



Research article

Osmotolerant plant growth promoting bacteria mitigate adverse effects of drought stress on wheat growth

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Supplementary

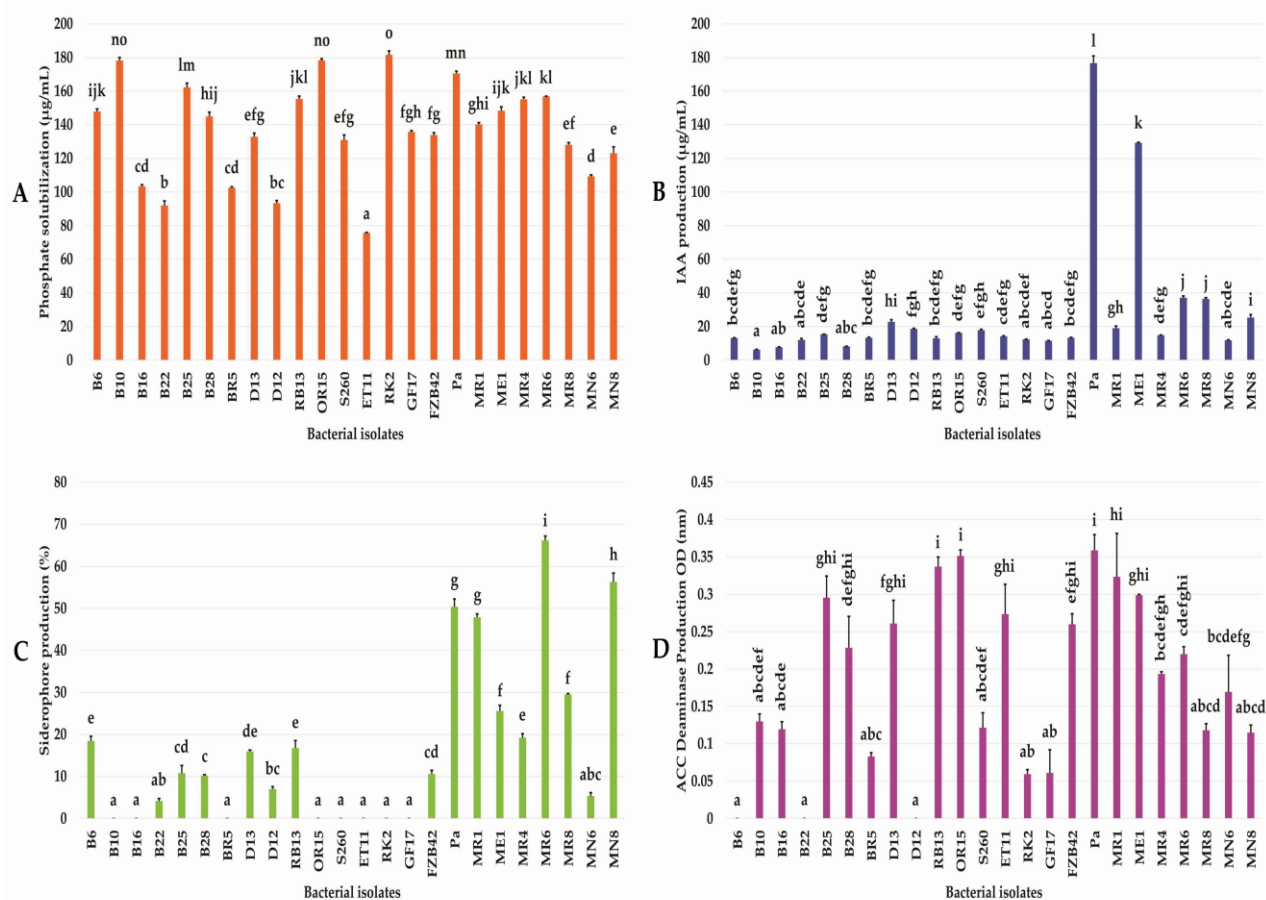


Figure S1. PGP activities of bacterial isolates, (A) Phosphate solubilization ($\mu\text{g/mL}$), (B) Indole acetic acid (IAA) production ($\mu\text{g/mL}$), (C) Siderophores production (%) and (D) 1-Aminocyclopropane-1-carboxylate (ACC) deaminase production (DO). Values are means \pm standard deviation (SD) of three replicates ($n = 3$).

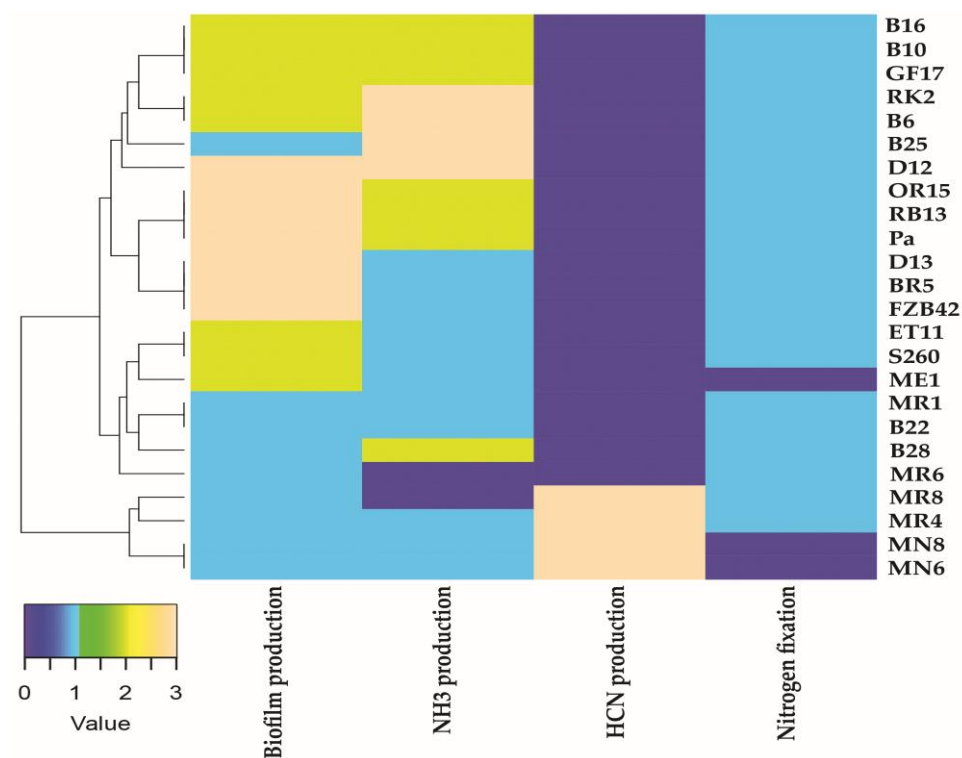


Figure S2. Clusters and heat map of PGP activities (biofilm, NH₃, HCN production and N₂ fixation) of bacterial isolates.

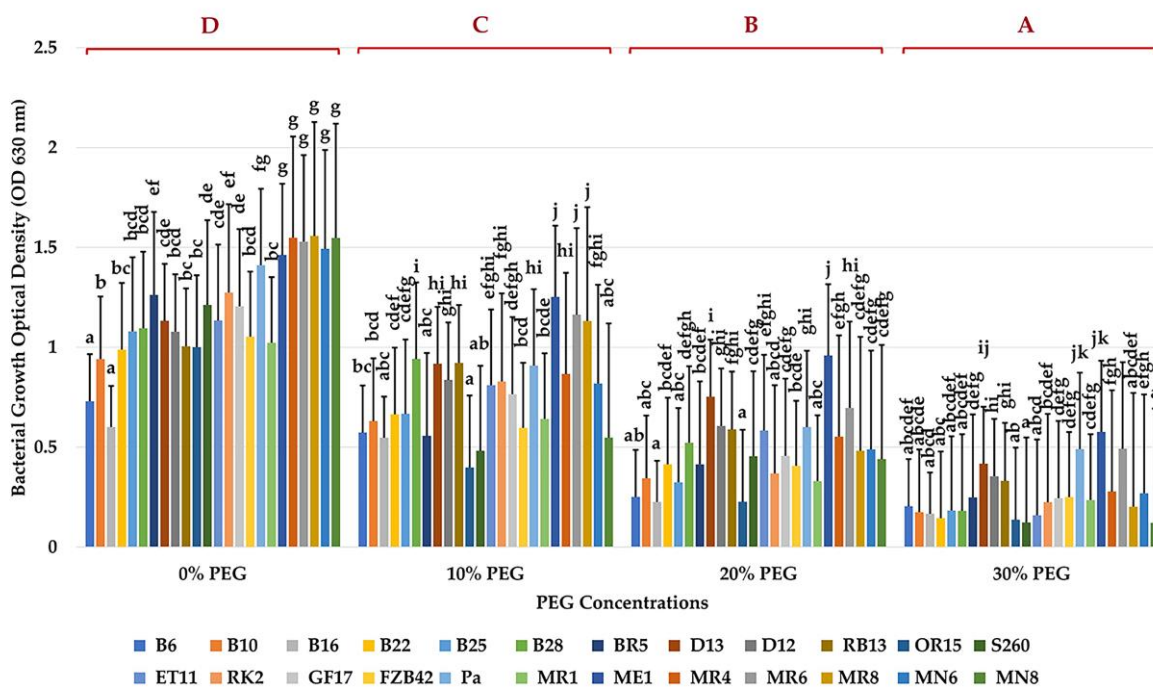


Figure S3. Growth performance of bacterial isolates at different levels of osmotic stress using polyethylene glycol (PEG-6000).

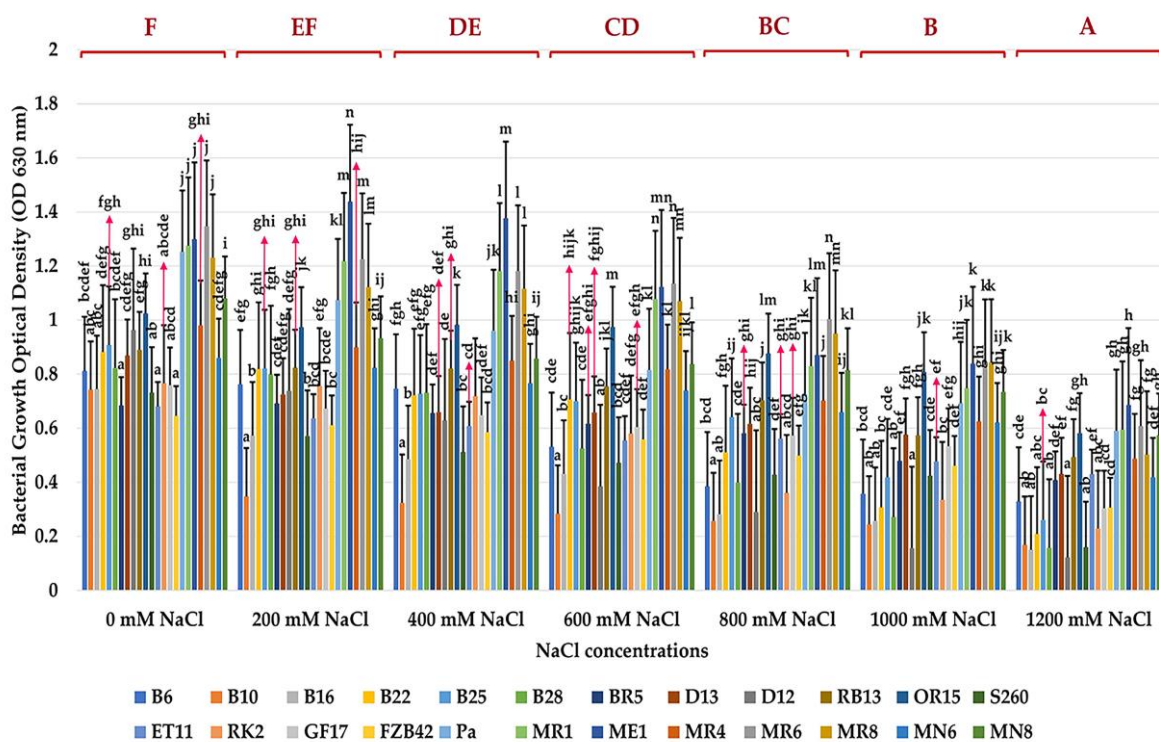


Figure S4. Growth performance of bacterial isolates at different concentrations of NaCl.

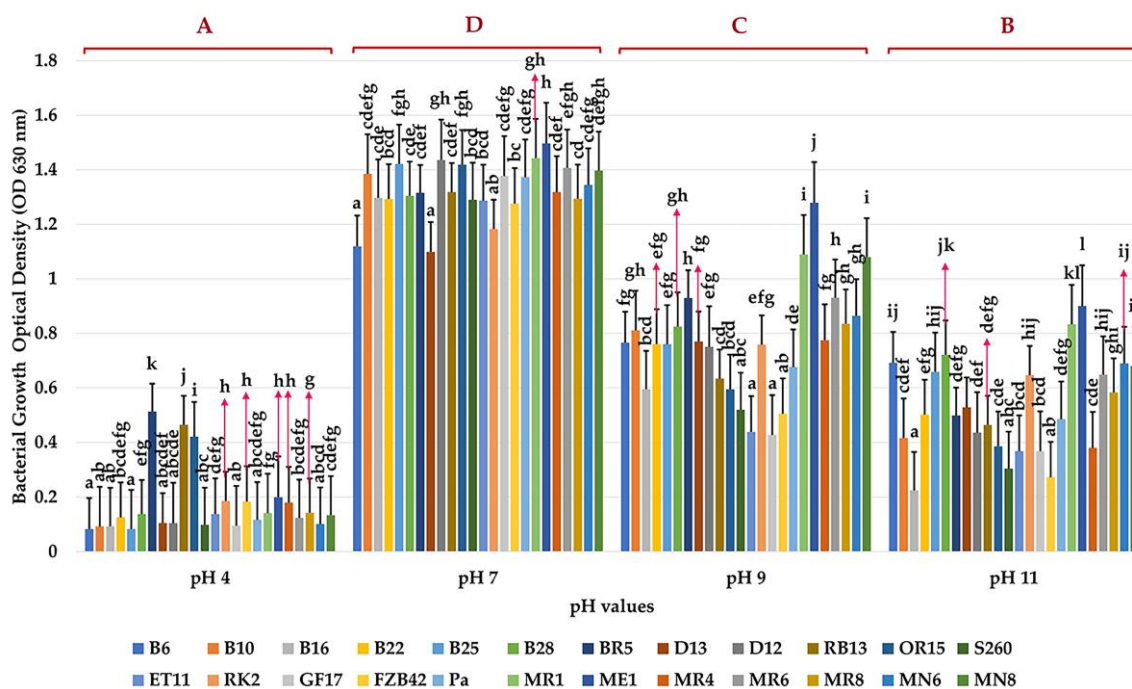


Figure S5. Growth performance of bacterial isolates at different pH values.

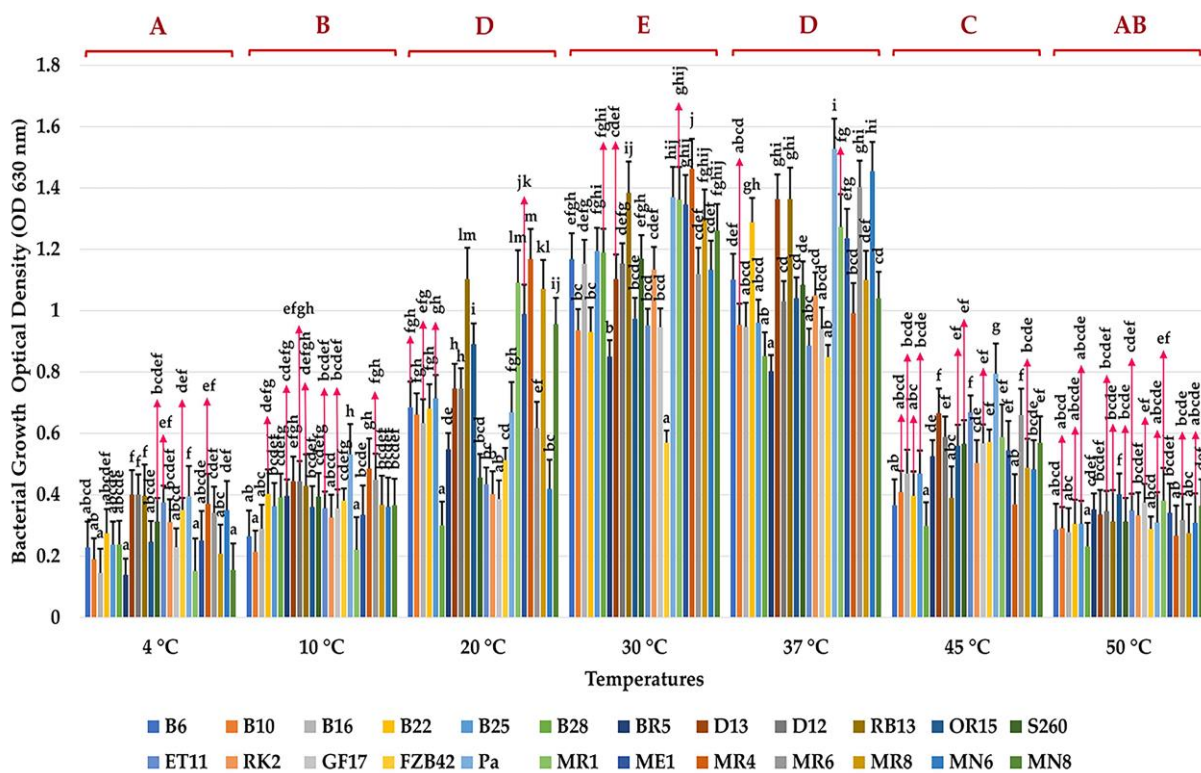


Figure S6. Growth performance of bacterial isolates at different temperatures.

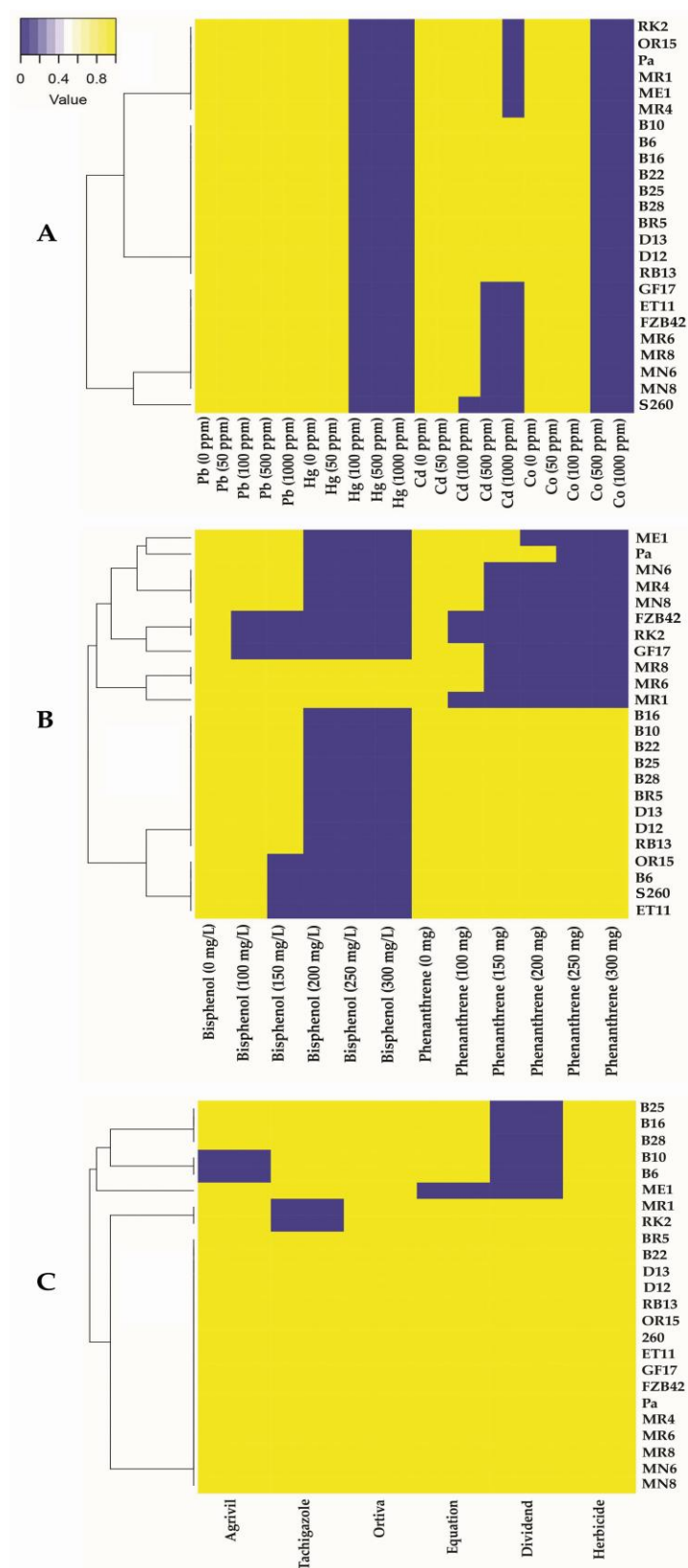


Figure S7. Clusters and heat map of bacterial isolates tolerance to (A) different concentrations of heavy metals (Hg, Pb, Cd, and Co) (B) pollutants (phenanthrene and bisphenol), (C) Herbicides, and fungicides (Agrivil, Tachigazole, Ortiva, Equation and Dividend).

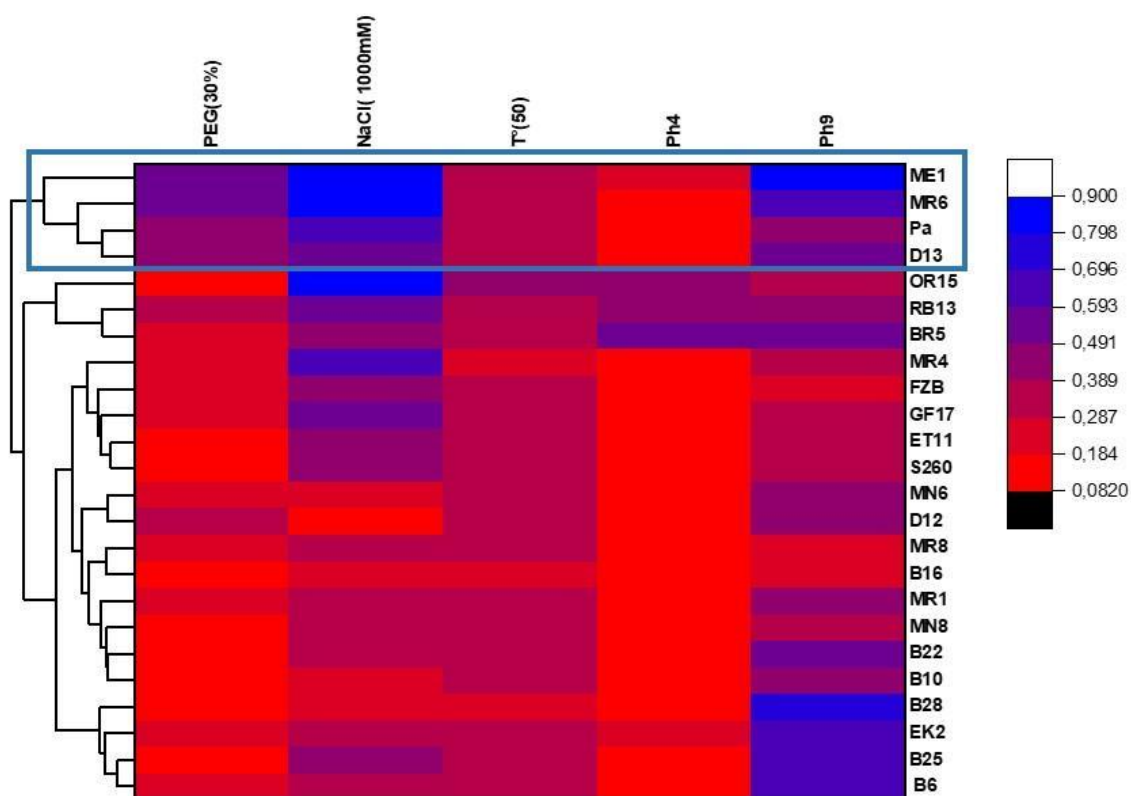


Figure S8. Heat map showing the response of the isolates to different stress tolerance (pH 4, 9, temperature 50 °C, NaCl 1000 mM, and PEG 30%). The bacterial isolates (ME1, MR6, Pa and D13) having the best capacities are highlighted with the same colors.



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