



Figure 4. Vegetation indices and photosynthetic traits in Scarlett and NIL-143 under drought stress at the seedling stage grown inside an automated climate chamber. Effect of water stress on (a) soil plant analysis development (SPAD) chlorophyll meter value, (b) Lichtenthaler index 1 (Lic1), (c) structure intensive pigment index (SIPI), (d) Carter index 2 (Ctr2), (e) effective quantum yield of photosystem II (Y(II)), (f) rate of CO₂ assimilation (A), (g) maximum carboxylation rate of rubisco (V_{cmax}), and (h) maximum rate of electron transport (J_{max}). Drought treatment was applied to two-week-old seedlings by terminating the water supply. Photosynthesis-related traits were evaluated at 4, 5, 6 and 8 d after drought stress using MiniPam and gas exchange analyzer by LI-COR. The graph indicates mean \pm SE (n = 5). Asterisks indicate significant differences between genotypes (* $P \leq 0.05$, ** $P \leq 0.01$) using student's *t*-test.