

PARAQUA

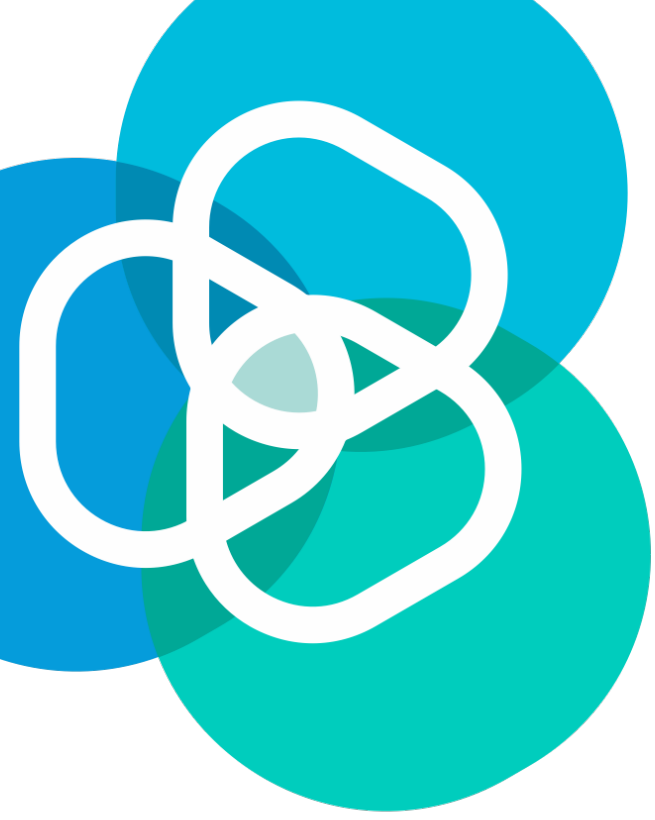
# Microbiome literature review

Young R&I action

Belén Villarreal Toribio 30/01/24



# Introduction

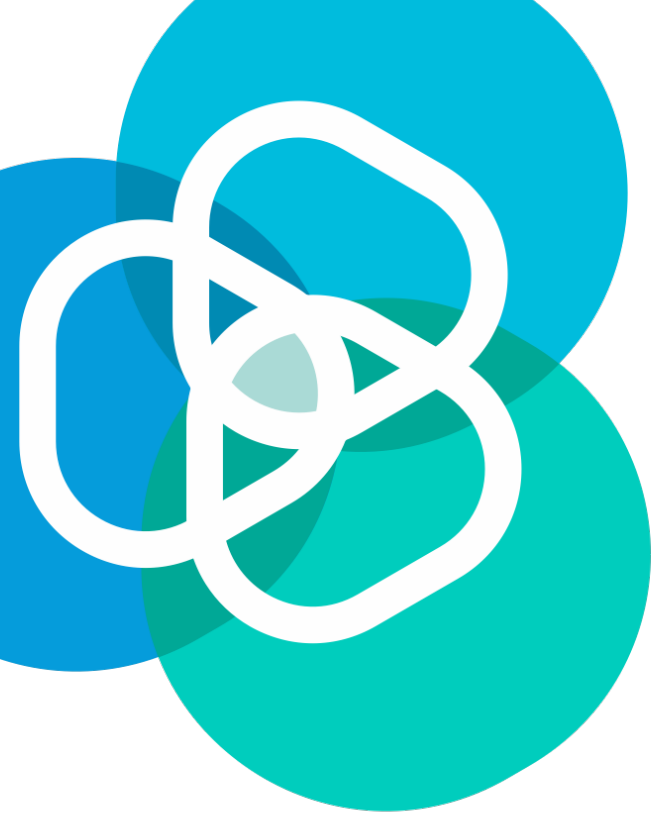


# Why?

## Aim of the paper

**To what extent do microalgae producers benefit from microbiome analyses: A review.**

- Is it affordable for producers? Do they get reliable information? Can they take action with the information given in these analyses?
- Does the existing literature answer these questions?
- How this paper will be different from others?

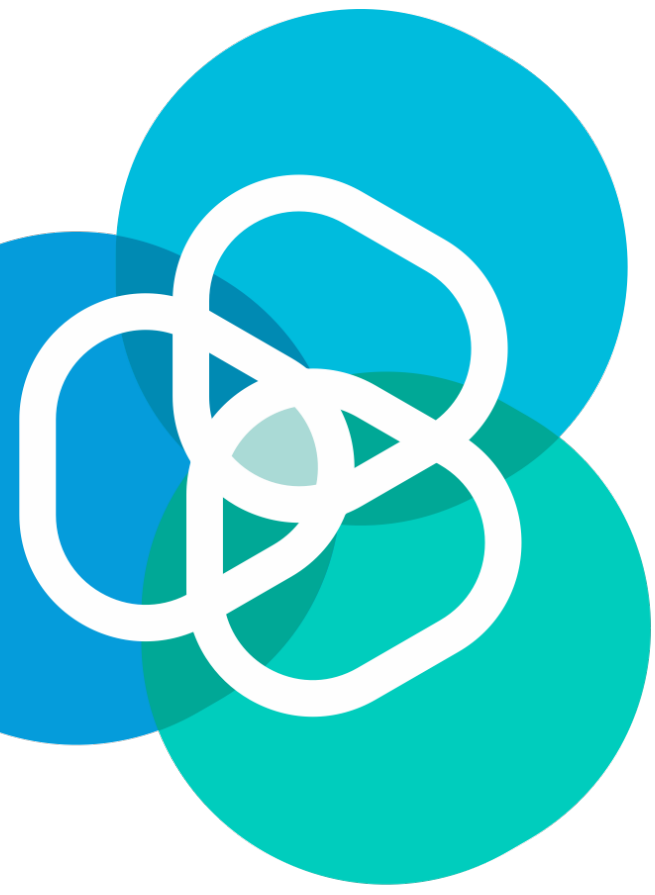


# Why?

## Aim of the paper

### Relevant information to be discussed:

- Focus on the main produced microalgae species
- Type of production system
- Type of microbiome analyses
- Insightful outcomes from experimental literature

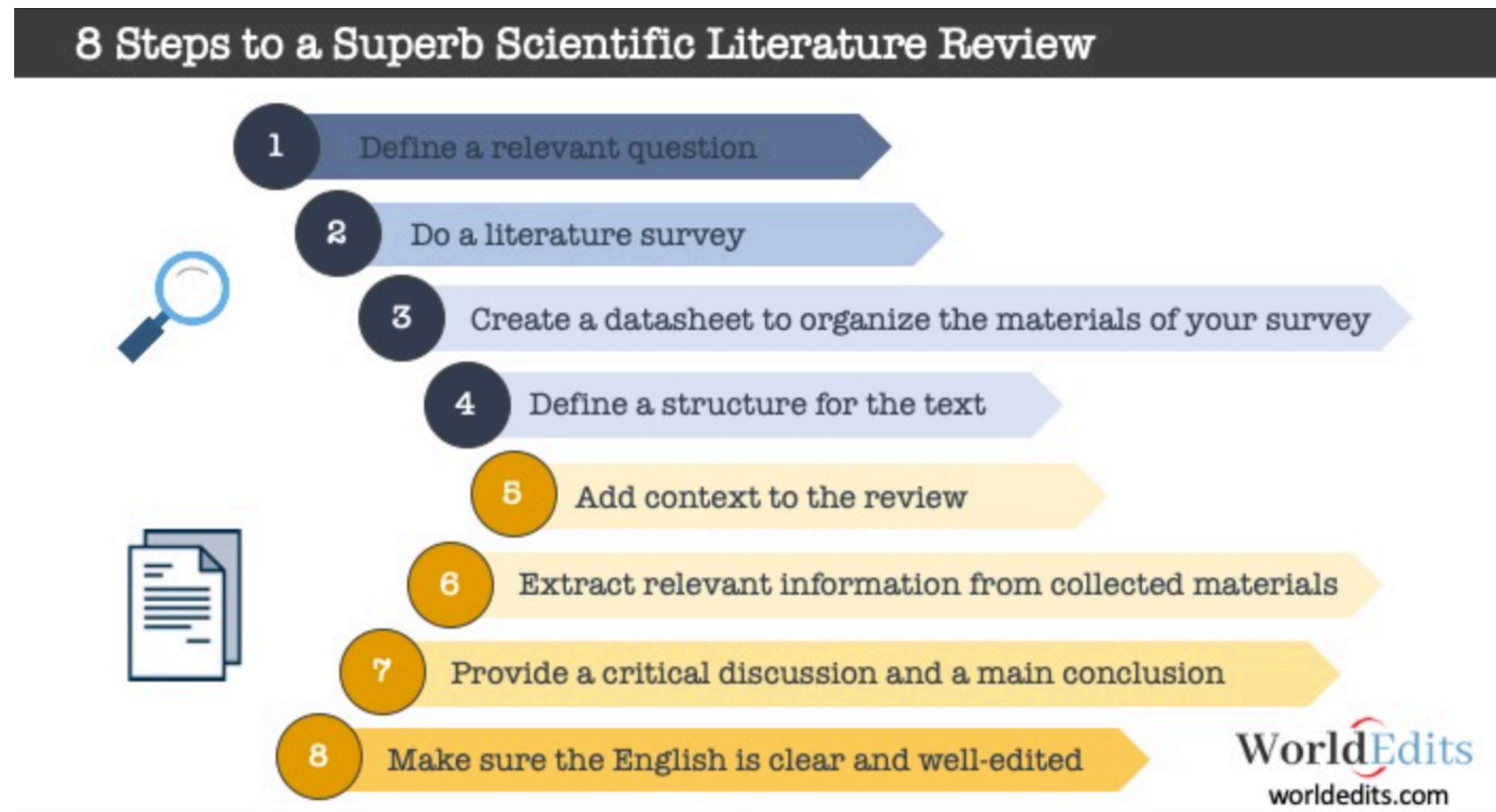


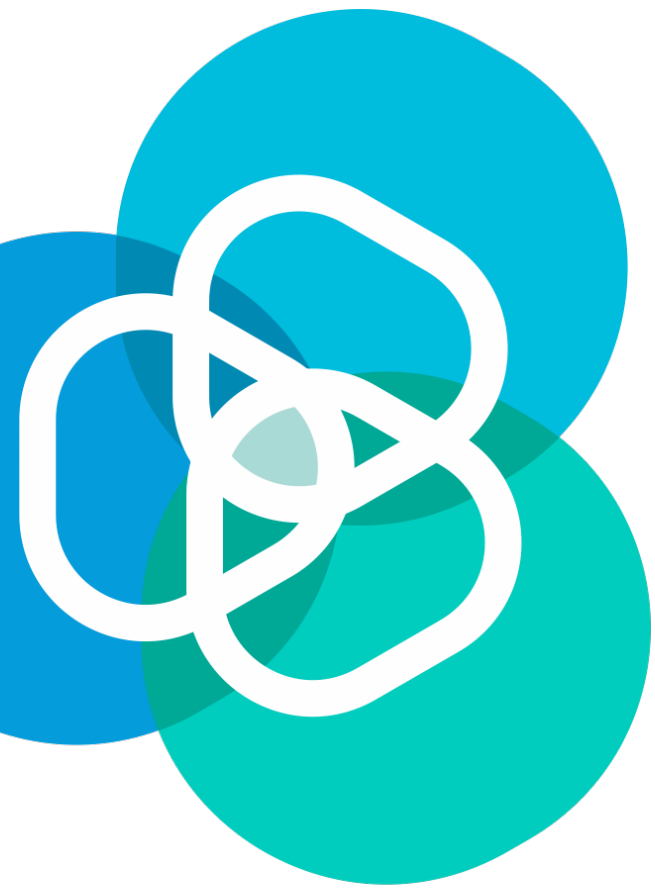
# How?

## Work flow

### Steps:

- Select relevant literature publications
- Select relevant experimental papers
- Create a summary table with the main information
- Select journals
- Define the structure of the review paper



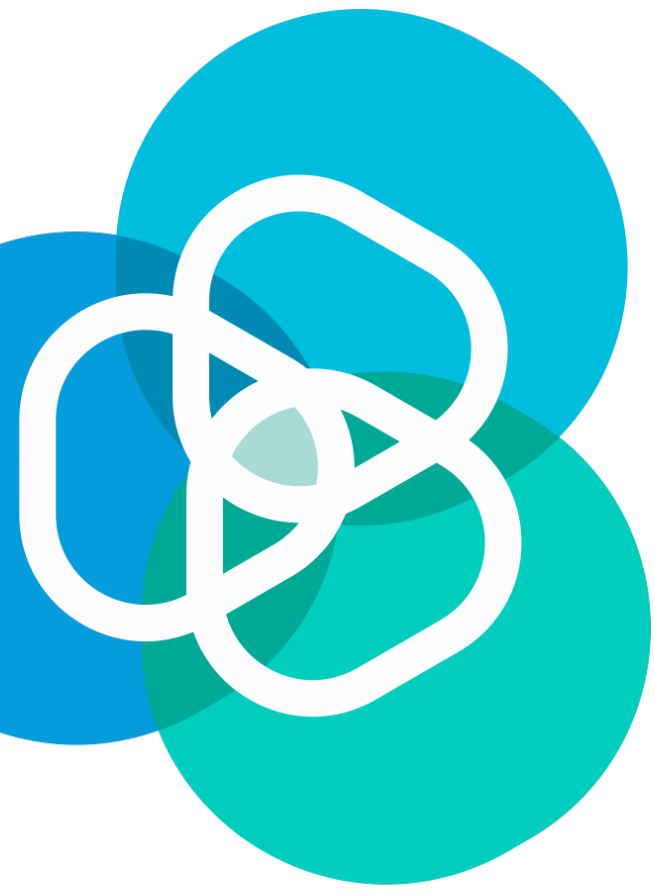


# How?

## Work flow

### Working documents:

- Excel with participants
- Excel with literature table
- Word with Draft of the paper
- Mendeley/Zotero group folder



# Working documents

## Excel with participants

### Information:

Microbiome paper\_Participants

Search for tools, help, and more (Option + Q)

Buy Microsoft 365

File Home Insert Share Page Layout Formulas Data Review View Help Draw

Comments Catch up Editing Share

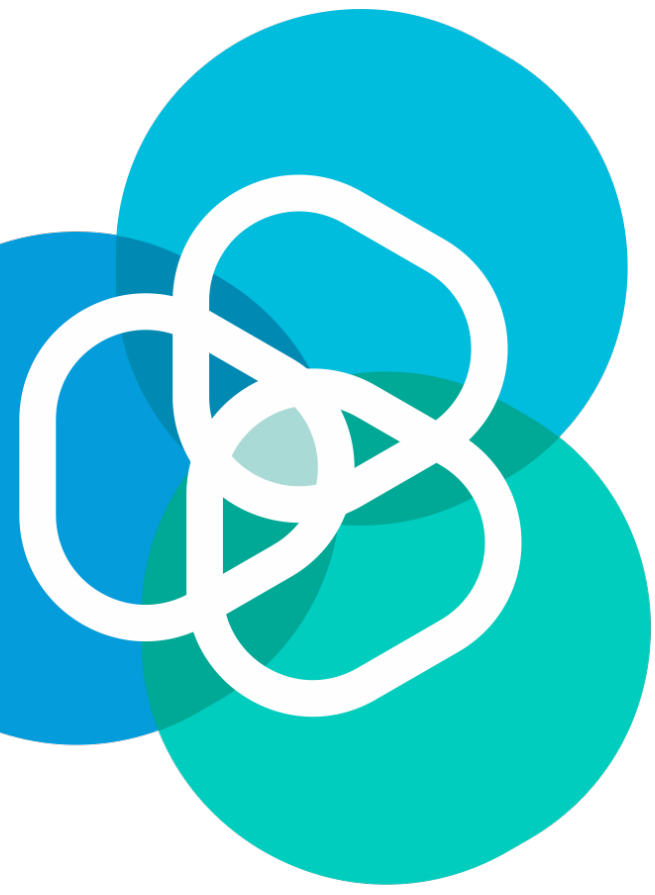
Calibri (Body) 11 B

B8

	A	B	C	D	E	F	G	H	I	J	K	L
1	<b>Name</b>	<b>Email</b>	<b>Area of expertise</b>	<b>Task</b>								
2	Belén Villarreal Toribio	<a href="mailto:belenvillato@gmail.com">belenvillato@gmail.com</a>	Microalgae production									
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Sheet1 +

Workbook Statistics Screenshot Give Feedback to Microsoft 100%



# Working documents

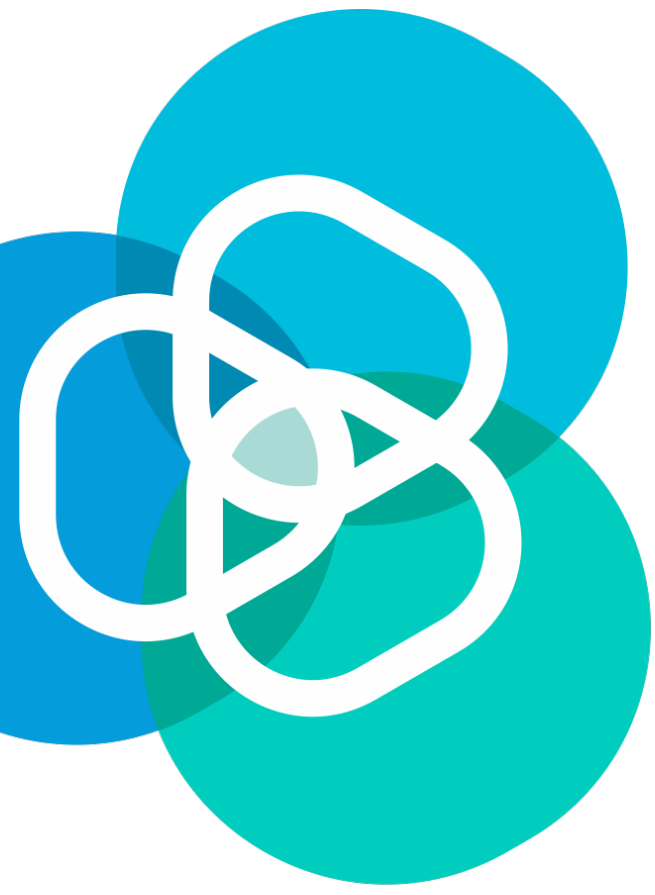
## Excel with literature table

### Columns to be discussed:

The screenshot shows the Microsoft Excel interface with a spreadsheet titled "Microbiome paper". The ribbon is set to "Home". The spreadsheet has the following columns:

	A	B	C	D	E	F	G	H	I
1	Paper (Authors, year, title)	Rationale for the review // Aim	Experimental design	Microalgae strain	Primers	Results	Conclusion	Evaluation of findings	
2									
3									
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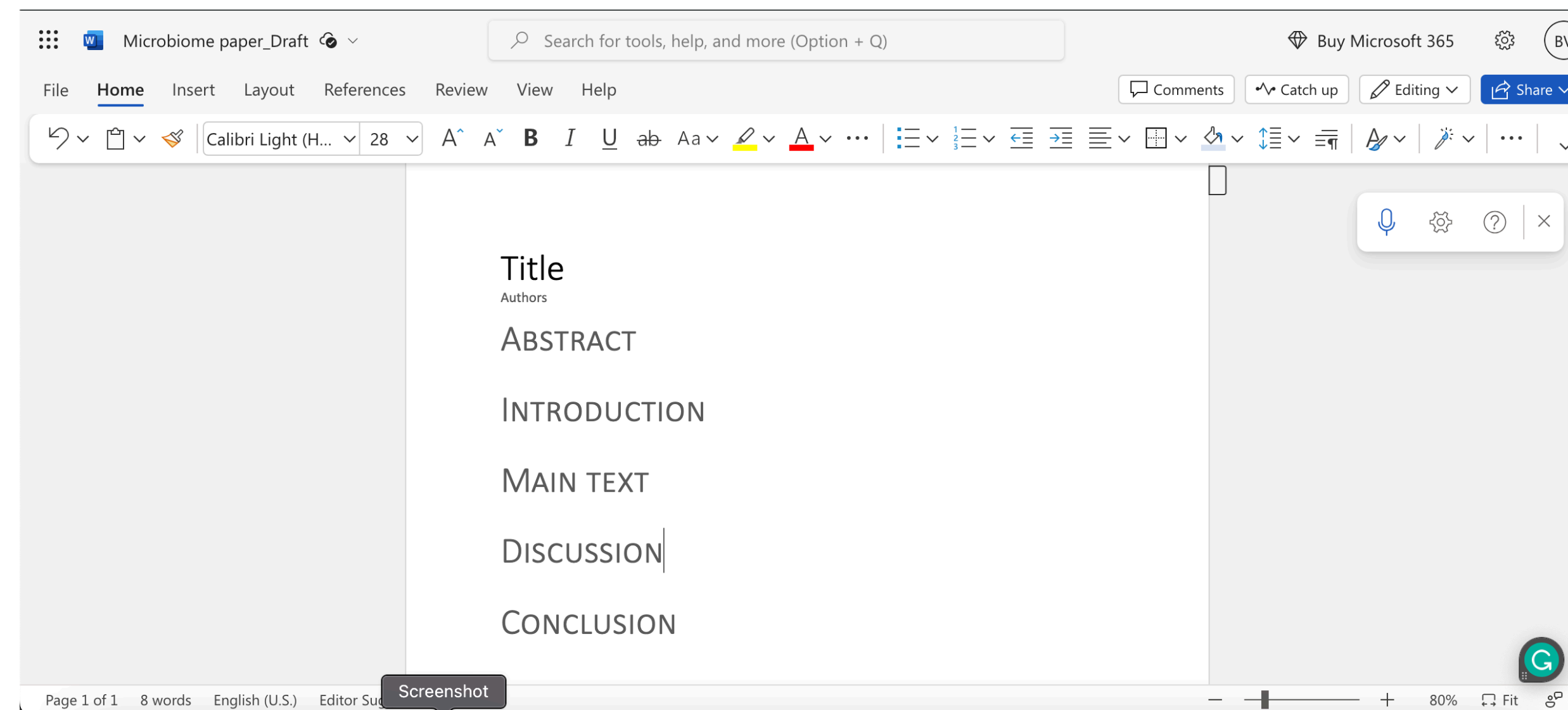


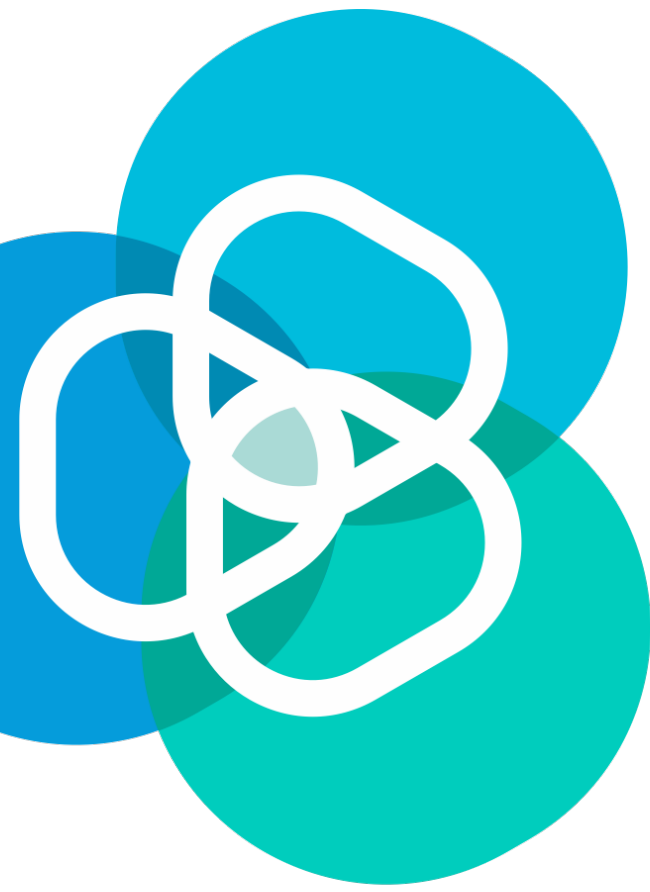


# Working documents

Word with draft

Guidance needed





# Working documents

## Mendeley/Zotero

### Subfolders:

- Review literature
- Experimental literature

### Gadgets:

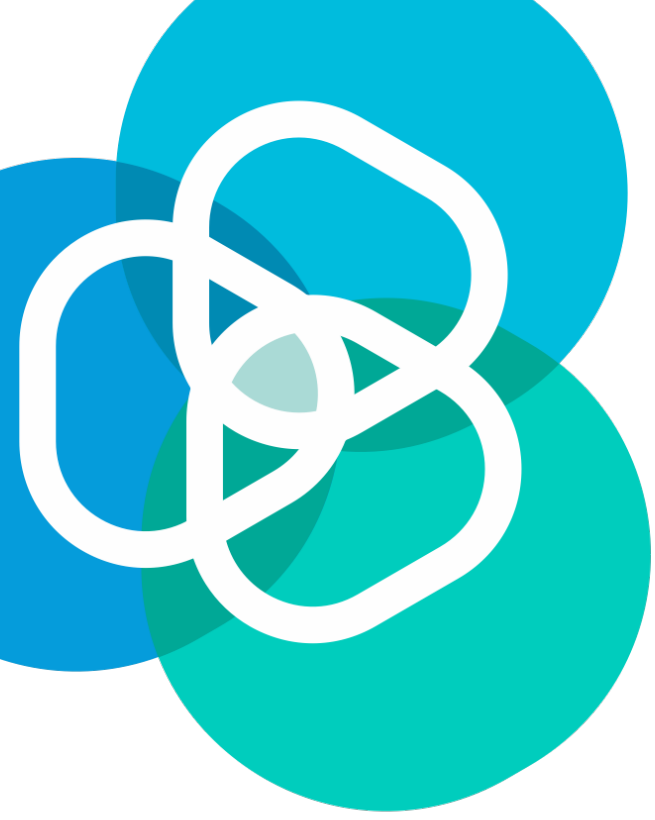
- Notes
- Highlight
- General notes

The screenshot shows the Mendeley Desktop application. On the left is a sidebar with navigation options like 'Seaweed', 'Thesis', 'Wadden Sea', and 'GROUPS'. The main area displays a list of literature papers with columns for 'AUTHORS', 'YEAR', 'TITLE', 'SOURCE', and 'ADDED'. One paper is selected, and its details are shown in a larger view below. The details view includes the paper's title, authors, abstract, and a 'GENERAL NOTES' section with handwritten-style notes.

AUTHORS	YEAR	TITLE	SOURCE	ADDED
Lian J, Wijffels R, Smid...	2018	The effect of the algal microbiome on industrial production of microalgae	Microbial Biotec...	1/8/2
Krohn I, Menanteau-Le...	2022	Health benefits of microalgae and their microbiomes	Microbial Biotec...	1/8/2
Hom E, Aiyar P, Schae...	2015	A Chemical Perspective on Microalgal-Microbial Interactions	Trends in Plant ...	1/8/2
Coyne K, Wang Y, Joh...	2022	Algicidal Bacteria: A Review of Current Knowledge and Applications to C...	Frontiers in Micr...	1/8/2
Granado D, Garcia J, ...	2023	A promising Computational pipeline for microbial consortia analysis usin...		1/8/2
Cooper M, Smith A	2015	Exploring mutualistic interactions between microalgae and bacteria in th...	Current Opinion i...	1/8/2

**microbial biotechnology**  
Minireview  
**The effect of the algal microbiome on industrial production of microalgae**

**GENERAL NOTES**  
In this review: the latest studies of algae-microbial interactions and their underlain mechanism.  
1st- Alga-associated bacteria in algae production systems -- Most studies in wastewater  
2nd-Beneficial roles of bacteria -- recent observations have demonstrated that mutualistic algal-bacterial interactions are prevalent. Multiple bacteria have been tested in cocultivation to evaluate the effects on the growth of microalgae. Microbial-associated salinity acclimation and thermal tolerance. Nutrient provision  
Algae.



# Working documents

## Links

### Excel (Participants and Summary table sheets)

- [Microbiome paper.xlsx](#)

### Word (Paper draft)

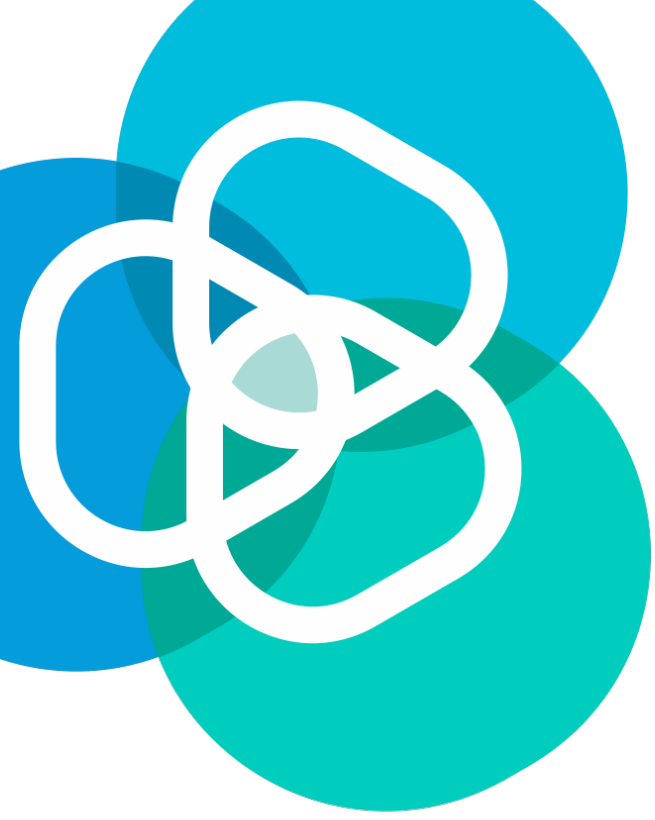
- [Microbiome paper\\_Draft.docx](#)

### Mendeley

- I need emails



# Lyon Program



# Lyon sessions

## Tasks

### Schedule

- 30<sup>th</sup> Tuesday from 9 to 13 → Short introduction to the activity
- 30<sup>th</sup> Tuesday:
  - 14 -16 → Discussion literature review content, table content,
  - 16 - 18 → Literature review search
- 31<sup>st</sup> Wednesday:
  - 9 -10:30 → Experimental review search
  - 10:30 -12 → Search of journals, the structure of the paper and wrap up