

Supplementary data

Over-expression of bacterial *mtlD* gene confers enhanced tolerance to salt-stress and water-deficit stress in transgenic peanut (*Arachis hypogaea*) through accumulation of mannitol

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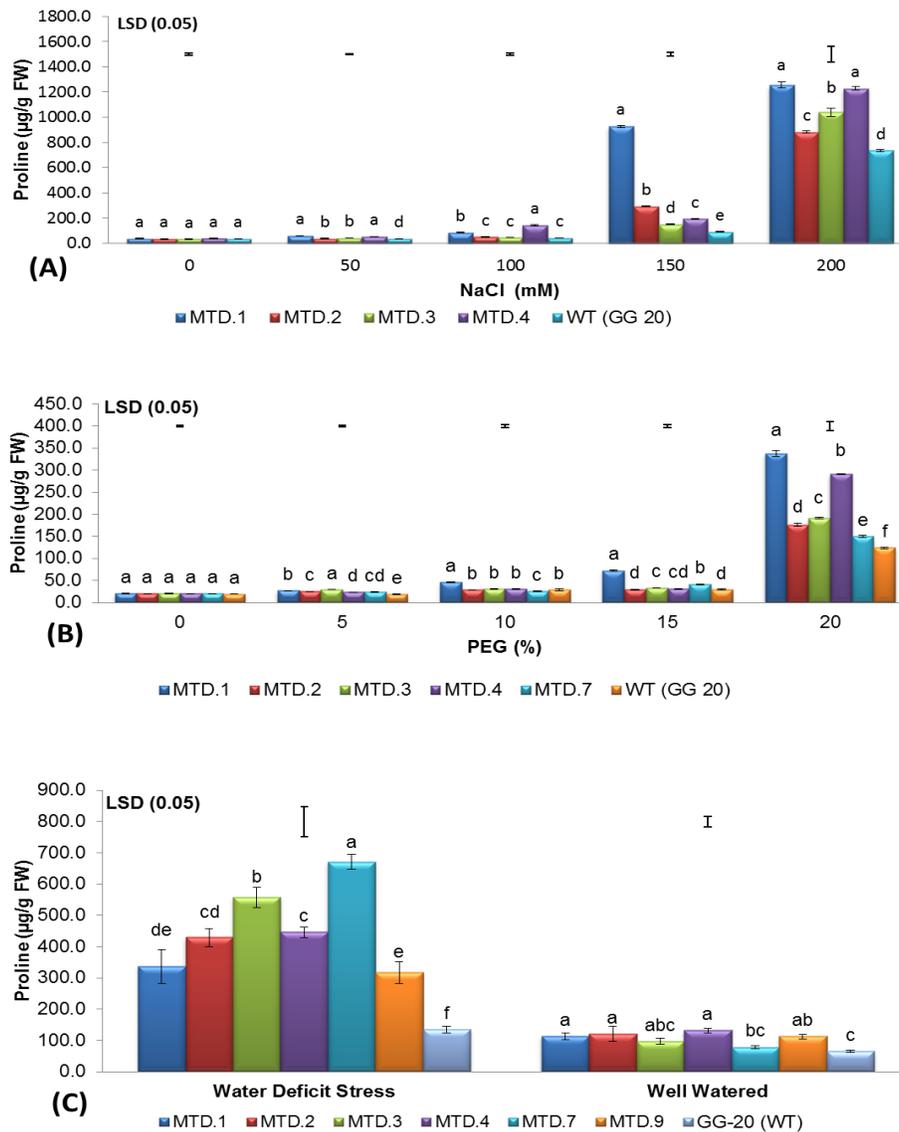


Fig S1. Effect of imposing different levels of (A) Salt-stress (0, 50, 100, 150, 200 mM NaCl) and (B) water-deficit stress (0, 5, 10, 15, 20% PEG) at seedling stage and (C) Effect of imposing water-deficit stress at full-growth stage in transgenic lines (MTDs) and a WT (GG 20) on proline content. Values are mean of three replicates and bars indicate \pm SE; bars on the top represent the $LSD_{0.05}$. Bars having same lower-case letters within treatments are not significantly different ($P \leq 0.05$).

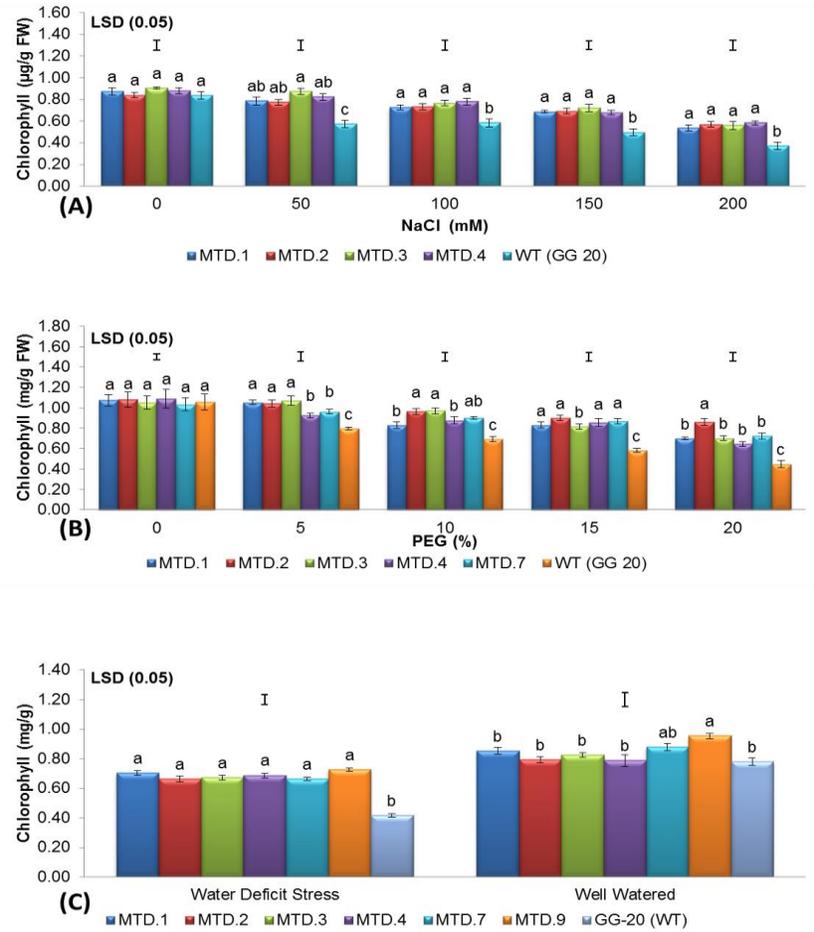


Fig S2. Effect of imposing different levels of (A) Salt-stress (0, 50, 100, 150, 200 mM NaCl) and (B) water-deficit stress (0, 5, 10, 15, 20% PEG) at seedling stage and (C) Effect of imposing water-deficit stress at full-growth stage in transgenic lines (MTDs) and a WT (GG 20) on total chlorophyll content. Values are mean of three replicates and bars indicate \pm SE; bars on the top represent the $LSD_{0.05}$. Bars having same lower-case letters within treatments are not significantly different ($P \leq 0.05$).

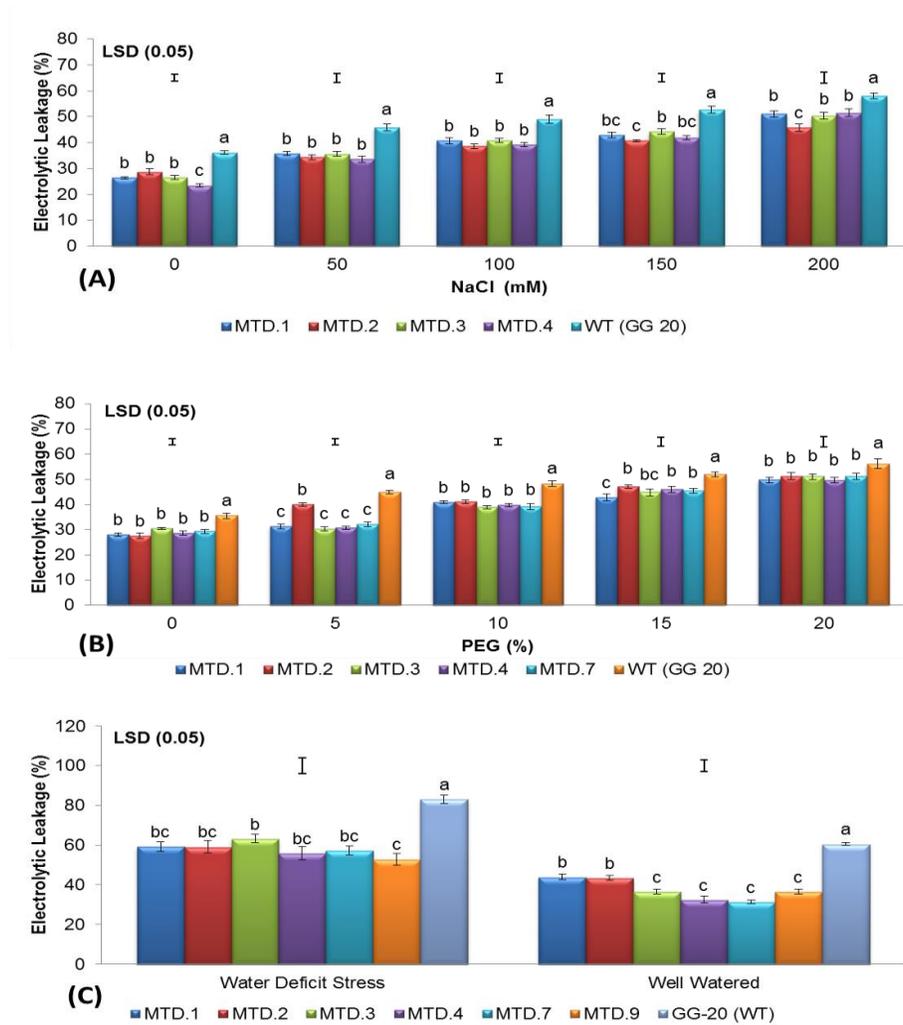


Fig S3. Effect of imposing different levels of (A) Salt-stress (0, 50, 100, 150, 200 mM NaCl) and (B) water-deficit stress (0, 5, 10, 15, 20% PEG) at seedling stage and (C) Effect of imposing water-deficit stress at full-growth stage in transgenic lines (MTDs) and a WT (GG 20) on leaf electrolytic leakage. Values are mean of three replicates and bars indicate \pm SE; bars on the top represent the $LSD_{0.05}$. Bars having same lower-case letters within treatments are not significantly different ($P \leq 0.05$).

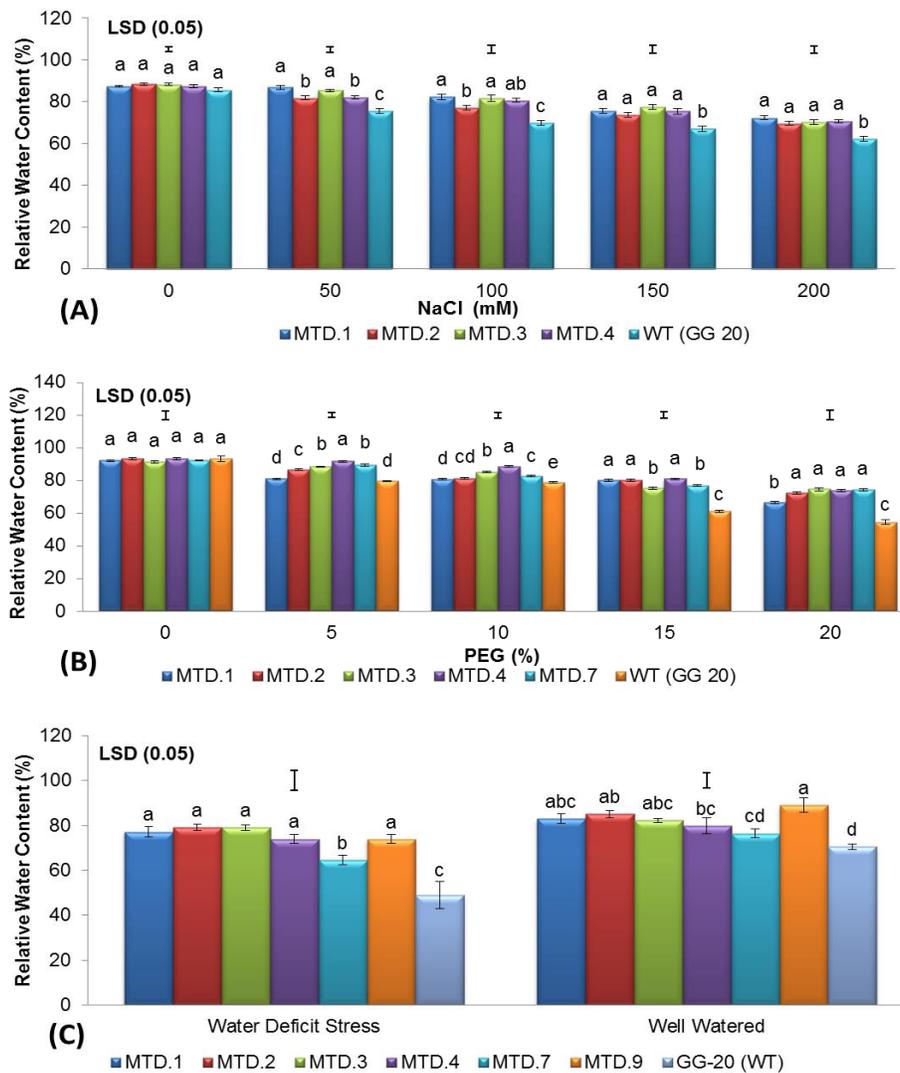


Fig S4. Effect of imposing different levels of (A) Salt-stress (0, 50, 100, 150, 200 mM NaCl) and (B) water-deficit stress (0, 5, 10, 15, 20% PEG) at seedling stage and (C) Effect of imposing water-deficit stress at full-growth stage in transgenic lines (MTDs) and a WT (GG 20) on RWC content. Values are mean of three replicates and bars indicate \pm SE; bars on the top represent the $LSD_{0.05}$. Bars having same lower-case letters within treatments are not significantly different ($P \leq 0.05$).

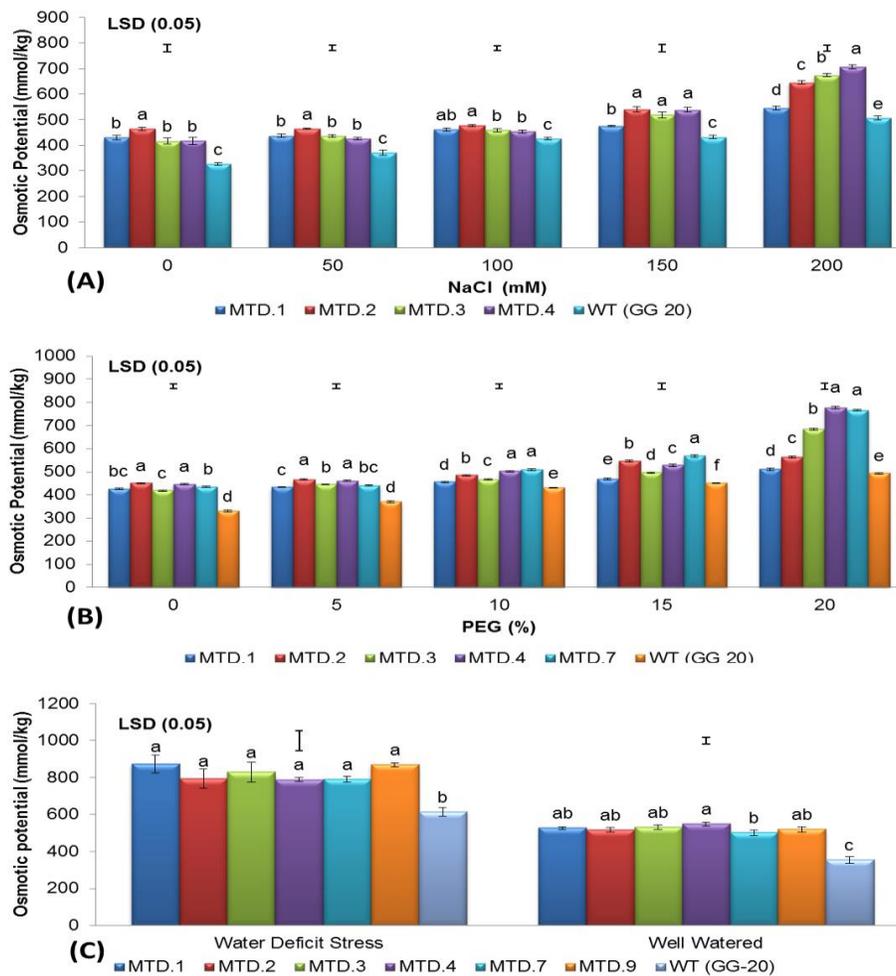


Fig S5. Effect of imposing different levels of (A) Salt-stress (0, 50, 100, 150, 200 mM NaCl) and (B) water-deficit stress (0, 5, 10, 15, 20% PEG) at seedling stage and (C) Effect of imposing water-deficit stress at full-growth stage in transgenic lines (MTDs) and a WT (GG 20) on osmotic potential. Values are mean of three replicates and bars indicate \pm SE; bars on the top represent the $LSD_{0.05}$. Bars having same lower-case letters within treatments are not significantly different ($P \leq 0.05$).