

Supplemental Materials

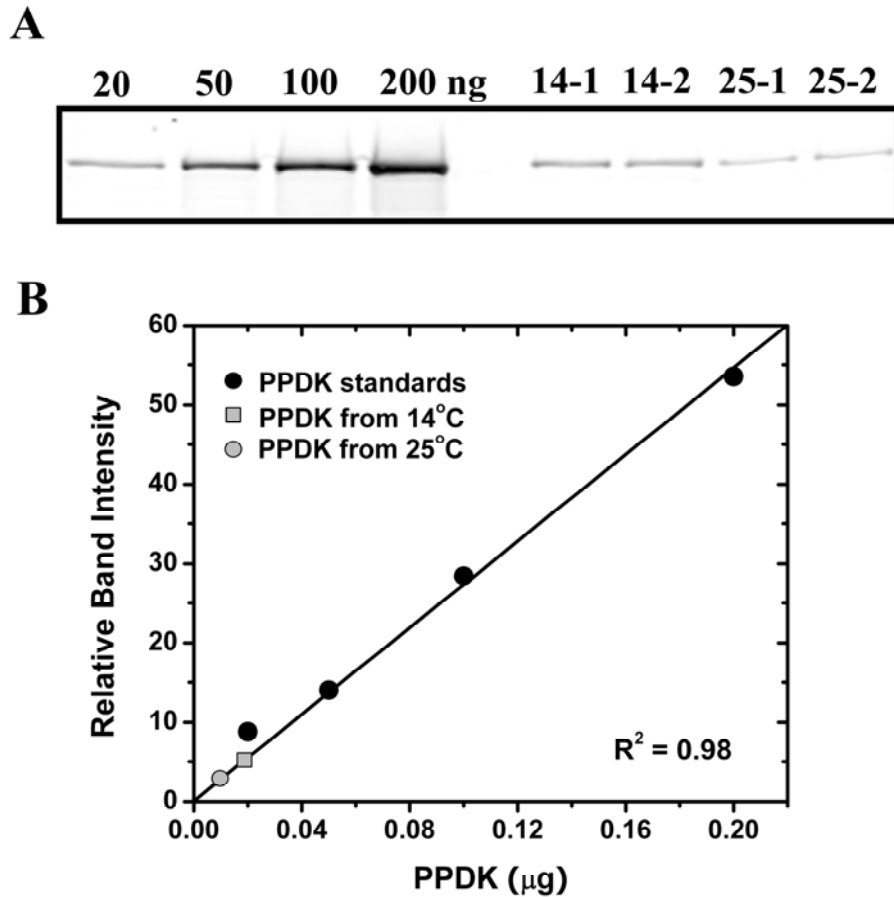


Figure S1. Quantification of PPDK in crude leaf extract of *Miscanthus x giganteus* grown continuously at 25°C (25) or 14 days after transferred to 14°C (14). A) Protein was separated by SDS-PAGE and transferred to a PVDF membrane. PPDK was detected by incubation with a primary rabbit polyclonal antibody to maize PPDK (Budde and Chollet, 1986). Lanes 1-4 (from left to right) contain 20, 50, 100 and 200 ng respectively of purified recombinant *M. x giganteus* PPDK from *E. coli* as standards. Lanes 6-9 contain total soluble proteins (loaded on a basis of leaf area) from *M. x giganteus* 14 days after transferred to 14°C (lane 6 and 7, two biological replicates), and 25°C grown *M. x giganteus* (lane 8 and 9, two biological replicates). B) Relative band intensities of PPDK standards and PPDK in crude leaf extract of *M. x giganteus* (as described in A) obtained from laser densitometry of lanes 1 to 4 in A, quantified using the Odyssey V1.2 software and calibrated against the known amounts of recombinant PPDK loaded on lanes 1-4.

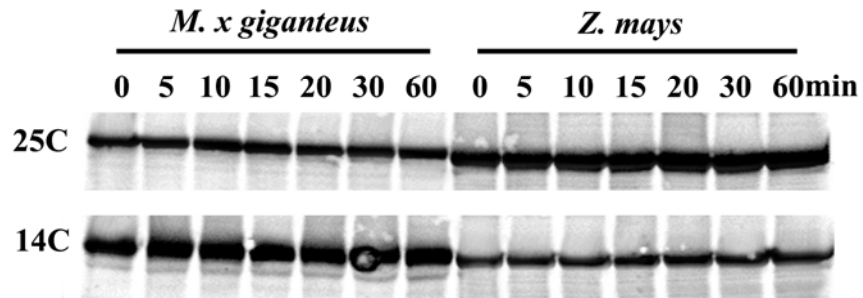


Figure S2. Changes in PPDK protein contents in leaves of *M. x giganteus* (MG) and *Z. mays* (ZM) grown continuously at 25°C (25C), or grown at 25°C and then transferred to 14°C (14C) for 14 days upon illumination. The same leaf samples used in Fig. 8 were separated by SDS-PAGE. The PPDK protein was probed with the rabbit polyclonal antibodies to maize C₄ PPDK as described in Fig 2A. The lane labeled with time zero indicates the sample that is collected immediately before light on.