

COMMUNITY SURVEY - FAIR Phytoliths: Increasing the FAIRness of phytolith data

Hello! This short survey is aimed at understanding current practices concerning open science within the phytolith community as part of the project *FAIR Phytoliths: Increasing the FAIRness of phytolith data*. The project strives to make phytolith data more FAIR (Findable, Accessible, Interoperable and Reusable). This initiative is supported by the International Phytolith Society. If you want to learn more about the project you can visit our website: <https://open-phytoliths.github.io/FAIR-phytoliths/>.

The survey is organised into two main sections, the first will be anonymous and it is aimed at analysing the current situation. The second, which you might decide not to respond to, concerns your availability to contribute (at different levels according to your inclination and time) to the widening of the open data community within phytolith research. Part 2 is actually a separate questionnaire that cannot be linked to Part 1 so your answers to these first questions will remain totally anonymous. For the second part you will need to give us specific consent to record and retain your personal data (you will find all the relevant information before starting Part 2).

Part 1 of the questionnaire will take less than 10 minutes to complete. Thank you for answering the Part 1 questions!

Block 1 - About you

Tell us a little about you. All the answers are very general so that we will not be able to identify you even by data crossing. None of the questions are compulsory but we hope you will answer all of them!

Gender :

Female

☐

Male

☐

Binary option

☐

Prefer not to say

☐

Where are you based?

Africa

☐

Americas

☐

Asia

☐

Australia and the Pacific

☐

Europe

☐

Where do you mainly conduct your research (i.e., where do you do fieldwork/get your samples from)?

- 1. Africa ☐
- 2. Americas ☐
- 3. Asia ☐
- 4. Australia and the Pacific ☐
- 5. Europe ☐

What is your main field of research (please choose maximum 2)? *

- 1. Agronomy ☐
- 2. Archaeology (and related disciplines: Ethnoarchaeology, Archaeometry, Bioarchaeology, etc.) ☐
- 3. Botany (and related disciplines: Plant physiology, Crop breeding, etc.) ☐
- 4. Forensics ☐
- 5. Geochemistry ☐
- 6. Palaeoenvironment ☐
- 7. Palaeontology ☐

What is your current position?

- 1. PhD candidate ☐
- 2. Junior postdoc
(up to 7 years from PhD) ☐
- 3. Senior postdoc
(7 to 12 years from PhD) ☐
- 4. Senior researcher (untured) ☐
- 5. Senior researcher (tenured) ☐
- 6. Professional (non-academic) ☐

Block 2 -About open practices

Give us an idea on what you know about open practices in general, and how you make your work open. There is no right or wrong answer, we are just interested in knowing more about how the community of phytolith researchers works.

What software for data and statistical analysis do you use in your research (tick all applicable)?

- | | |
|-------------------------------|--------------------------|
| CANOCO | <input type="checkbox"/> |
| Google Sheet | <input type="checkbox"/> |
| Microsoft Excel | <input type="checkbox"/> |
| Open/Libre Office spreadsheet | <input type="checkbox"/> |
| R | <input type="checkbox"/> |
| SPSS | <input type="checkbox"/> |
| None | <input type="checkbox"/> |

What software do you use for writing (tick all applicable)?

- | | |
|--------------------------|--------------------------|
| Google Docs | <input type="checkbox"/> |
| HackMD | <input type="checkbox"/> |
| LaTeX | <input type="checkbox"/> |
| Microsoft Word | <input type="checkbox"/> |
| Open/Libre Office Writer | <input type="checkbox"/> |
| Others | <input type="checkbox"/> |

What software do you use for data visualisation (tick all applicable)?

- | | |
|--|--------------------------|
| C2 | <input type="checkbox"/> |
| Grapher | <input type="checkbox"/> |
| Illustrator | <input type="checkbox"/> |
| "Office" graphics (e.g. Excel or PowerPoint) | <input type="checkbox"/> |
| R | <input type="checkbox"/> |
| Tilia | <input type="checkbox"/> |
| Others | <input type="checkbox"/> |

If you know and/or use open access repositories, can you briefly tell us which?
Open access repositories are databases or virtual archives established to collect, disseminate and preserve scientific output like scientific articles and datasets and make them freely available.

Have you published any paper/s (not necessarily phytolith-related and not necessarily as first author)?

Yes

☐

No

☐

Future publications

We would like to know your intentions for your future publications, what would you like to do when you next publish a paper.

Would you like to publish gold open access?

Gold open access = the article and all relative contents are made available immediately upon publication and licensed for sharing and reuse via Creative Commons license or similar. This option usually involves the payment by the author or their host institution of an Article Processing Charge (APC). Green open access [also referred as self-archiving] = authors can upload their papers on a website controlled by themselves, the research institution that funded or hosted the work, or to an independent central open repository, where anyone can download the work without paying.

Yes

☐

No

☐

In what case would you consider publishing gold open access?

Only if it is requested by the body that is funding my research

☐

Only if a co-author or one of the involved institutions facilitates it

☐

I will try to find funding to pay the processing fees

☐

Others

☐

Why do you think you will not publish gold open access?

I don't think I will publish gold but I intend to publish green open access

☐

I would like to but it will be hard to find money to pay for APCs

☐

I would like to but I think that the fees are too high

(i.e., I would pay if fees were lower)

☐

The journal I intend to publish with does not offer this possibility

☐

I do not think it is worth paying for this option

☐

I do not think gold open access is an ethical choice

☐

I did not know this possibility existed

☐

Other

☐

Will you consider publishing pre-prints of your work?

Pre-prints: a full draft research paper that is shared publicly before it has been peer reviewed that is usually given a digital object identifier (DOI) so it can be cited in other research papers.

Yes

☐

No

☐

Do you know which pre-print server you are most likely to use?

Yes

☐

No

☐

Can you tell us which and why you think it is most appropriate?

Can you tell us why?

I do not think it is useful

☐

I think it is too much work

☐

I am afraid of plagiarism

☐

I do not know what pre-prints are and how to publish one

☐

Section 12. Yes, I have published

Have you published your work using gold open access?

Yes

☐

No

☐

Yes, I have published gold open access

Why did you choose to publish gold open access?

It was required to by the funding body

☐

I planned for it as part of the project (you budgeted for this)

☐

It was facilitated by one of the co-authors institution (an institution has open access funds or deals with publishers, etc.)

☐

No, I have never published open access

Why have you never published gold open access?

- I have not published gold so far but I did publish green open access ☐
- I would have liked to but had no money to pay for APCs ☐
- I would have liked to but I think that the fees are too high (i.e., I would pay if fees were lower) ☐
- I did not know this possibility existed ☐
- The journal did not offer this possibility ☐
- I do not think it is worth paying for this option ☐
- I do not think gold open access is an ethical choice ☐

Preprints

Pre-prints: a full draft research paper that is shared publicly before it has been peer reviewed that is usually given a digital object identifier (DOI) so it can be cited in other research papers.

Have you published a pre-print version of your papers?

- Yes ☐
- No ☐

Yes, I have published pre-prints

Give us an assessment (1= only once, 5= all my papers)

- 1 ☐
- 2 ☐
- 3 ☐
- 4 ☐
- 5 ☐

How did you choose which pre-print server you published with?

No, I have never published a pre-print

Can you tell us why?

- I have not done it so far but I am planning to with my next papers ☐
- I do not think it is useful ☐
- I think it is too much work ☐
- I am afraid of plagiarism ☐
- My co-authors did not agree ☐

I do not think non-peer-reviewed research
should be treated as scientific evidence

☐

Block 3 - Methods and data sharing practices

In this block we will ask questions about data sharing practices.

How do you normally describe the methods in your papers?
Please consider all your methods including sample collection, extraction methods, slide preparation and microscope practices (such as magnification and counting), reference collections, etc.

I only reference published methods
I only describe things that deviate from published procedures
I describe everything in detail
I publish them in a methods repository (e.g., protocols.io)

☐
☐
☐
☐

Do you generally consider that your methods are replicable?

We know that things are not black or white, try to consider your practice in general terms or, if you want, use the "other" option to tell us a bit more.

Yes
No
Other

☐
☐
☐

How many papers that include new phytolith data have you published?

None
1-5
More than 5

☐
☐
☐

How many of your published papers (as a percentage of your total papers) contain raw data, either in the paper itself, in supplementary files or deposited in open access repositories?

Note: for raw data we mean absolute counts of phytoliths. Summary data such as percentages, phytolith grouping, etc. do not count as raw data.

0 (0%)	<input type="checkbox"/>
1 (20%)	<input type="checkbox"/>
2 (40%)	<input type="checkbox"/>
3 (60%)	<input type="checkbox"/>
4 (80%)	<input type="checkbox"/>
5 (100%)	<input type="checkbox"/>

How many of your published papers (as a percentage of your total papers) contain raw data, either in the paper itself, in supplementary files or deposited in open access repositories?

Note: for raw data we mean absolute counts of phytoliths. Summary data such as percentages, phytolith grouping, etc. do not count as raw data.

0 (0%)	<input type="checkbox"/>
1 (20%)	<input type="checkbox"/>
2 (40%)	<input type="checkbox"/>
3 (60%)	<input type="checkbox"/>
4 (80%)	<input type="checkbox"/>
5 (100%)	<input type="checkbox"/>

I have published raw data

How did you publish your raw data (check all that apply)?

As table in the main text	<input type="checkbox"/>
As supplementary file	<input type="checkbox"/>
In an institutional repository	<input type="checkbox"/>
In a subject-base online repository (e.g., Pangaea, Neotoma, etc.)	<input type="checkbox"/>
In a general repository (e.g., Zenodo, Open Science Framework, etc.)	<input type="checkbox"/>
In a personal repository (e.g., GitHub, personal webpage, etc.)	<input type="checkbox"/>
Not applicable	<input type="checkbox"/>
Other	<input type="checkbox"/>

I did not want to publish raw data

If you have never published raw data can you tell us why?

I did not know how or where	<input type="checkbox"/>
I did not think it was useful/needed	<input type="checkbox"/>
I did not want to	<input type="checkbox"/>
Other	<input type="checkbox"/>

Incentives, training and updates

Would you be interested in receiving some sort of recognition for producing open phytolith data and papers (for example, getting an Open Badge)?

Open Badges are information-rich visual records of verifiable achievements earned by recipients and easily shared on the web and via social media. Open Badges embed information on who earned it, who issued it, the criteria required, and in many cases even the evidence and demonstrations of the relevant skill (https://en.wikipedia.org/wiki/Mozilla_Open_Badges).

Yes, but it will not make me change my present way of working (i.e., I will not produce more open work)

☐

Yes, and it will definitely be an incentive to be more open

☐

I am not sure, I should learn more about Open Badges

☐

No, I do not think it is something that interests me at all

☐

Other

☐

Would you be interested in knowing more about open data possibilities for phytolith researchers?

This might include future offers of courses, webinars, training opportunities, etc.

Yes

☐

No

☐

Maybe

☐

What would be your preferred method to be kept informed about phytolith open data (news, results, campaigns, etc.)?

Email

☐

Twitter

☐

Facebook

☐

Slack

☐

Instagram

☐

TikTok

☐

Other

☐

Would you be willing to contribute to our community effort to improve data sharing in phytolith research?

No - Thank you for your time, the survey ends here!

☐

Yes - Follow-up questions (not fully anonymous)!

☐

Thank you for your interest in widening the open phytolith community!