

*There is no strict rule for preparing the manuscript. However, this guideline should help authors to prepare the manuscript consistently. The authors have **flexibility** within sections as the ones below are based on typical expected manuscripts for most agricultural engineering and biological science. For example, Agricultural Economics papers might not have materials and methods, and that is fine, but they might follow all the other sections.*

*Please do not write an Introduction and then another section called “Related Work” as this is not acceptable, you should follow the structure illustrated below. For more information, please refer to:*

<https://www.springer.com/journal/11119/submission-guidelines>

**TITLE:** *Concise and informative*

Author Author<sup>1</sup>, Author Author<sup>2</sup>, ....

<sup>1</sup>Affiliation#1

Corresponding author: name, email address

**KEYPOINTS/HIGHLIGHTS (from 3 to 5,)**

- #1;
- #2;
- #3;....

**IMPACT:** Please write one or two sentences regarding the impact of your work and how it fits within Precision Agriculture’s definition (<https://www.springer.com/journal/11119>).

**KEYWORDS:** *Please provide 4 to 6 keywords which can be used for indexing purposes.*

For more information, please refer to:

<https://www.springer.com/journal/11119/submission-guidelines>

**ABSTRACT** (*Between 150 and 300 word maximum*)

The abstract must contain the key points indicated below; but it is important that you **make clear what is novel about the paper:**

***Context:*** (one/two sentence(s))

***Aims:*** (one sentence)

***Methods:***

***Key Results:***

***Conclusion:***

***Implications and Impacts:***

**STATEMENT and DECLARATIONS:** *Authors are required to disclose financial or non-financial interests that are directly or indirectly related to the work submitted for publication. Please refer to “[Competing Interests](#)” in the submissions guidelines. and Funding” below for more information on how to complete this section.*

**INTRODUCTION**

Please provide a background to the topic, and objectives of the work. There is no given suggestion on the length, but a suggestion is to keep it short. Remember to highlight the research gaps on the topic in the community, and what new information/methodology your research is attempting to address or to clarify.

**MATERIALS AND METHODS**

This is an important section and depending on the manuscript type, it can be longer or shorter. But remember that from the description provided in this section you enable other colleagues to reproduce your experimental work. So, try not to leave out any piece of information. It would be appreciated if you also publish any code you write to analyse the data (or to do interpolation or Spatial maps, and

so on) as supplemental to the manuscript or in a given data journal or repository. This will allow peers to use the same approach you used, step-by-step. **An important point to remember is that you must use the past tense through this whole section.**

It is helpful to organize this section logically, e.g. following the steps that were performed, and to organize the section into sub-headings. In case of laboratory analysis, common techniques do not need to be described in depth but simply reference in the text the laboratory manual used to analyse a given property.

## **RESULTS**

In this section please just report the main results of your study. Simply highlight any interesting (and/or contrasting) result reported in the Figures/Tables. **This section is also written in the past tense. All the results from your experiment reported in Tables and Figures have to be described here and not later in the Discussion section.** So, summarize the data and highlight the main trends and relevant facts. This section is rather “dry” so try to be direct and point out only important things, do not be too wordy.

Kindly be aware that in this journal, the discussion section is distinct from the results. Therefore, it's advisable to maintain brevity when describing the results, reserving any potential implications for the discussion section.

## **DISCUSSION**

Here you can discuss the potential implications of your results in the context of the objectives (and/or hypotheses) you formulated at the end of the introduction. For example, a potential reader could read the last part of your introduction and the first paragraph of the discussion and understand what the whole manuscript is about. You will also address broader issues raised by your research. For example, you might want to address **whether your results were expected** and supported your aims. You must find explanations for some of your results **in relation to other scientific work**. Then, you will finish this section with how you might address any unexpected future result, the **direction** the research will follow, and future implications. How **your results are influenced by the inevitable limitations of the experiment** (*e.g. number of repetitions, weather, equipment available, measurement methods available etc*).

## CONCLUSION

Please be aware that in this journal, the conclusion constitutes a distinct section. In this part, it is essential to demonstrate how the undertaken work has contributed to advancing the field beyond the current state of knowledge. Provide a well-defined scientific rationale for your work, highlighting potential applications and extensions if relevant. Feel free to suggest future experiments and mention any ongoing ones. Present both overarching and specific conclusions, aligning them with the objectives outlined in the introduction. Avoid duplicating the abstract or reiterating a list of results, and refrain from using trivial statements to convey your findings.

## REFERENCES

Please follow the submission guidelines highlighted here: <https://www.springer.com/journal/11119/submission-guidelines>.

## TABLES AND FIGURES

**Remember to keep the number of Figures and Tables within a certain number.** For example, 7 to 9 Figures plus 2 or 3 Tables for a total of 11, or more Tables and less Figures totalling maximum the same amount. If you have more Figures or Tables, consider adding supplemental Information.

When choosing to draw a Figure or insert a Table, ask yourself if a Figure is more effective than a Table or vice-versa. Are both needed?

The ultimate aim of Figures and Tables is to display your data to support your hypothesis with argumentation while emphasizing the significant findings of your research.

Then, number them in the order they are referred to in the text. Make sure the legend is descriptive. A reader should read the legend and understand a Figure and does not need to go into the text to find what it means.

**Do not present the same data into both Tables and Figures at the same time.**

**Some additional important points:**

- *Normal, plain font (e.g. 10-point Times Roman) for Text*
- *All commercial equipment – give model/number, manufacturer, manufacturer location (city, country)*

- *Avoid the use of personal pronouns / royal 'we' – use the passive*
- *Preferred length units are mm, m – not cm*
- *Colour is only used online – the hard copy is in B/W. Authors should take care that differences shown by colours on graphs and maps will not be lost in grey scale if they decide to insert grey Figures.*
- *In text, what was done must be in the past tense (Methodology and Results)*
- *All equations must be sequentially numbered*
- *Use italics for emphasis*
- *Use the automatic page numbering function to number the pages*
- *Do not use field functions*
- *Use tab stops or other commands for indents, not the space bar*
- *Use the table function, not spreadsheets, to make tables*
- *Use the equation editor or MathType for equations*
- *Save your file in docx format (Word 2007 or higher) or doc format (older Word versions)*
- *No More than three levels of displayed Headings*
- *Abbreviations should be defined at first mention and used consistently thereafter*