# Tutorial 2
# (How to prepare a poster presentation)

## 1. Definition

**A poster** presentation is a way of presenting research or academic work using a large printed (or digital) poster that combines **text, figures, tables, and visuals** to summarize the study. Instead of giving a formal oral talk to a large audience, the researcher stands by their poster during a conference session and explains it to interested attendees in smaller, more informal discussions.

## 2. When a poster presentation is used

2.1. Academic conferences & scientific meetings: Commonly used to share preliminary results, case studies, or specific aspects of a larger project.

2.2. When time is limited: Posters allow many researchers to present at once in a shared space.

2.3. For students and early-career researchers: Often a first step before giving full oral presentations.

## 3. A poste should be:

### 3.1. Attractive to capture attention

-The title should attract the reader, and the information should be presented as graphically as possible.

### 3.2. Structured to facilitate reading

-The reader must be guided in their reading. For this:

-Identify the different parts of the poster (with titles, section numbers, etc.).

### 3.3. Concise to focus the communication on the message

-The text should be clear and precise, with short sentences and an appropriate font (not in capital letter…).

- White spaces are important. Ideally, a poster should contain about 30% text, 40% illustrations, and 30% empty space. Avoid overusing colors, as they reduce readability.

### 3.4. Structure of poster

-The title, across the full width of the page, with the author(s) listed below.

-Introduction and objective (**clear and brief**).

-Materials and/or methods (**brief, and illustrated if possible**).

-Results obtained (**presented in the form of illustrations**).

-Conclusion.

- The Methods and Results are the sections that should be most developed, covering approximately two-thirds of the poster space.

## 4. Some practical tips

### 4.1. Do not forget to identify yourself.

-Contact details and the university logo.

-Name(s) and first name(s) of the author(s).

-Authors' email addresses.

### 4.2. Give priority to readability

-Use bold and avoid italics.

-Choose a readable font size.

-Be careful with color choices, as some backgrounds can make a poster unreadable.

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# Le pistachier de l'Atlas (*Pistachia atlantica* Desf.) pourrait-il contribuer à améliorer la fertilité du sol sous climat semi-aride ?


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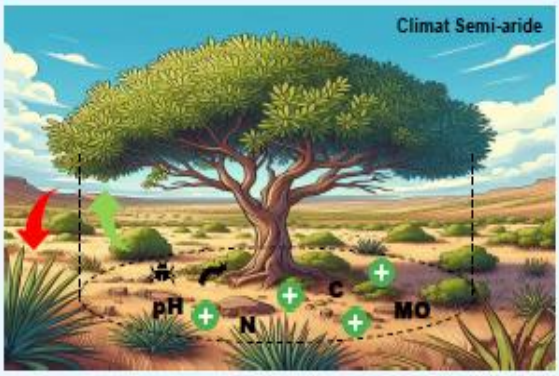
## INTRODUCTION




*Le pistachier de l'Atlas a-t-il la capacité d'améliorer la fertilité du sol?*

## Matériels et Méthodes

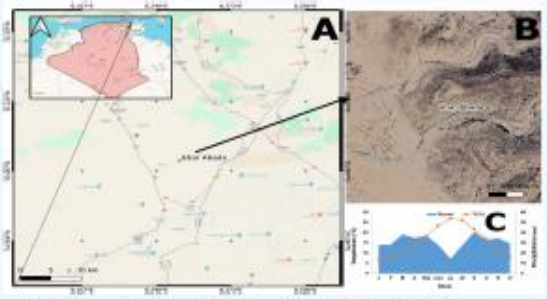



Fig. 1. Carte de la zone d'étude, A: Localisation de la zone d'étude (Djar Abada) ; B : Vue satellitaire de la station étudiée ; C : Diagramme ombrothermique de Gaussen et Bagnouls de la station (1978-2018).

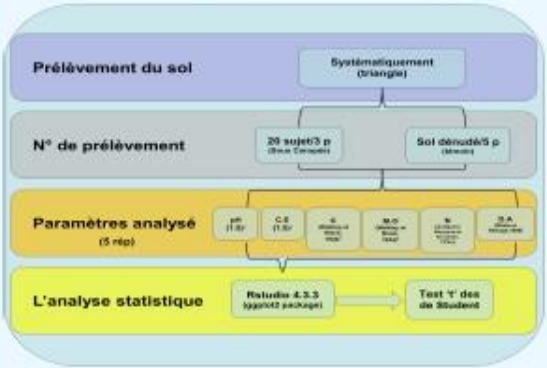



Fig. 2. méthodologie de travail par phase.

## Résultats et discussion

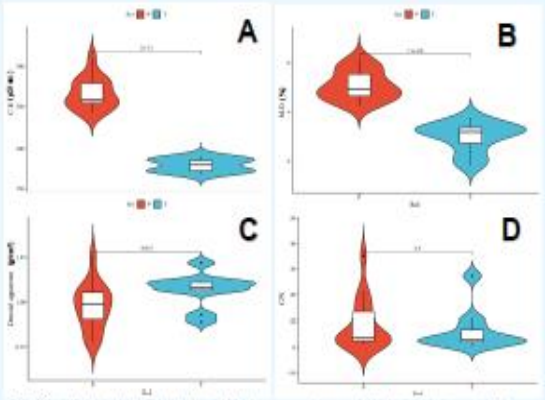



Fig. 3. violin et box plot représente la variabilité des moyennes des propriétés physicochimiques du sol (P : sous canopé vs T: témoin ou sol nu), (A : conductivité électrique; B : Matière organique ; C : Densité apparente ; D : Ratio du Carbone organique sur l'Azote Total).

- Différence significatif pour : C.E., C, M.O, D.A
- *Pistacia atlantica* Desf. En tant qu'un arbre hors forêt a fortement affecté les indicateurs de la qualité du sol dans la station étudier (zone steppique en est d'Algérie, climat semi-aride). Ceci renforce l'hypothèse, qui annoncé que la qualité du sol diminue là où les arbres sont complètement absents ou sous les arbres à feuilles persistantes (*Juniperus sp*), tandis que sous les arbres à feuilles caduce (cas du *Pistacia atlantica* desf) la fertilité a augmenté (Koch et al., 2023 ; Zarafshar et al., 2023).
- Sauf l'Azote total nos résultats des propriétés physico-chimiques du sol (sous la canopé vs sol nu) sont approximativement tous semblables à celles avancées par Zarafshar et al., (2023) en Iran dans un cadre climatique analogue. La variation du taux de N peux être due à la composition de la communauté rhizobium (Steffens et al., 2022).

## CONCLUSION

On peut conclure que le Pistachier de l'Atlas conviendrait mieux pour promouvoir les fonctions du sol, en particulier dans la restauration des écosystèmes steppiques dégradés. Ainsi, l'application de stratégies de gestion des sols spécifiques au site permet d'optimiser et de maintenir la multifonctionnalité des sols par le biais d'indicateurs de fertilité des sols.


Référence :

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[3] Kooch, Y., Ghorbanzadeh, N., Hajimirzaaghaee, S., & Francaviglia, R. (2023). Soil biological quality as affected by vegetation types in shrublands of a semi-arid montane environment. *Applied Soil Ecology, 189*, 104980. https://doi.org/10.1016/j.apsoil.2023.104980

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[5] Zarafshar, M., Rosata, M. J., Matinizadeh, M., Talebi, K. S., Bonthar, S. K., Alizadeh, T., Nouri, E., & Bader, M. K.-F. (2023). Scattered wild pistachio trees profoundly modify soil quality in semi-arid woodlands. *CATENA, 224*, 106983. https://doi.org/10.1016/j.catena.2023.106983