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3 **Figure S3. Starch levels determined by enzyme linked assays under different environmental**  
 4 **conditions.** Plants of Col-0 and *fum2.2* were grown under  $100 \mu\text{mol m}^{-2} \text{s}^{-1}$  light, 8 h light/16 h dark,  
 5  $500 \mu\text{L L}^{-1} \text{CO}_2$ ,  $20 \text{ }^\circ\text{C}$  light/ $18 \text{ }^\circ\text{C}$  dark conditions for 8 w. Plants were then transferred to control  
 6 (identical) conditions, low temperature ( $4 \text{ }^\circ\text{C}$ ), high carbon dioxide ( $1500 \mu\text{L L}^{-1}$ ) or high light ( $400$   
 7  $\mu\text{mol m}^{-2} \text{s}^{-1}$  light) for one photoperiod. Measurements were taken at the end of the photoperiod (8  
 8 h) from liquid  $\text{N}_2$  flash-frozen, fully-expanded leaves, as in Fig. 2.

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