OPEN PEER REVIEW

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As a new feature for progressing towards transparency, we decided to open a new window for all of our editors as well as authors titled "**Peer Review**". We hope by this new facility, our reviewers will be more motivated and authors will be more satisfied with the review process. We believe that publishing our peer review reports could make a transparent and clear environment for all our efforts within a journal, but not all reviewers tend to publish their comments.

What is "Open Peer Review" process?

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Advantages of "Open Peer Review" process

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- Authors' satisfactions from the review process: Increases honesty between authors and reviewers
- Education of both authors and new students
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Peer Review

Jundishapur Journal of Natural Pharmaceutical Products
Article DOI: https://doi.org/10.5812/jjnpp-164649
Published in: Jundishapur Journal of Natural Pharmaceutical Products: 20(4) ; e164649

Peer Review Report for "Identification and Quantification of Carbohydrates, Amino Acids, and Protein in Gazo (Oak Manna)"

Author(s): Anvar Soleimani, Darya Shorsh Hamad, Sina Khalil Ismael, Kamal Muhamad Said

Review Timeline:

Submit Date:	20 Jul 2025
Revised Date:	31 Aug 2025
Accepted Date:	31 Aug 2025

Revision (0)

Here, you can see the **Reviewers**, **Associate Editors** and **EICs'** comments from the beginning to the end of the revision process.

REFEREE : Reviewer

24 Jul 2025

"I have reviewed the statistical aspects of the manuscript 'Identification and quantification of Carbohydrates, Amino acids, and Protein in Gazo (Oak manna)'. The statistical analyses appear to be straightforward and appropriately applied to the data presented. I found no major statistical concerns regarding the methods or interpretation of the results."

maryam kachooeian : Reviewer

30 Jul 2025

Dear Editor
This is a novel topic that could contribute meaning to future research in the field. It

can be Published after correction these revisions:
The manuscript contains numerous long and complex sentences that reduce clarity. I recommend that the authors revise the text for grammatical accuracy and scientific fluency. Specifically, sentences should be shortened and restructured for better readability

about the health-related benefits of Gazo, such as antioxidant, antimicrobial, and anti-inflammatory effects, without providing direct evidence or supporting references.
I strongly recommend that the authors expand the discussion section.

REFEREE : Reviewer

4 Aug 2025

I have read the manuscript entitled "Identification and quantification of Carbohydrates, Amino acids, and Protein in Gazo (Oak manna)". The following are my comments and questions:
Title:
It is suggested to add the scientific name of the source plant in your title, as well as the keywords.
Abstract:
1- Quercus brantii and every other scientific name must be written in italic.
Introduction:
1- The manna are only produced by insects. mechanical factors or external temperature variations are unable to lead to manna production independently.
2- Oak manna usually forms on the oak leaves, not the bark.
3- It is said “Kurdistan territories of Iran, Iraq, and Turkey”. Kurdistan is not a territory in Iran: It is a province. In the case of Türkiye, also there is not such territory. Most importantly, the cited references (9 and 4) has not the supporting data or any related claim.
4- The last paragraph is too long and there are several repeated statements. Please shorten this part and not repeat the same information in different manners.
Materials and Methods:
1- It is better to mention the accurate location by latitude and longitude. The elevation or altitude should be added. Most importantly, the identification process of the species including the herbarium code must be added.
2- Regarding materials, it must be , between methanol and analytical standards of glucose …
3- Seliwanoff's Test is a test to distinguish keto sugars form aldo sugars, so it does not evaluate non-reducing sugars necessarily.
4- You have listed a series of test including Molisch test, Barfoed’s test, Seliwanoff test, Ninhydrin test, and Biuret test but you have not provided the information of their reagents such as their supplying sources and their amounts. The detailed information of how these tests were done is necessary.
5- Regarding LC-MS/MS and HPLC analyses, the solvent systems, brand of instruments and brand of columns must be added.
6- Considering Kjeldahl method, the catalyst mixture is described as “typically

potassium sulfate and copper sulfate or selenium", however you must describe the exact mixture that you have used without "typically" and "or".
7- OPA/FMOC reagents must be defined before abbreviation.
Results:
1- You mentioned Bial's test, Osazone test and the iodine test in results but not in the methods part. They must be added there, too.
2- In Biuret test you obtained negative result, suggesting absence of proteins, while based on Kjeldahl test you estimated the protein content to be 2.18%. How do you explain this?
Discussion
1- There are several repeated statements in discussion. They should be deleted.

Sara Bahrainian : Associate Editor 8 Aug 2025

Thank you for submitting your manuscript to JJNPP.
Please revise the manuscript and submit a point-by-point response to the reviewers' comments and concerns and highlight any changes in the text.

I would also greatly appreciate the author's contribution and time for reviewing manuscripts for this journal. Without the dedication of reviewers like you, it would be impossible to manage an efficient peer review process and maintain the high standards necessary for a successful journal.

Best Regards

REFEREE : EIC 9 Aug 2025

The manuscript has been examined by expert reviewers who have concluded that the work is of potential interest to the readership of JJNPP.
However, from their comments it is clear that major revision of this manuscript will be required before a decision can be made on its publication. I would be pleased to consider a revised manuscript that addresses the reviewers' concerns. Your revised manuscript will be returned to one or more of the original reviewers for further consideration.

OPEN PEER REVIEW

Revision (1)

Reply to Reviewers

Ideally, the reviewing process can significantly improve the submitted manuscripts by allowing the authors to take into account the advice of reviewers. Author(s) must reply to all reviewers' comments in a separate Word file, point by point. A "**Reply to Reviewers**" document is submitted along with revised manuscript during submission of revised files, summarizing the changes that the authors made in response to the reviewers' comments. The responses to reviewers' comments specifies how the authors addressed each comment the reviewers made.

You can read the authors' responses to the reviewers' comments in the next page.

Reviewer 0:

This is a novel topic that could contribute meaning to future research in the field. It can be published after correcting these revisions: The manuscript contains numerous long and complex sentences that reduce clarity. I recommend that the authors revise the text for grammatical accuracy and scientific fluency. Specifically, sentences should be shortened and restructured for better readability. about the health-related benefits of Gazo, such as antioxidant, antimicrobial, and anti-inflammatory effects, without providing direct evidence or supporting references. I strongly recommend that the authors expand the discussion section.

Response to reviewer 0:

We sincerely thank the reviewer for the constructive and valuable feedback. In line with the reviewer's suggestion, we have carefully revised the manuscript for grammatical accuracy and scientific fluency. Overly long and complex sentences were shortened and restructured to enhance clarity and readability.

Regarding the discussion of health-related benefits of Gazo, we agree that stronger contextualization with supporting evidence is necessary. Accordingly, we have tried to expand the Discussion section, but there is insufficient basic research in order to expand it deeply.

Reviewer 1:

I have read the manuscript entitled "Identification and quantification of Carbohydrates, Amino acids, and Protein in Gazo (Oak manna)". The following are my comments and questions:

Title:

It is suggested to add the scientific name of the source plant in your title, as well as the keywords.

Answer: Regarding the writing scientific name for the host tree, it should be noted that our focus is not on the tree but it is on the oak manna. **But I do agree to write it in the keywords and it is added to the keywords.**

Abstract:

1- Quercus brantii and every other scientific name must be written in italic.

Response: your valuable comment is applied and highlighted in the text

Introduction:

1- The manna is only produced by insects. mechanical factors or external temperature variations are unable to lead to manna production independently.

Response: While some papers mention the physical activity and temperature variation but I do agree with you. So., I edited it in the manuscript.

2- Oak manna usually forms on the oak leaves, not the bark.

Response: You are right, Gazo is produced partly on the leaves. It is also produced on the young branches and fruit. I edited this part and removed the bark.

3- It is said “Kurdistan territories of Iran, Iraq, and Turkey”. Kurdistan is not a territory in Iran: It is a province. In the case of Türkiye, there is also not such territory.

Response: Politically, you are right. However, you may be aware that Iran and Turkey both have several Kurdish provinces. To prevent any misunderstanding, I rewrote this part again. Regarding the references, I double-checked them and substituted them with relevant references.

4- The last paragraph is too long, and there are several repeated statements. Please shorten this part and not repeat the same information in different ways.

Response: Your comment has been applied and edited as recommended.

Materials and Methods:

1- It is better to mention the accurate location by latitude and longitude. The elevation or altitude should be added. Most importantly, the identification process of the species, including the herbarium code, must be added.

Response: We have added the exact latitude, longitude, and altitude of the sampling site. The species was identified by a botanist, and a voucher specimen was deposited in the Kurdistan University Herbarium. The herbarium code has been included.

2- Regarding materials, it must be, between methanol and analytical standards of glucose …

Response: The missing comma has been inserted for clarity between “methanol” and “analytical standards of glucose.”

3- Seliwanoff Test is a test to distinguish keto sugars from aldo sugars, so it does not evaluate non-reducing sugars necessarily.

Response: We have corrected the description of the Seliwanoff test in the Methods section to specify that it distinguishes ketoses from aldoses rather than evaluating non-reducing sugars.

4- You have listed a series of test, including Molisch test, Barfoed's test, Seliwanoff test, Ninhydrin test, and Biuret test but you have not provided the information of their reagents such as their supplying sources and their amounts. The detailed information of how these tests were done is necessary.

- Response: Detailed descriptions of reagents, their suppliers, concentrations, and test procedures have been added for all qualitative biochemical tests.

5- Regarding LC-MS/MS and HPLC analyses, the solvent systems, brand of instruments and brand of columns must be added.

Response: We have added the solvent systems, instrument brands, and column brands for both LC-MS/MS and HPLC analyses.

6- Considering Kjeldahl method, the catalyst mixture is described as "typically potassium sulfate and copper sulfate or selenium", however you must describe the exact mixture that you have used without "typically" and "or".

Response: The exact catalyst composition used in the Kjeldahl method has been specified.

7- OPA/FMOC reagents must be defined before abbreviation.

Response: OPA (o-phthalaldehyde) and FMOC (9-fluorenylmethyl chloroformate) have been defined before abbreviations.

Results:

1- You mentioned Bial's test, Osazone test and the iodine test in results but not in the methods part. They must be added there, too.

Response: These tests have been added to the Methods section with full procedural details.

2- In Biuret test you obtained negative result, suggesting absence of proteins, while based on Kjeldahl test you estimated the protein content to be 2.18%. How do you explain this?

Response: An explanation has been added to the Discussion, stating that the Biuret test detects intact or high-molecular-weight proteins, while the Kjeldahl method measures total nitrogen, which includes amino acids and small peptides. Thus, Gazo contains amino acids and small peptides but lacks intact proteins detectable by the Biuret assay.

Discussion

1- There are several repeated statements in discussion. They should be deleted.

Response: We have removed redundant sentences and streamlined the Discussion section for conciseness.

Reviewer 4:

"I have reviewed the statistical aspects of the manuscript 'Identification and quantification of Carbohydrates, Amino acids, and Protein in Gazo (Oak manna)'. The statistical analyses appear to be straightforward and appropriately applied to the data presented. I found no major statistical concerns regarding the methods or interpretation of the results."

Response: We appreciate the reviewer’s positive feedback on the statistical analysis.

OPEN PEER REVIEW

Revision (1)

REFEREE : Reviewer — 21 Aug 2025

I have read the revised version of the manuscript. Most of the requested items are corrected in a proper way. It still needs some edits: the authors must write all scientific names in Italic, especially in the highlighted parts which are added recently.

REFEREE : Reviewer — 25 Aug 2025

It can be publushed.

REFEREE : Associate Editor — 26 Aug 2025

1- Thank you for presenting the detailed quantitative results in Table 2. To enhance the clarity, consistency, and scientific rigor of the data presentation, I recommend revising the table so that all values within each column (particularly "Result (mean ± SD)") are reported with the same number of decimal places.

Currently, the number of decimal places varies (e.g., Leucine: 5659±73.5 vs. Valine: 3809.3±0.65; Glycine: 10.9±2.23 vs. Methionine: 49.5±8.9). This inconsistency may affect the perceived precision of the measurements. For example, amino acid concentrations should be uniformly reported to one decimal place for the mean and two decimal places for the SD (or as appropriate based on measurement precision), and carbohydrate values should follow a similar consistent format.

Additionally, please ensure that missing values (indicated by "-") are clearly labeled as "ND" (Not Detected) or "Traces" if applicable, with a footnote explaining the notation. Standardizing the significant figures and decimal places will improve the readability and professionalism of the table and ensure accurate interpretation by readers.
2- I would like to note that the current version of the manuscript does not include any figures (e.g., representative chromatograms, mass spectra, or calibration curves) related to the LC-MS/MS analysis. Such figures are essential for supporting the reliability and transparency of the analytical data, especially in method validation and compound identification.

I strongly recommend including at least one representative MRM (Multiple Reaction Monitoring) chromatogram for key analytes (e.g., glucose, amino acids, or other detected compounds), along with relevant mass spectra, to demonstrate peak identification, resolution, and method specificity.

Including these visual data will strengthen the credibility of your analytical approach and allow readers to better assess the quality of your results.

REFEREE : EIC

26 Aug 2025

Our impression is that the above-mentioned manuscript could become suitable for publication in JJNPP. However, the criticism from the referees requires that we defer a final decision until you have considered their remarks and revised your manuscript accordingly.

OPEN PEER REVIEW

Revision (2)

Reply to Reviewers

Ideally, the reviewing process can significantly improve the submitted manuscripts by allowing the authors to take into account the advice of reviewers. Author(s) must reply to all reviewers' comments in a separate Word file, point by point. A "**Reply to Reviewers**" document is submitted along with revised manuscript during submission of revised files, summarizing the changes that the authors made in response to the reviewers' comments. The responses to reviewers' comments specifies how the authors addressed each comment the reviewers made.

You can read the authors' responses to the reviewers' comments in the next page.

Reviewer 0: It can be published.

Response: Thank you very much

Reviewer 1

I have read the revised version of the manuscript. Most of the requested items are corrected in a proper way. It still needs some edits: the authors must write all scientific names in Italic, especially in the highlighted parts, which are added recently.

Response: Thank you very much. We have applied your comment, and all scientific names are now written in Italic format.

Associate Editor's Comments:

1- Thank you for presenting the detailed quantitative results in Table 2. To enhance the clarity, consistency, and scientific rigor of the data presentation, I recommend revising the table so that all values within each column (particularly "Result (mean ± SD)") are reported with the same number of decimal places. Currently, the number of decimal places varies (e.g., Leucine: 5659±73.5 vs. Valine: 3809.3±0.65; Glycine: 10.9±2.23 vs. Methionine: 49.5±8.9). This inconsistency may affect the perceived precision of the measurements. For example, amino acid concentrations should be uniformly reported to one decimal place for the mean and two decimal places for the SD (or as appropriate based on measurement precision), and carbohydrate values should follow a similar consistent format. Additionally, please ensure that missing values (indicated by "-") are clearly labeled as "ND" (Not Detected) or "Traces" if applicable, with a footnote explaining the notation. Standardizing the significant figures and decimal places will improve the readability and professionalism of the table and ensure accurate interpretation by readers.

Response: We sincerely thank the Associate Editor for this valuable comment regarding the clarity and consistency of data presentation in Table 2. We have carefully revised the table to standardize the reporting format. Specifically, we ensured that all values in the "Result (mean ± SD)" column are presented with a consistent number of decimal places, reflecting the

measurement precision. Amino acid concentrations are now reported with one decimal place for the mean and two decimal places for the SD, and carbohydrate values were adjusted accordingly for consistency. In addition, missing values previously indicated with "–" have been replaced with "ND" (Not Detected). A corresponding footnote has also been added to the table to explain these notations.

2- I would like to note that the current version of the manuscript does not include any figures (e.g., representative chromatograms, mass spectra, or calibration curves) related to the LC-MS/MS analysis. Such figures are essential for supporting the reliability and transparency of the analytical data, especially in method validation and compound identification.

I strongly recommend including at least one representative MRM (Multiple Reaction Monitoring) chromatogram for key analytes (e.g., glucose, amino acids, or other detected compounds), along with relevant mass spectra, to demonstrate peak identification, resolution, and method specificity. Including these visual data will strengthen the credibility of your analytical approach and allow readers to better assess the quality of your results.

Response: We sincerely appreciate the reviewer's valuable suggestion regarding the inclusion of representative chromatograms, mass spectra, and calibration curves to enhance the transparency and reliability of the LC-MS/MS data. We fully recognize the importance of such figures in demonstrating compound identification, peak resolution, and method specificity. However, we would like to clarify that the LC-MS/MS analyses were performed by an external certified institute (Iranian Institute of Research and Development in Chemical Industries), and only the processed quantitative results were provided to us. Unfortunately, the raw chromatographic and spectral data are not available to us for inclusion in the manuscript. It should be noted that All analyses were performed in 2023. We tried to receive the details about the results, but they told

us that they have deleted all old results and keep the results just for 6 months. To address this concern as best as possible within our constraints, we have now provided detailed methodological information regarding the LC-MS/MS analysis in the Materials and Methods section, including the instrument model, column type, solvents, gradient conditions, ionization mode, and MRM transitions where available. And also, to clarify more about the validity of our research, we uploaded the results from the Iranian Institute of Research and Development in Chemical Industries.

OPEN PEER REVIEW

Revision (2)

REFEREE : EIC

28 Aug 2025

1. Table 2 should be corrected.
Forexample, 2.9±0.45 should corrected as 2.90±0.45
10.9±2.23 to 10.90±2.23. This should be considered for all other data in this table.
2. Remove Lab reorts from manuscript.

OPEN PEER REVIEW

Revision (3)

Reply to Reviewers

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You can read the authors' responses to the reviewers' comments in the next page.

EIC 0:

1. Table 2 should be corrected.

For example, 2.9±0.45 should corrected as 2.90±0.45

10.9±2.23 to 10.90±2.23. This should be considered for all other data in this table.

Response: Table 2 is corrected as requested.

2. Remove Lab reports from manuscript:

Response: Lab Reports are deleted in the final version of the manuscript.

OPEN PEER REVIEW

Revision (3)

REFEREE : EIC

31 Aug 2025

we are please to inform you that your manuscript is accepted for publication in JJNPP.