Interactive comment on "Microbial communities and their predictive functional profiles in arid soil of Saudi Arabia" *by* Munawwar A. Khan and Shams T. Khan

Anonymous Referee #1

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The manuscript entitled "Microbial communities and their predictive functional profiles in arid soil of Saudi Arabia" presents enough evidence of the existence of a microbial community with many genera well suited to their survival under extremes of arid region climate soils poor in nutrient content. But I have some minor concerns that should be addressed before the manuscript can be finally accepted for publication.

Line 18, environmental conditions.; shows an abundance of genes

Line 31, rainfall

Line 40, Delete the sentence "consequently, improving. . ..of the soil.

Line 80: The sentence Online program Galaxy, should be modified as "Predictive functional analysis of microbial communities using 16S rRNA gene sequences was carried out using online PICRUSt program available with Galaxy and STAMP program.

Line 86, the weather of the city

Line 95: Please correctly calculate how many times $5.5 \pm 1.9 \times 105$ is higher than $1.1 \pm 0.9 \times 104$. I think it is 50 times?

Line 96, Delete "an" before 8.1

Line 115 was observed

Line 130, these sequences have been

Line 133, Scientific names should be italicize throughout the manuscript, examples, Acinetobacter in line, Rhizobium in line 163 and Flavobacterium in line 169.

Line 155, Change "is known to oxidize" to are known to oxidize

Line 176, PICRUSt should be changed to PICRUSt analysis

Line 184 Correct this line use "us" after help.

Line 187, delete but after Gemmatimonas abd italicize Gemmatimonas.

Improve the map of Saudi Arabia, clearly label A and B in figure 1.

Interactive comment on SOIL Discuss., https://doi.org/10.5194/soil-2020-31, 2020.