

Peer Review

Review of: "Isolation of a Novel Plant Growth-Promoting *Dyella* sp. from Danish Natural Soil"

Juan Ignacio Vílchez¹

1. Universidade Nova de Lisboa, Portugal

This work is interesting, and the strain potential is intriguing. However, I have some comments to enhance it:

Intro:

- Extremely short; I'd make a more precise statement that helps in understanding the relevance of bioinoculants and their impact on plant morphology and development.
- Not many references about previous *Dyella* studies on plant growth promotion or stress management.

Materials and Methods:

- Requires some more chemo-physical information about the soil.
- WGS should be followed by Phylogenetic analysis; this section looks untidy, going back and forth between their sections.
- What equivalence in CFUs/mL do the ODs used in inoculation processes represent?

Results:

- The PCoA and other methodological explanations should be done in the M&M section, not here.
- Fresh weight is very delicate, especially for *Arabidopsis*, as any water loss can affect it. I'd suggest considering dry weight.
- This study requires an explanation of why the *Dyella* strain is proposed as a new species.

Discussion:

- Be careful not to repeat the introductory or results sections; many statements and paragraphs look like that.

- Definitely, this section can be enhanced and compared to many similar studies, even focusing on *Dyella* strains

Declarations

Potential competing interests: No potential competing interests to declare.