



Research article

Antibacterial activity of *Arthrobacter* strains isolated from Great Gobi A Strictly Protected Area, Mongolia

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Supplementary

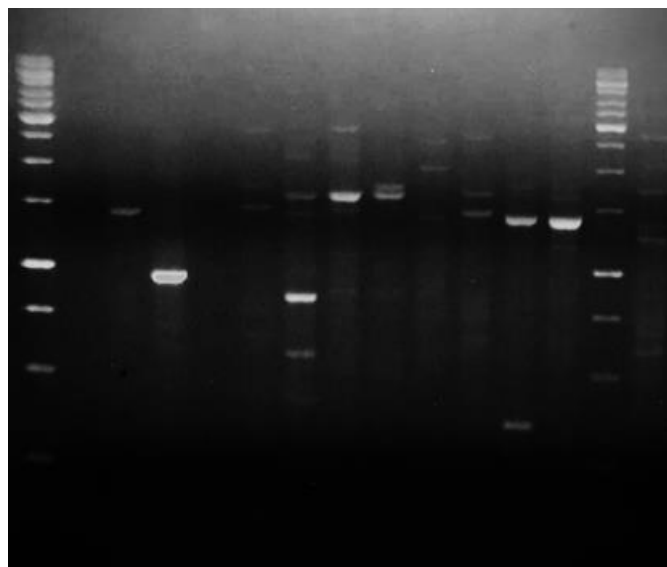


Figure S1. RAPD visualization on agarose gel. The amplicons for each strain are shown in the following order: MS2A2; MS3A4; MS2A14; MS3A8; MS3A11; MS3A13; MS3A6; MS3A17; MS3A25; MS3A3; MS3A7; MS3A20; MS3A21.



Figure S2. Cross Streaking test on Petri dishes without physical septum. Tester: *Arthrobacter* MS2A14; Targets from top to bottom: *Burkholderia cepacia* FCF3, *B. cenocepacia* FCF23, *B. cenocepacia* LMG 13010, *B. cenocepacia* LMG 16656, *B. cenocepacia* LMG 21462, *B. cenocepacia* LMG 24506, *B. cepacia* LMG 1222, *B. multivorans* LMG 17588, *B. ambifaria* LMG 19182, *B. cenocepacia* LMG 19230.

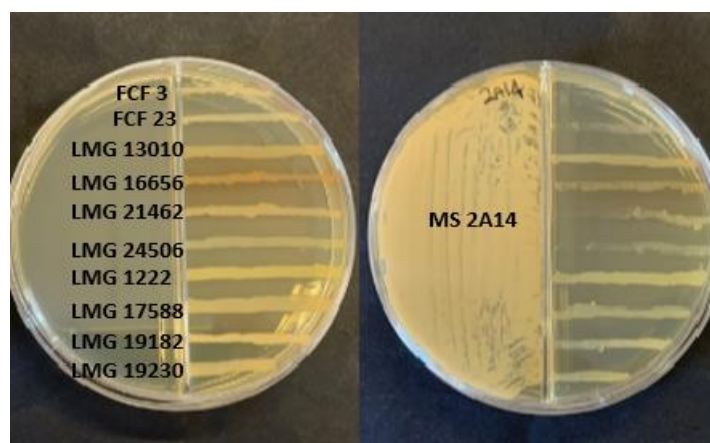


Figure S3. Cross Streaking test on Petri dishes with physical septum. Tester: *Arthrobacter* MS2A14; Targets from top to bottom: *Burkholderia cepacia* FCF3, *B. cenocepacia* FCF23, *B. cenocepacia* LMG 13010, *B. cenocepacia* LMG 16656, *B. cenocepacia* LMG 21462, *B. cenocepacia* LMG 24506, *B. cepacia* LMG 1222, *B. multivorans* LMG 17588, *B. ambifaria* LMG 19182, *B. cenocepacia* LMG 19230.

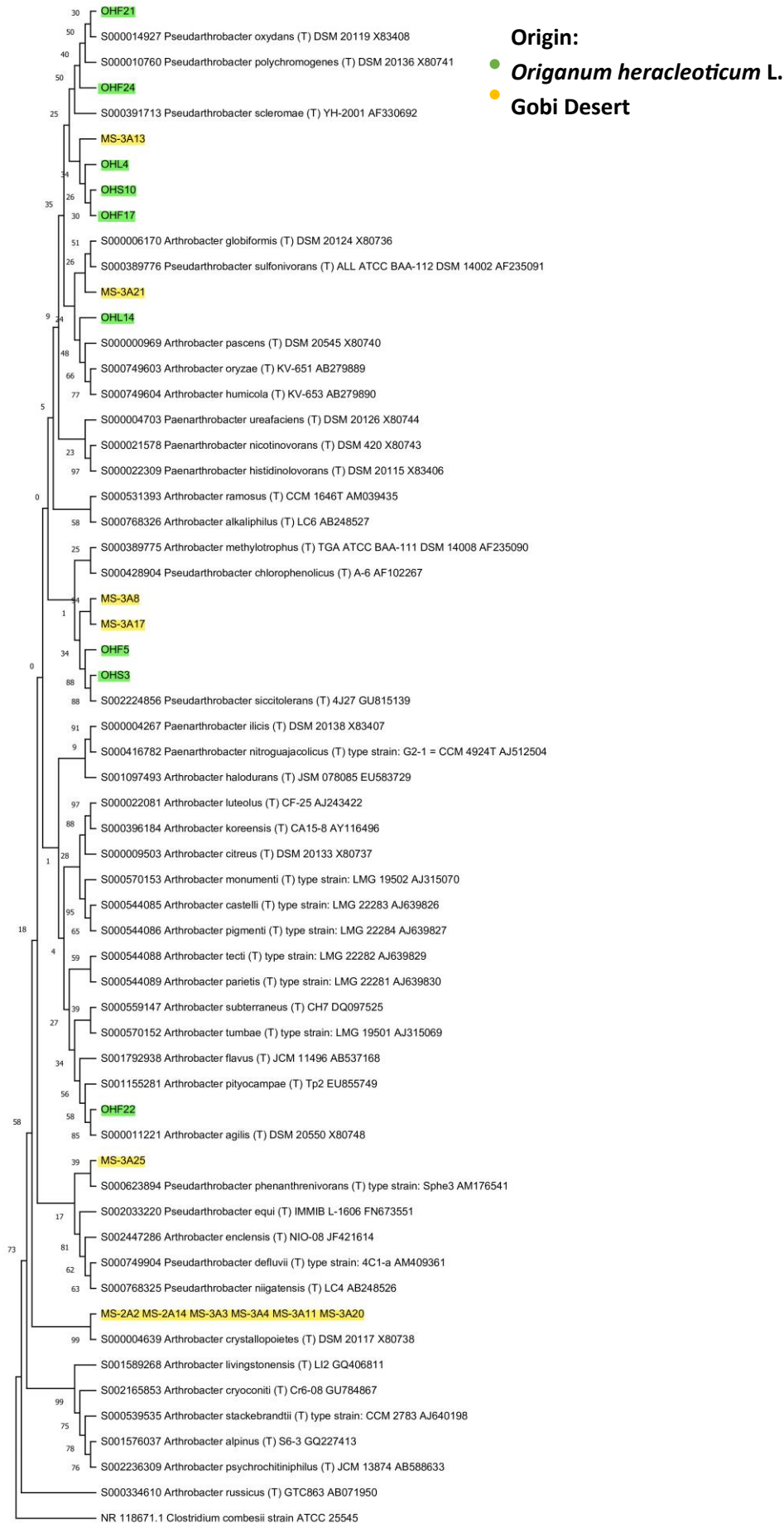


Figure S4 Phylogenetic tree base on 16S rRNA coding genes of *Arthrobacter* strains isolated from Gobi Desert soil (MS-) or associated to *Origanum heracleoticum* L. (OH-). The *Clostridium combesii* orthologous sequence was used as an outgroup.

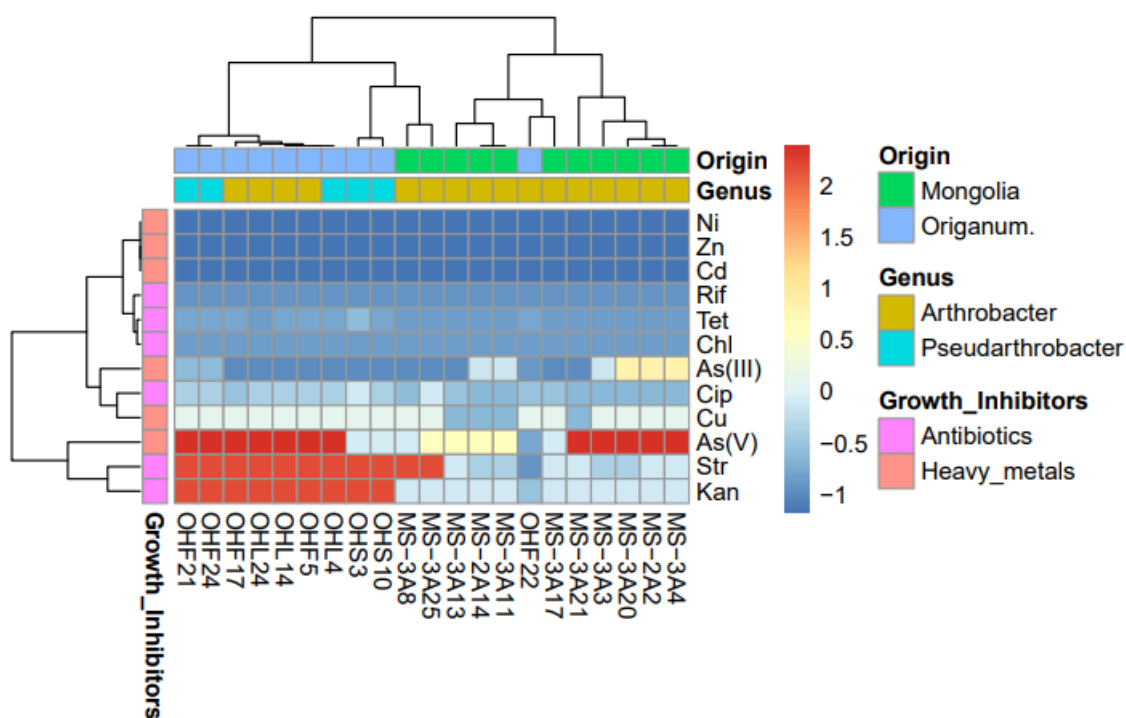


Figure S5. Heatmap of the MIC of different antibiotics and heavy metals for *Arthrobacter* strains isolated from Gobi Desert soil (MS-) or associated to *O. heracleoticum* L. (OH-). The values were obtained by normalizing the MIC values.

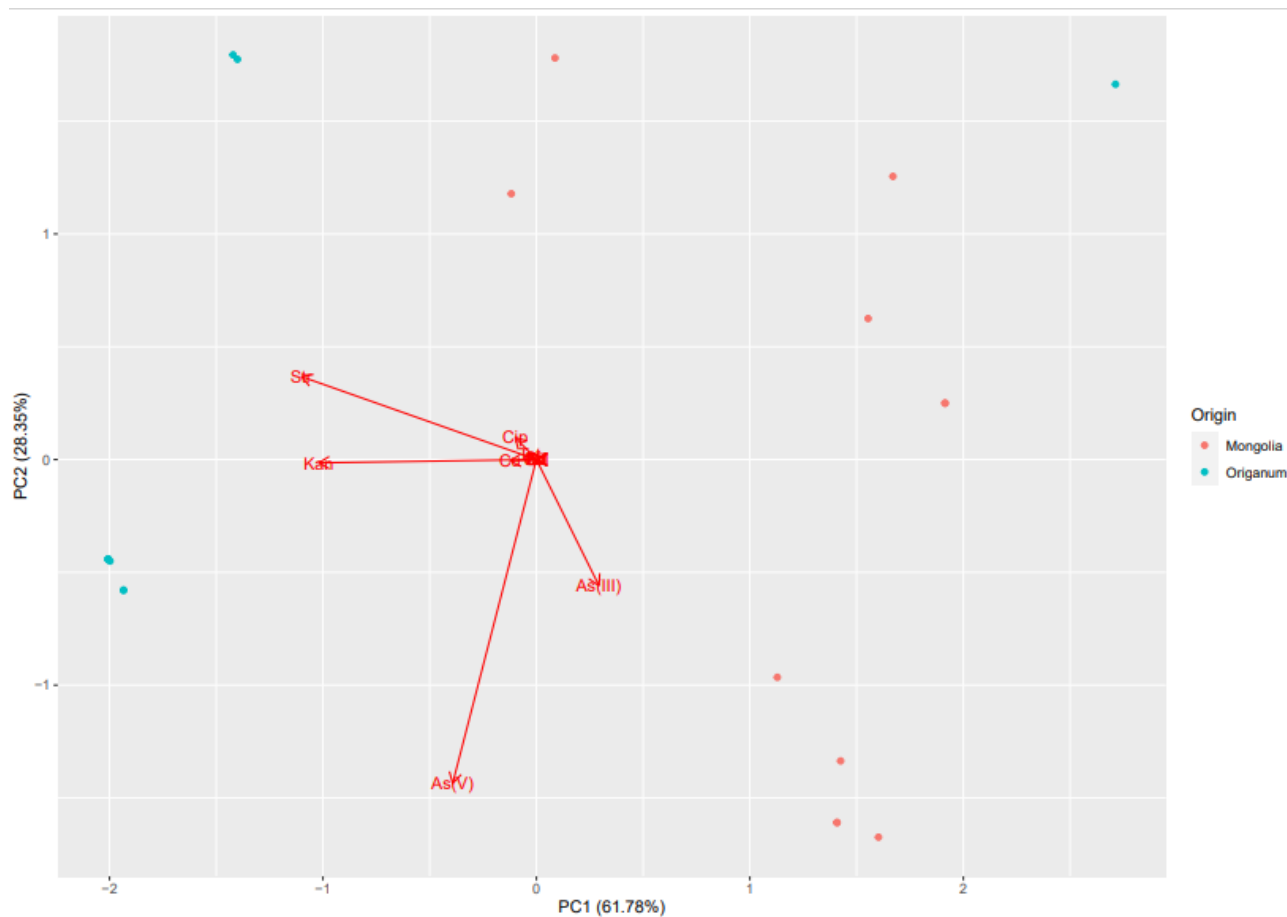


Figure S6. PCA plot showing the differences between the *Arthrobacter* strains isolated from Gobi Desert soil and those associated with *O. heracleoticum* L.



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