



Figure 2: Proline accumulation in Scarlett and NIL-143 at the seedling stage in response to drought stress grown inside an automated climate chamber. Drought treatment was applied to two-week-old seedlings by terminating the water supply. Sampling was done at 4 d, 5 d, 6 d, and 8 d after drought stress before proline measurement. The experiment was performed inside a controlled climate chamber. (a) Chromatophore indicates a free proline reaction product with ninhydrin. Darker color indicates a higher concentration of proline. (b) Shoot proline concentration under control and drought conditions. The graph represents the mean + SE (n = 5). (c) Relative mRNA expression of *HvP5cs1* gene. The graph represents the mean + SE (n = 3). Asterisks indicate significant differences between genotypes (* $P \leq 0.05$) using a student's *t*-test. FW, fresh weight