

## Supplementary Materials

### **Metabolomics analyses reveal metabolites affected by plant growth-promoting endophytic bacteria in roots of the halophyte *Mesembryanthemum crystallinum***

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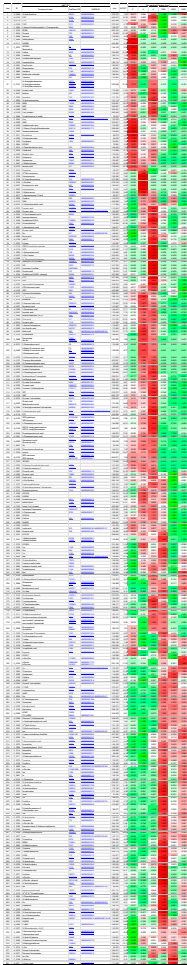
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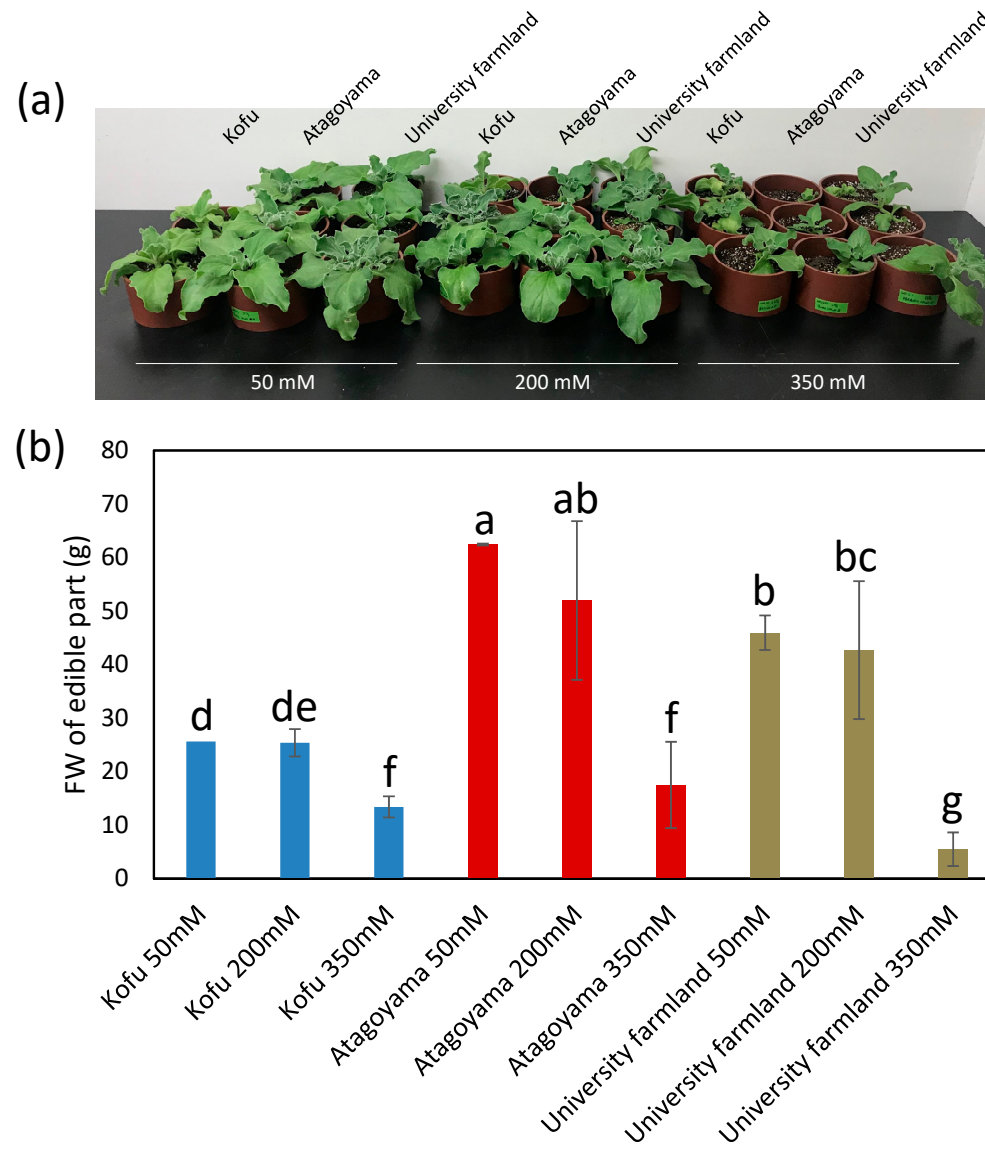
**Table S1** Heatmap and tabular presentation of all metabolites based on relative peak area in the control and strains 4- and 2-applied *Mesembryanthemum crystallinum* plants. Green (low) to red (high) represents the increase in relative area of each peak among the three treatments.



**Table S2** Conditions of cation and anion modes for CE-TOFMS-based metabolome analysis.

<b>Cationic Metabolites (Cation Mode)</b>	
Device	Agilent CE-TOFMS system (Agilent Technologies Inc.) Machine No. 6 Capillary: Fused silica capillary i.d. 50 $\mu$ m $\times$ 80 cm
Analytical	Run buffer: Cation Buffer Solution (p/n : H3301-1001)
Condition	Rinse buffer: Cation Buffer Solution (p/n : H3301-1001) Sample injection: Pressure injection 50 mbar, 10 sec CE voltage: Positive, 30 kV MS ionization: ESI Positive MS capillary voltage: 4,000 V MS scan range: m/z 50-1,000 Sheath liquid: HMT Sheath Liquid (p/n : H3301-1020)
<b>Anionic Metabolites (Anion Mode)</b>	
Device	Agilent CE-TOFMS system (Agilent Technologies Inc.) Machine No. 5 Capillary: Fused silica capillary i.d. 50 $\mu$ m $\times$ 80 cm
Analytical	Run buffer: Anion Buffer Solution (p/n : H3302-1023)
Condition	Rinse buffer: Anion Buffer Solution (p/n : H3302-1023) Sample injection: Pressure injection 50 mbar, 22 sec CE voltage: Positive, 30 kV MS ionization: ESI Negative MS capillary voltage: 3,500 V MS scan range: m/z 50-1,000 Sheath liquid: HMT Sheath Liquid (p/n : H3301-1020)

**Figure S1** Growth of ice plants in different soils under a range of salinity conditions. Values are means  $\pm$  SD, ( $n=3$ ), Tukey's HSD ( $p < 0.05$ ).



**Figure S2** Initial Ice plant growth with selected strains (a), and plate photo of selected strains in this study (b).

