

Figure S1. Effect of Methyl Jasmonate (MeJa) on the growth of *S. bicolor* under normal condition. Phenotype (A) and shoot length (B) of *S. bicolor* plants grown from seeds primed with 10 and 15 μ M MeJa in the absence of salt stress. Data in the figure represent the mean \pm standard deviation from three biological replicates. Different letters indicate significant differences ($p < 0.05$) based on ANOVA one-way variance analysis following Tukey's comparison test.

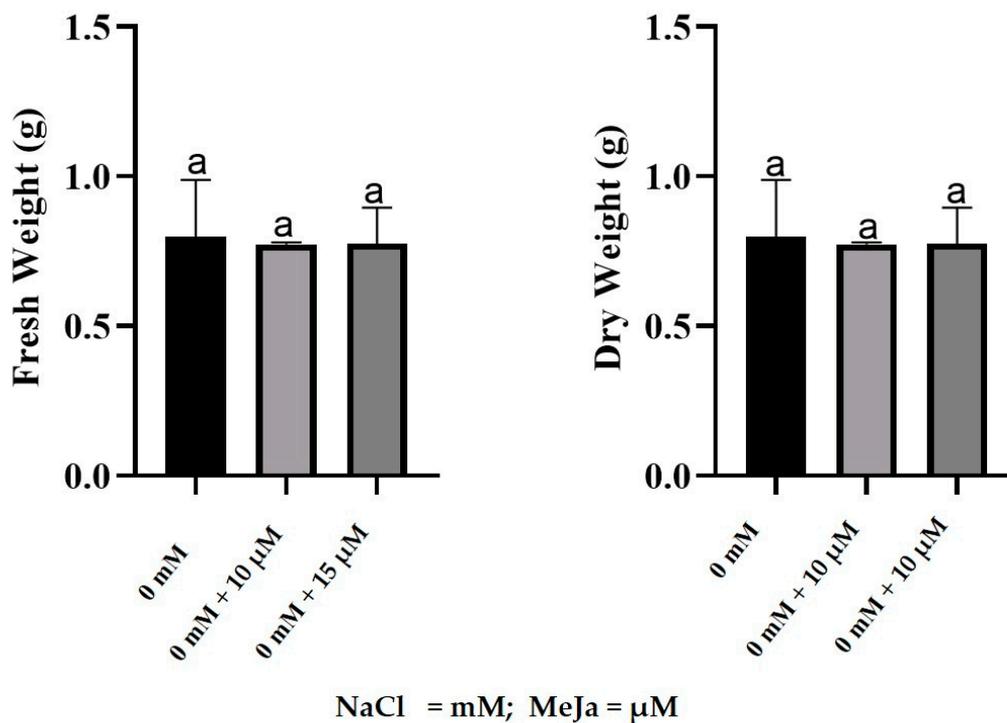


Figure S2. Effect of Methyl Jasmonate (MeJa) on biomass of *S. bicolor* under normal conditions. Fresh weight (A) and dry weight (B) of *S. bicolor* plants grown from seeds primed with 10 and 15 μM MeJa in the absence of salt stress. Data in the figure represent the mean \pm standard deviation from three biological replicates. Different letters indicate significant differences ($p < 0.05$) based on ANOVA one-way variance analysis following Tukey's comparison test.

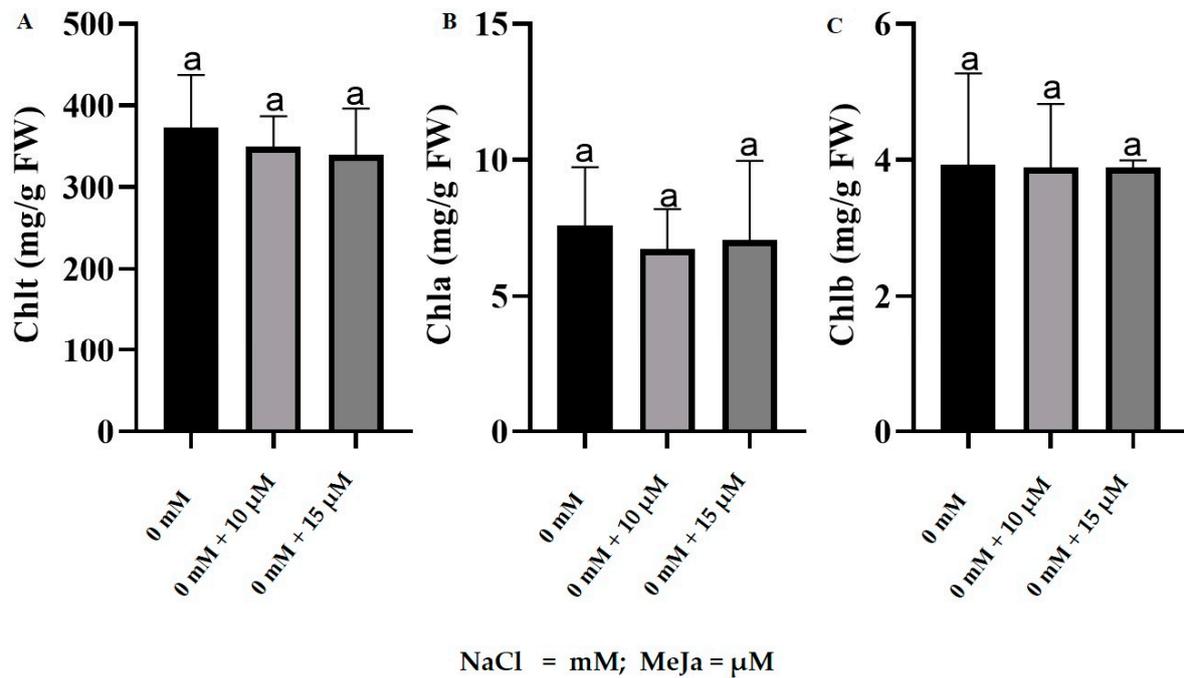


Figure S3. Effect of Methyl Jasmonate (MeJa) on the chlorophyll content in *S. bicolor* under normal (non-stressed) conditions. Photosynthetic pigments assayed include Chlorophyll *a* (A), Chlorophyll *b* (B) and total Chlorophyll (C) were determined from *S. bicolor* plants grown from seeds primed with 10 and 15 μM MeJa and stressed with 100 and 200 mM NaCl. Data in the table represent the mean ± standard deviation from three biological replicates ($n = 3$). Different letters in the column indicate significant differences ($p < 0.05$) based on ANOVA one-way variance analysis using Tukey's comparison test.

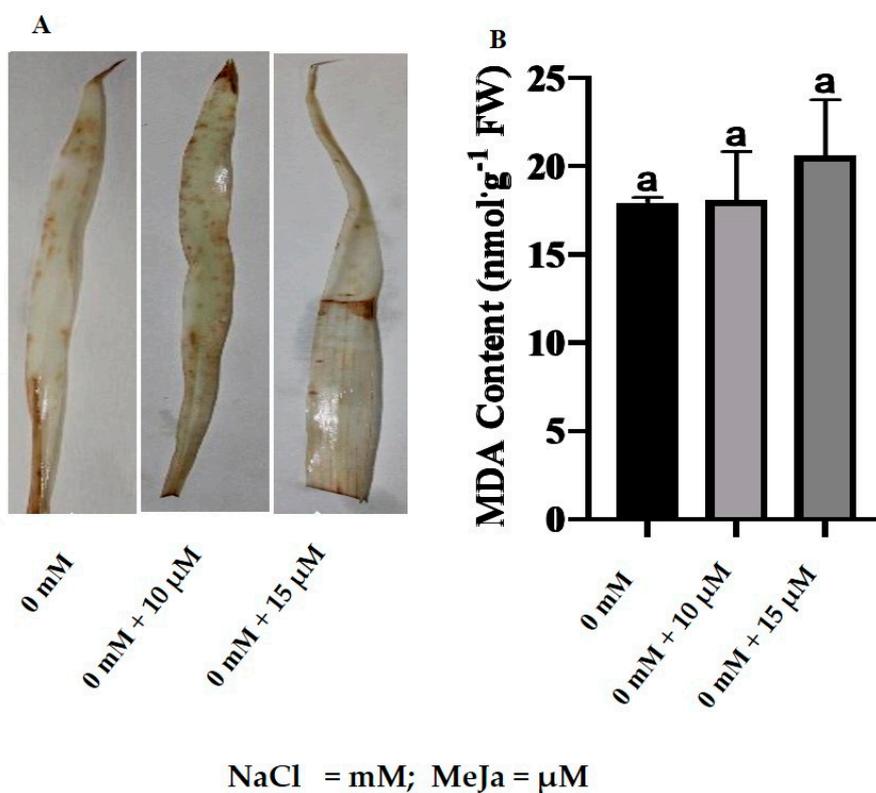


Figure S4. Assessment of oxidative damage in *S. bicolor* in response to MeJa under normal (non-stressed) conditions. Accumulation of H₂O₂ on the leaves was determined by histochemical staining (A), and lipid peroxidation was determined by measuring MDA content (B) for *S. bicolor* plants grown from seeds primed with 10 and 15 μM MeJa. Data in the figure represent the mean ± standard deviation from three biological replicates. Different letters indicate significant differences ($p < 0.05$) based on ANOVA one-way variance analysis using Tukey's comparison test.

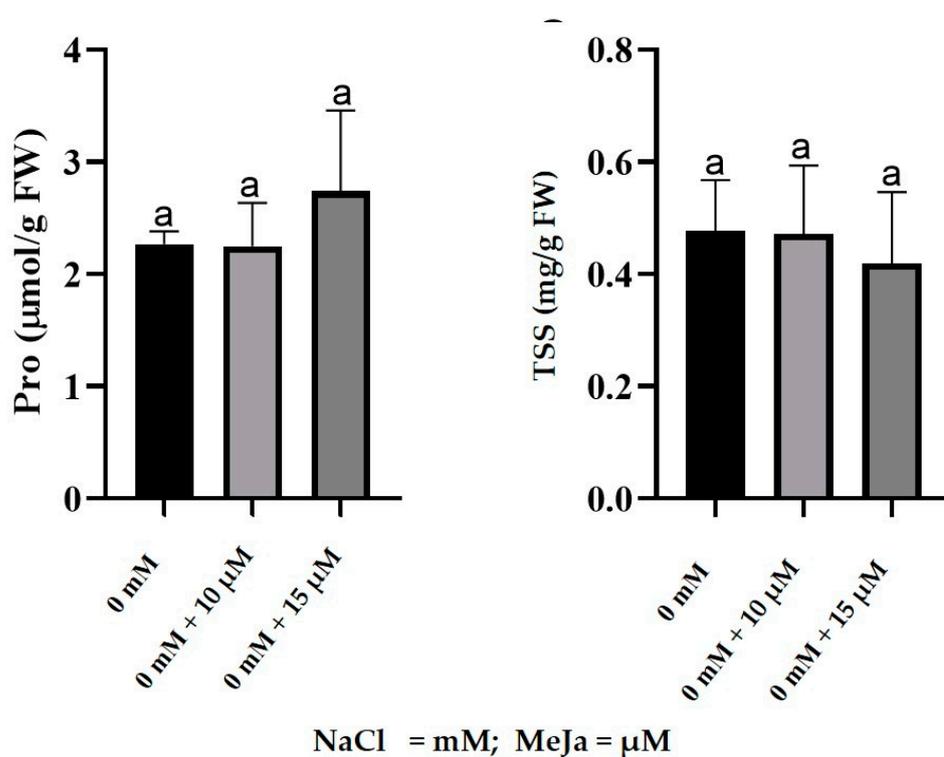


Figure S5. Proline (Pro) and total soluble sugar (TSS) content in response to MeJa pre-treatment in *S. bicolor* under normal (non-stressed) conditions. Proline content in *S. bicolor* plants grown from seeds primed with 10 and 15 μM MeJa under 100 mM NaCl (A) or 200 mM NaCl (B). Total soluble sugars content in *S. bicolor* plants pre-treated with 10 μM or 15 μM MeJa under 100 mM NaCl (C) or 200 mM NaCl (D). Data in the figure represent the mean \pm standard deviation from three biological replicates. Different letters indicate significant differences ($p < 0.05$) based on ANOVA one-way variance analysis using Tukey's comparison test