS) of cow biourine during plant growth, (B) pH of cow biourine solution during growth…..what we observe ?	We add cow bio urine nutrient solution every week and measure TDS and pH. we observe whether the amount of TDS we add will always be constant during plant growth, and the pH measurement aims to see if there is a change in the pH of the solution every week. Where plants will especially be sensitive to changes in pH.
➢ In 50% solution of biourine show highest TDS and pH? Explain.	Because the initial pH of bio urine is around 8, adding water will help lower the pH of the bio urine nutrient solution as well as the TDS in the nutrient stock solution that we use. The explanation has been added in material and method. Line 85-91.
➢ “The TDS of the C5 ranged from 1100-1150 ppm so that it can be absorbed by plants – especially vegetables, and the pH was neutral.”……. These crops have ability to change pH 8 to neutral?	An explanation has been added in lines 148-149. Plants do not change the pH of 8 in solution. pH 8 (table 1) is the initial pH of cow bio urine before it is dissolved in distilled water according to the concentration used. When we dissolved the bio-urine mixed with water, the pH decreased (according to table 2). This pH observation was carried out every time

	we added the solution to the bottle during the study.
➢ "This shows that by increasing the concentration of the biourine, the dry weight and fresh weight are increasing."…..why not observed on 60% biourine…..may be chances to increase….?	It's already in the suggestions L233-235. we only studied up to a concentration of 50% because the pH of the solution was already 7, it is possible that if we increase the biourine concentration to 60% the pH of the solution will exceed 7. but it doesn't matter if further research is carried out, in order to obtain maximum concentration information on the growth of the 3 vegetables tested.
➢ I want to known; undoubtedly your work is good but how applicable in large scale?	Thank you, large-scale applications can be applied when there are large cow farms that provide raw materials for the manufacture of bio urine. Farmers and hydroponic entrepreneurs can work together. The farmer can also open an organic hydroponic business by managing their own livestock waste and making bio urine. We add some ideas for small farmers and communities L219-221
There were 4 replicates for experiments and not mentioned Mean with Standard deviation/error in any tables 2, 3.	Has been added in supplementary table
➢ **Some references mentioned in text but not correct show in reference list:**	Has been revised

With thanks and best wishes.

6. **Revisi ke 5 tanggal 25 Januari 2023**



Terdapat revisi dari reviewer 1

Submit revisi 8 Februari 2023

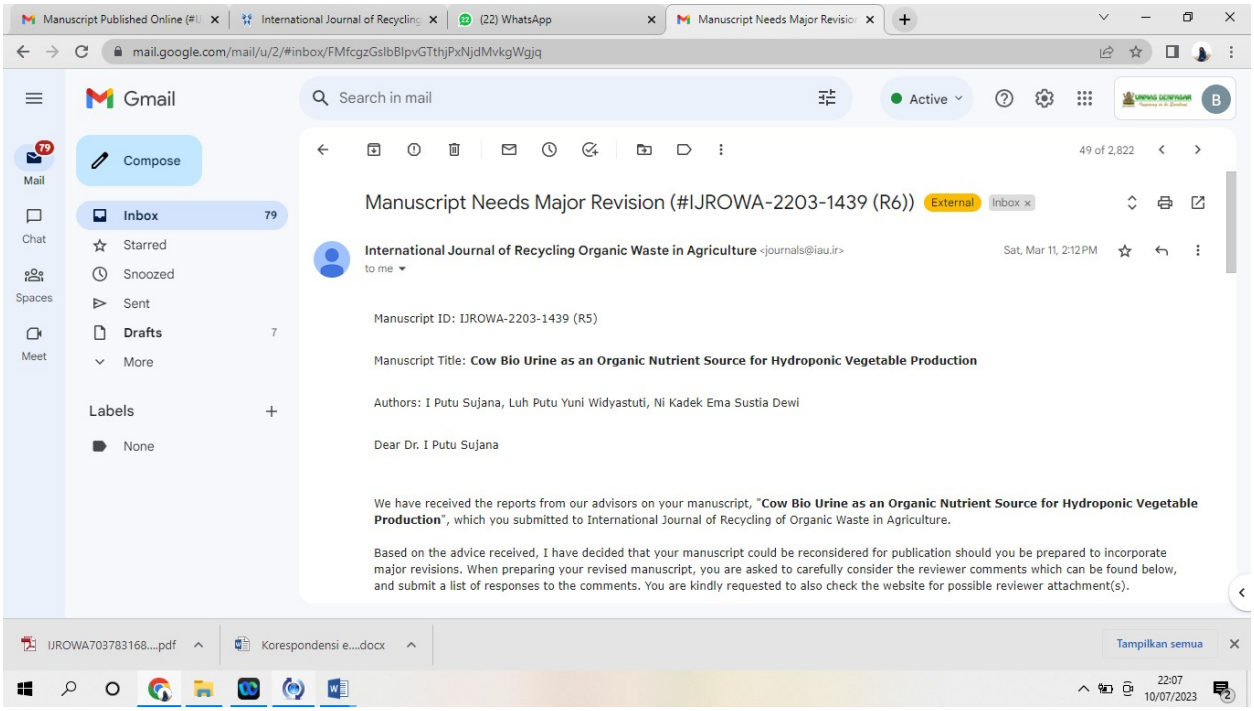
Reviewer 1

comment	tanggapan
There is a need to develop organic fertilizers from waste products and provide fertilizer alternatives in hydroponic production. The study presented here appears to show that fermented bio-urine may be a suitable hydroponic fertilizer for producing vegetables organically. The use of fermented bio-urine appears to be relatively easy to implement and may be especially well suited for use on smaller farms. The apparent limited need for advanced technology and automation may be significant advantages in the use of fermented bio-urine.	Yes, we agree about the statement. Bio urine is a liquid fertilizer derived from fermented cow urine and is easily available and made by farmers in Indonesia
The manuscript is a bit difficult to follow and understand. It is not clear for instance, how the various plant characteristics were measured. The study	The hydroponic system was placed in a greenhouse with natural temperature and sunlight.

was likely conducted under "natural" temperature and light conditions, although that is not stated or clearly indicated.	
Would it be desirable to establish and maintain a certain TDS level (ppm) rather than a specific dilution percentage? Considering that there may be variations in the nutrient content of fermented bio-urine?	Yes, in this study we wanted to get the best concentration that is close to the optimum TDS for plant growth.
Would a comparison of vegetable growth using a current commonly used inorganic or organic hydroponic fertilizer, be informative in evaluating the use of fermented bio-urine?	Yes, it would be interesting to use this comparison. In this study, the results we got produced healthy and well-growing plants, as well as results similar to the use of commercial liquid inorganic fertilizers aimed at parameters such as wet weight and dry weight. We have added some literature to the discussion.
Organic is repeated in the title - maybe edit to - Cow bio urine as an organic nutrient source for hydroponic vegetable production	Thank you so much for your suggestion. We have correcting the tittle of the manuscript.
Line 36: hydroponics as a soilless production system using water? There are several types of "hydroponics." Some systems use an inert growing substrate to hold/anchor the plants while the nutrients/fertilizers are provided in a water solution. It is not clear why verti-culture is introduced and mentioned on line 43.	Thank you so much. We have been correcting that in the introduction.
Line 38: this paragraph can be improved – It is a circular argument to say that hydroponics can be productive using a nutrient rich water solution. The availability and uptake of nutrients along with appropriate growing conditions (temp, light CO2, etc) can be expected to result in good crop growth and productivity in any production system.	We agree with your opinion, we have provided other literature regarding the advantages of using organic hydroponic nutrient solutions
Line 67: confusing, why reference soil and hydroponics?	We have replaced the literature from within the paper. It should be noted that bio-urine is a liquid organic fertilizer which is actually widely used in conventional organic cultivation (soil

	media), but not many use it as a hydroponic solution
Line 90: Does this mean the hydroponic solution was recharged every 8 days? Or was the bio-urine added to a closed hydroponic system?	Yes, this solution was recharged every 8 days. We make a stock solution of 1 liter for each concentration. First application 700 ml, and 2, 3, 4 (100 ml/weeks)
Line 134: Information on variables collected to determine growth and yield belongs in the Research Method section. Since these are leafy vegetables, measuring yield as the above ground leaf tissue can be expected suitable. How many plants were included in each treatment and how many plants were sampled throughout the study? How were the measurements conducted? What size of a leaf, for instance, was considered a "leaf?" How were fresh- and dry weights determined?	The efects of each treatment on the growth of bok choy, spinach and water spinach were recorded by measuring plant growth parameters as follows: fresh and dry weight, number of leaves, leaf area, foliage dry biomass, and root dry biomass. There were 3 types of plants and each treatment was repeated 4 times, so that a total of 60 plants were used in the experiment. Fully developed leaves were measured, with a leaf area meter, leaf biomass, roots and all of them were measured with digital scales and dry weight in the oven until dry until constant.
Line 150: Figure 2 shows the results after 21 days. Why was this data collection time used rather than at the termination of the study after 32 days?	Only photos of plant development 21 days showed the growth of the plant. The best harvesting age for these vegetables is 32 DAT. Because it has reached its maximum vegetative growth.
Figure 3: Is there an expectation that the relative ratio between fresh- and dry weight would vary at the various biourine concentrations?	We wanted to see if each of the vegetables tested showed an increase in fresh and dry weight per concentration. The most responsive to the addition of concentration is bok choy.We see the response of vegetables to the addition of concentration.

7. **Revisi ke 6 tanggal 11 Maret 2023**



Masih mendapat revisi dari reviewr 1

Submit revisi 20 Maret 2023

March 20, 2023

Dear, Hossein Pourmoghadas

Thank you for the comments from the reviewers as well as form the editor. Please find our response below of each comment, as well as the attaches revised manuscript.

Comment's from reviewer

It is stated in the response to the reviewers that bio-urine is or has been used in field and soil-based production systems. The study here was conducted to evaluate and how to adapt the use of biourine in organic hydroponic systems. It is not clear in this manuscript that biourine has or is currently being used successfully as a nutrient source in traditional soil-based vegetable production. It may be helpful to have this information to understand that this is not necessarily a new product or nutrient source for vegetable production.

Thank you for your suggestion, We have added more explanation about the use of bio urine in organic plants in soil media in introduction

it is indicated that cow bio urine is produced using a solution of various microorganisms called EM4. Is this product readily available for smaller growers to use?
Yes, EM4 product is very easy to obtain for small farmers, because EM4 is easy to buy and is often used in composting by farmers.

Or would the preparation and manufacturing of biourine occur at a central facility and then distributed to various producers?
Bio Urine can be produced in groups by farmers with available urine sources from cow ranch in one village

This may limit the availability and use by smaller sized hydroponic growers?
In Indonesia, there are many farmers who know how to make bio urine and even have training. This product is not licensed to be manufactured by a large company. So anyone can produce it independently (of course the nutritional content of each bio urine will different). Some farmer groups, sell it with a nutritional analysis label.

Overall, the study is a bit limited in scope and comparing the results to "traditional" hydroponic solution would be helpful in evaluating the results.

Thank you. We agree this study will be interesting if we conduct uses "traditional" hydroponic solution as check. we haven't explore this further in this study as we only comparing the concentration of bio urine in the growth of 3 types of vegetables.

Reviewer's report:
The manuscript entitle may be correct as "**Cow urine as Organic Liquid Nutrient for Growing Organic Vegetables in Hydroponic Systems**." accepted after major corrections.
Thank you for your suggestions.

- In the abstract and paper, cow urine is a biourine and used any one name.
  Bio urine is obtained from ruminants such as cows, buffalo, goats, and others through an anaerobic fermentation process employing nitrogen-fixing microbes and other decomposer

microbes. It’s not only raw cow urine, that's why we call it cow bio urine in our manuscript.

- Why cow urine diluted 10%.....50% with distilled water?
  fermented cow urine (we call it cow bio urine) is similar to "traditional" hydroponic solution, therefore it needs to be diluted into several concentrations so that it can be optimally absorbed by plants, from this study we want to see which concentration is the most effective, gives the best results for the growth of 3 vegetables)

- Write about experimental crops (Pakcoy, spinach and water spinach) and its important in intro.
  we have added in the introduction

- In Figure 2. (A) Total Dissolved Solid (TDS) of cow biourine during plant growth, (B) pH of cow biourine solution during growth.....what we observe ? Changes in TDS/pH by the effect of crops???
  what we observed was plant growth at different cow bio urine solution concentrations, TDS and pH observations were made to assess the quality of the hydroponic solution we used during the study.

- In 50% solution of biourine show highest TDS and pH? Explain.
  the ratio between cow bio urine and solvent is 50:50, the higher the solute, the higher the TDS as well as the pH of the cow bio urine solution.

- “The TDS of the C5 ranged from 1100-1150 ppm so that it can be absorbed by plants – especially vegetables, and the pH was neutral.”..... These crops have ability to change pH 8 to neutral?
  No, we explained that a C5 solution with a TDS of 1100-1150 ppm can be absorbed well by plants. besides that, the pH of the solution at C5 concentration is still neutral, the TDS and pH will change because of the results of dilution with distilled water not because of the plants. please take a look at the pH of the cow bio urine solution in table 1 which has not been diluted is 8 which has alkaline pH. In this study we measured the pH and TDS of the solution periodically at each addition of the solution into the hydroponic system (found in the method) so that the quality of the hydroponic solution is maintained at each addition)
- “This shows that by increasing the concentration of the biourine, the dry weight and fresh weight are increasing.”.....why not observed on 60% biourine.....may be chances to increase....?
  We have not carried out follow-up experiments for higher concentrations, considering that this is an initial study, the

results of our research also show that the optimum concentration has not been found for the use of bio-urine concentrations. We are preparing the continuation of this study to analyze in more concentration and variation of bio urine.

- I want to known; undoubtedly your work is good but how applicable in large scale?
  Cooperation between farmers in an area can be carried out to produce bio urine on a large scale. This product is not licensed to be manufactured by a large company. so anyone can produce it independently (of course the nutritional content of each bio urine will different). In Indonesia, some farmer groups, sell it with a nutritional analysis label.

- There were 4 replicates for experiments and not mentioned Mean with Standard deviation/error in any tables 2, 3.

  The value of mean, coefficient of variation and Duncan test have been presented in table 3 and 4. We also attach the anova analysis in supplementary table.

Some references mentioned in text but not correct show in reference list:

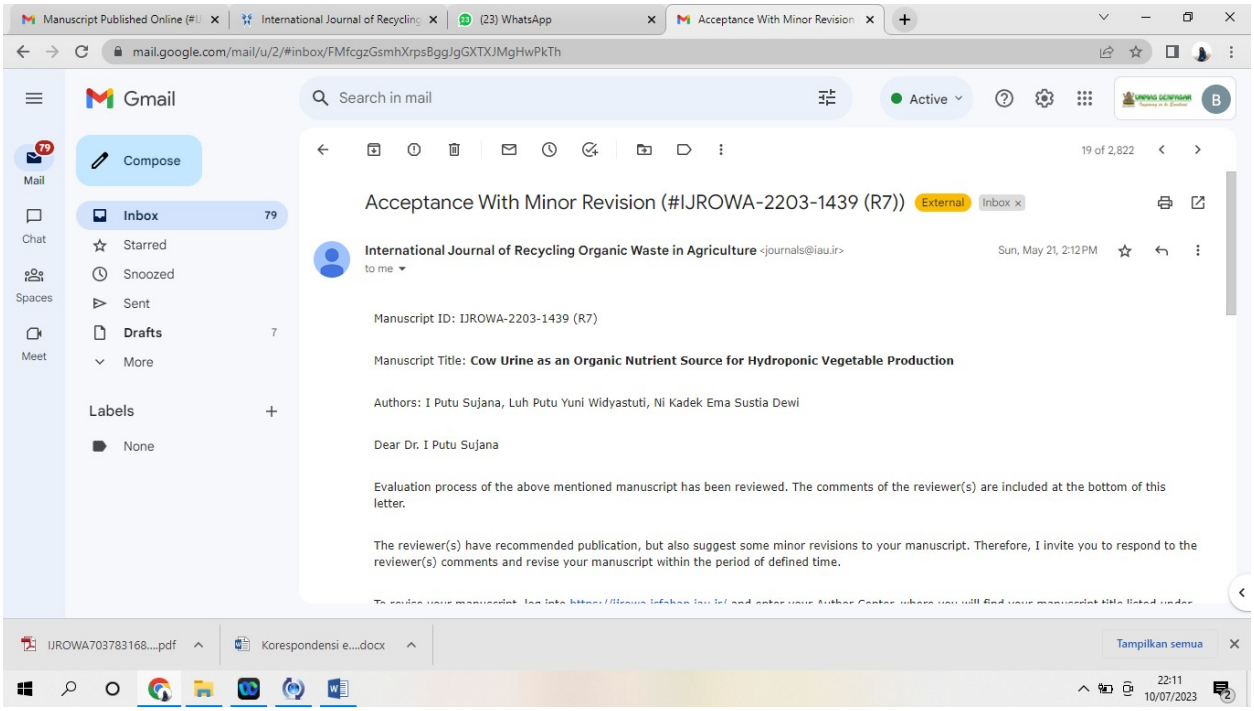
Thank you. We have carefully revised our manuscript as suggested, and hope that this version is better than the previous ones.

Dear editor,

Thank you. We have tried to address all the comments and performed the revisions, as suggested.

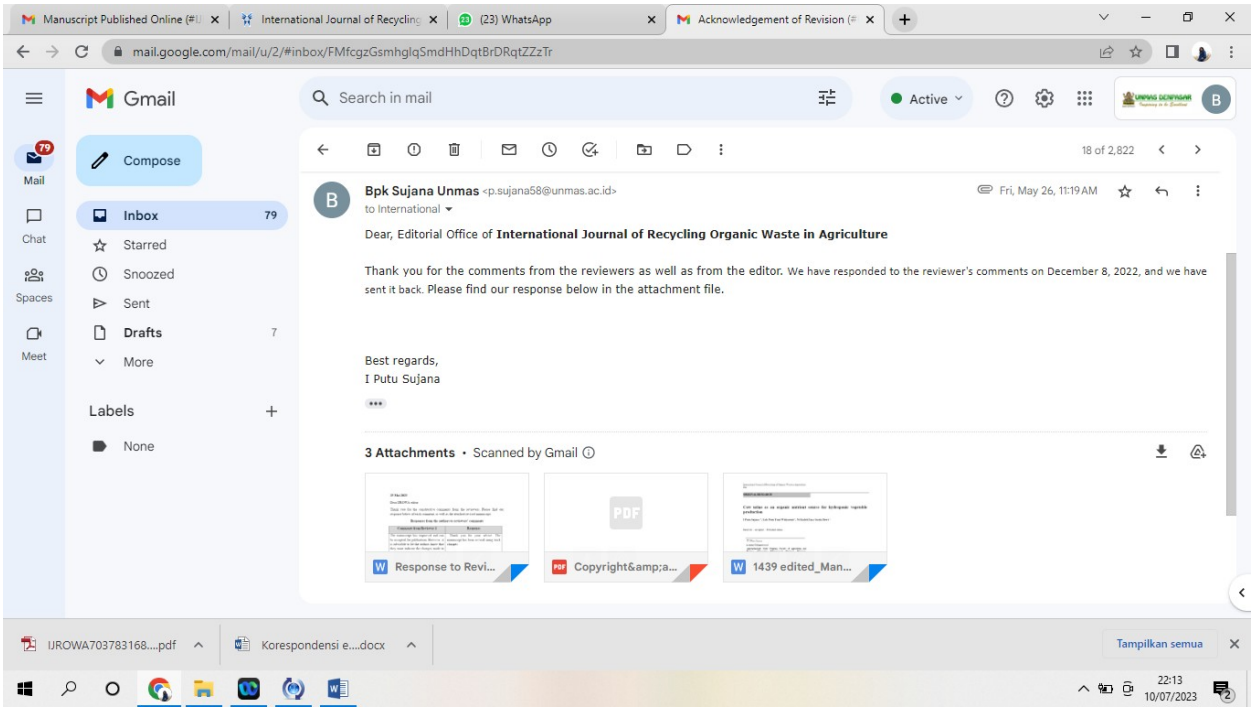
With thanks and best wishes,

8. **Revisi ke 7 tanggal 21 Mei 2023**



Accepted with minor revision, revisi berupa pengecekan afiliasi, draft sesuai template

Submit revisi 26 Mei 2023



B

Bpk Sujana Unmas <p.sujana58@unmas.ac.id>

Fri, May 26, 11:19 AM

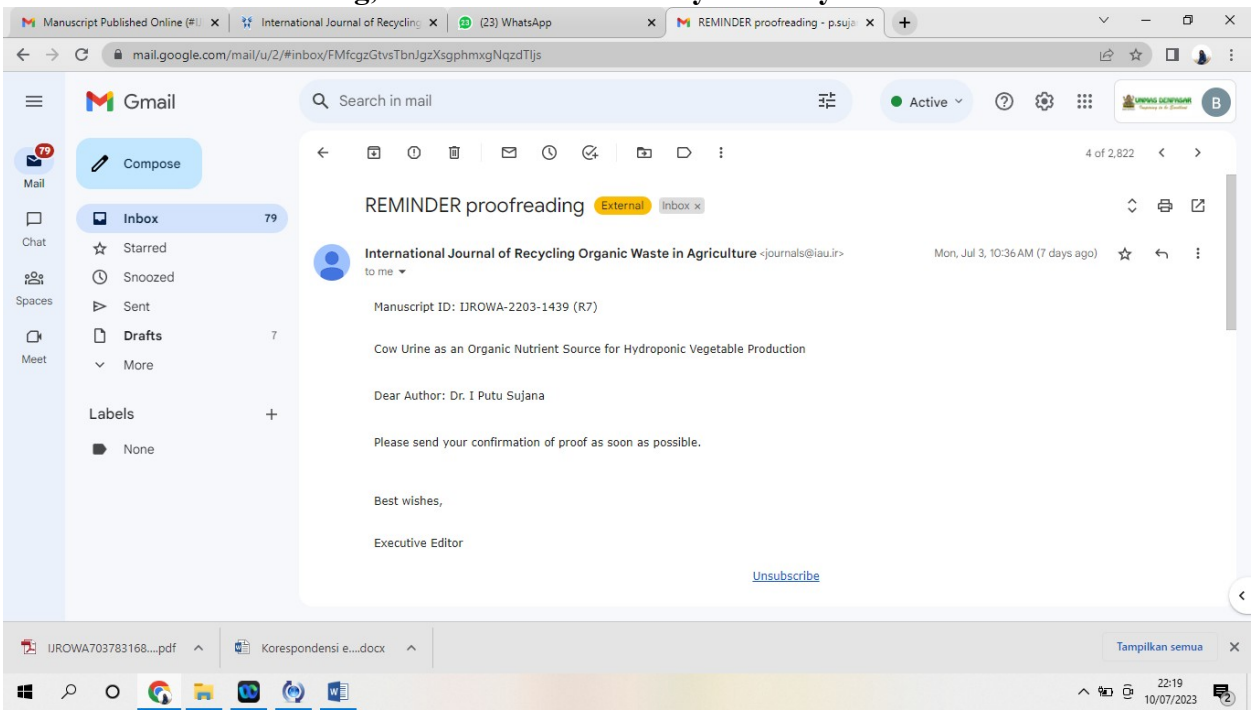
to International

Dear, Editorial Office of **International Journal of Recycling Organic Waste in Agriculture**

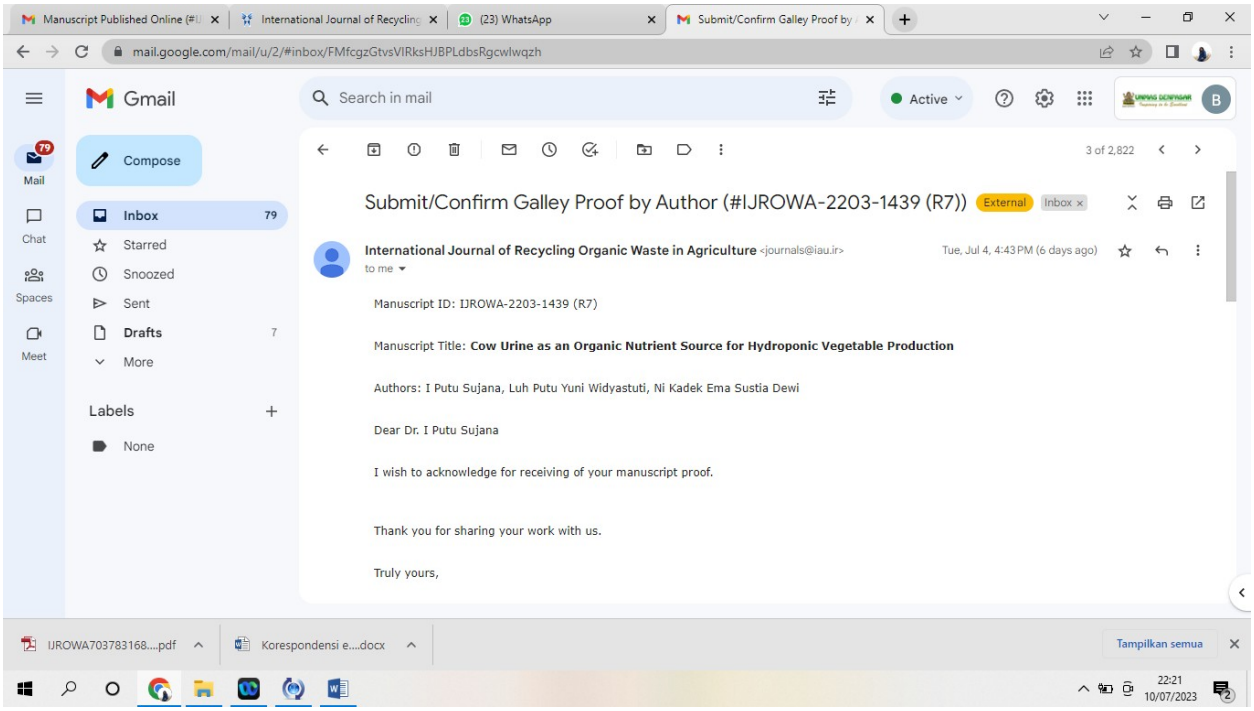
Thank you for the comments from the reviewers as well as from the editor. We have responded to the reviewer's comments on December 8, 2022, and we have sent it back. Please find our response below in the attachment file.

Best regards,
I Putu Sujana

9. REMINDER Proofreading, Submit/Confirm Galley Proof by Author 4 Juli 2023

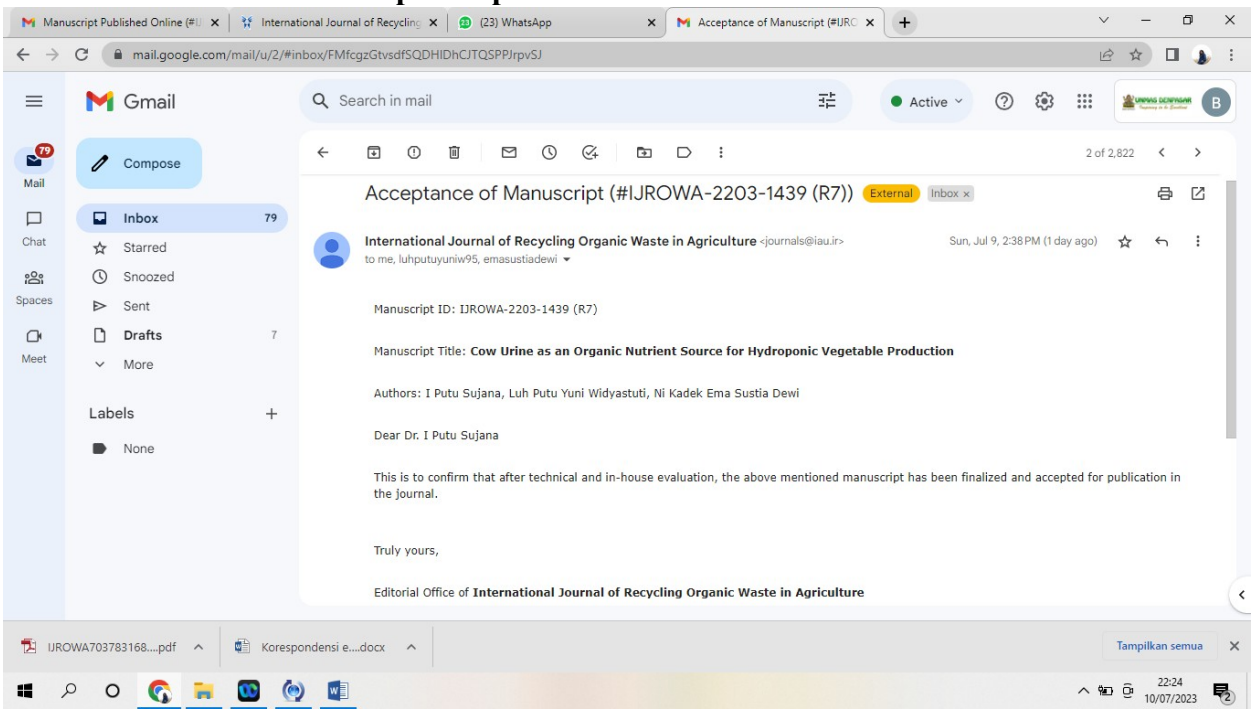


Mengingatkan untuk mengecek proofreading atau draft jurnal

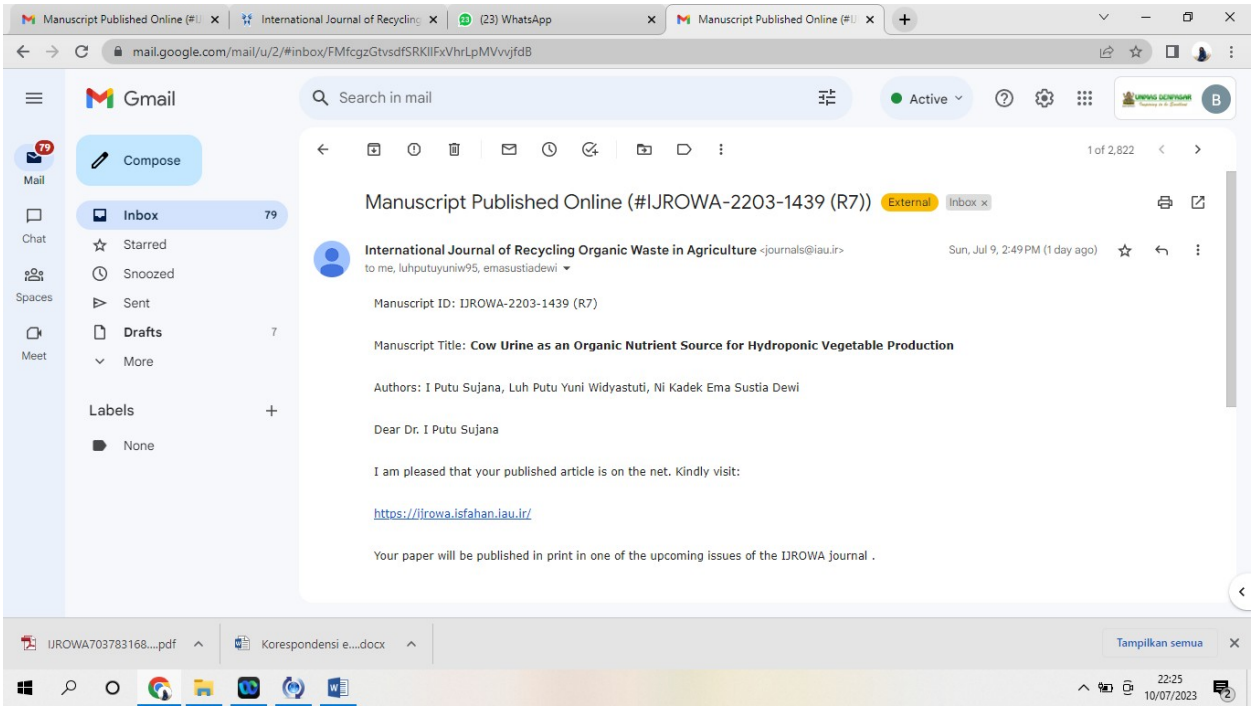


Submit lagi draft yang dikonfirm dan menambahkan file gambar dengan kualitas yg lebih baik

10. ACCAPTENCE of manuscript and publised online 9 Juli 2023

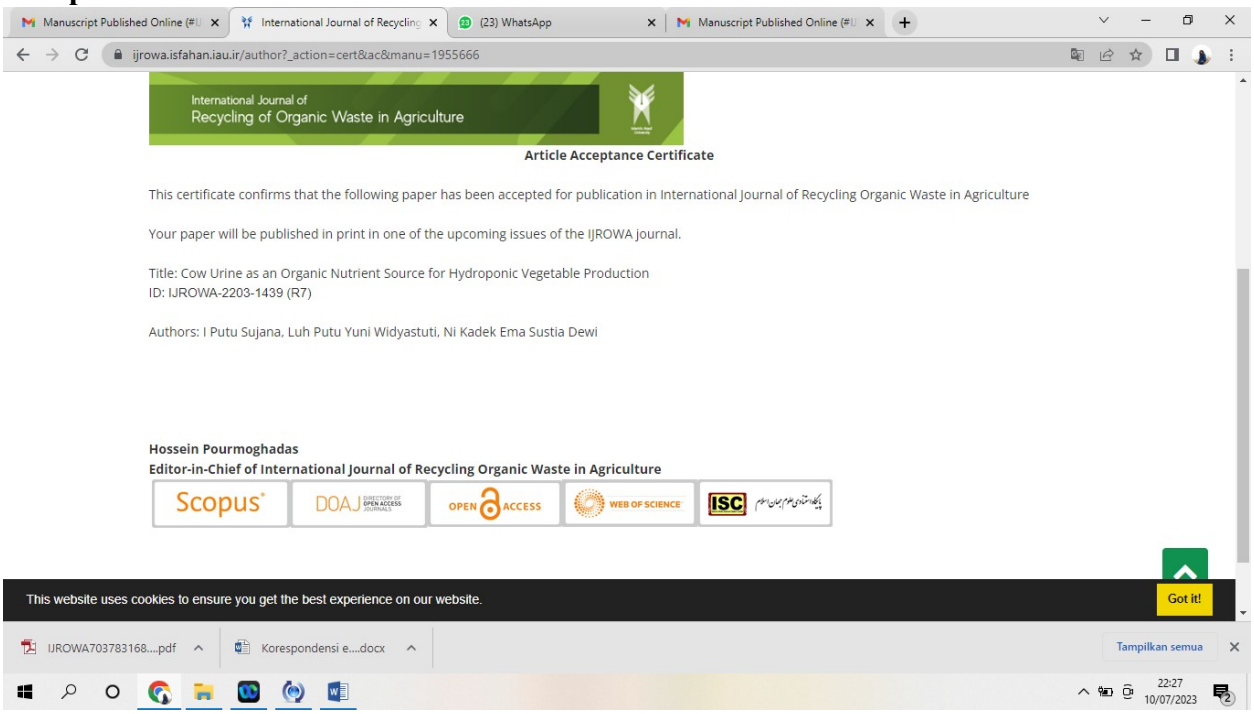


Bukti accepted melalui email



Bukti manuscript publised in press (menunggu in print)

Acceptence Certificate



International Journal of
Recycling of Organic Waste in Agriculture

Article Acceptance Certificate

This certificate confirms that the following paper has been accepted for publication in International Journal of Recycling Organic Waste in Agriculture

Your paper will be published in print in one of the upcoming issues of the IJROWA journal.

Title: Cow Urine as an Organic Nutrient Source for Hydroponic Vegetable Production
ID: IJROWA-2203-1439 (R7)

Authors: I Putu Sujana, Luh Putu Yuni Widyastuti, Ni Kadek Ema Sustia Dewi

Hossein Pourmoghadas
Editor-in-Chief of International Journal of Recycling Organic Waste in Agriculture

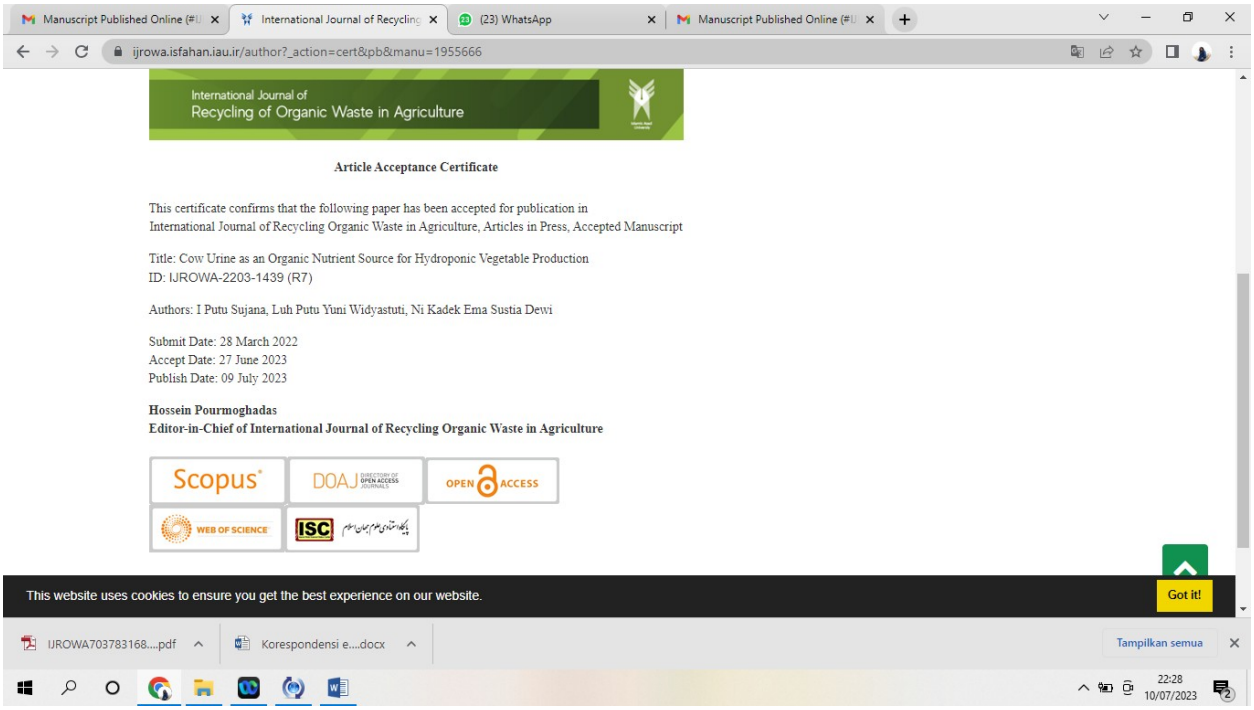
Scopus DOAJ OPEN ACCESS WEB OF SCIENCE ISC

This website uses cookies to ensure you get the best experience on our website. Got it!

IJROWA703783168....pdf Korespondensi e....docx Tampilkan semua

22:27 10/07/2023

Publised certificate



International Journal of
Recycling of Organic Waste in Agriculture

Article Acceptance Certificate

This certificate confirms that the following paper has been accepted for publication in
International Journal of Recycling Organic Waste in Agriculture, Articles in Press, Accepted Manuscript

Title: Cow Urine as an Organic Nutrient Source for Hydroponic Vegetable Production
ID: IJROWA-2203-1439 (R7)

Authors: I Putu Sujana, Luh Putu Yuni Widyastuti, Ni Kadek Ema Sustia Dewi

Submit Date: 28 March 2022
Accept Date: 27 June 2023
Publish Date: 09 July 2023

Hossein Pourmoghadas
Editor-in-Chief of International Journal of Recycling Organic Waste in Agriculture

Scopus DOAJ OPEN ACCESS WEB OF SCIENCE ISC

This website uses cookies to ensure you get the best experience on our website. Got it!

IJROWA703783168....pdf Korespondensi e....docx Tampilkan semua

22:28 10/07/2023

Dear, Editorial Office of **International Journal of Recycling Organic Waste in Agriculture**

Thank you for having accepted and published this manuscript. Thank you for the cooperation, we hope this manuscript will be useful for the community.

Best regards,
I Putu Sujana and team