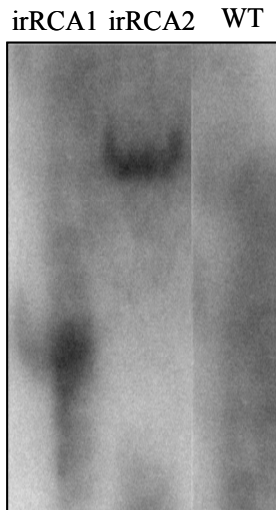


Supplemental

Figure 1

A



B

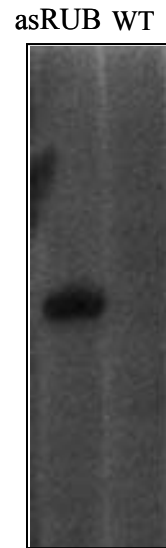


Figure 1. Southern Hybridization of Genomic DNA from (A) irRCA (lines 1 and 2) and (B) asRUB with a *hptII*-specific probe identified those lines containing only one transgene. 10µg of genomic DNA of both *ir-rca* and asRUB lines were digested with *EcoRV*, separated on an agarose gel, blotted, and hybridized with a ³²P-labelled probe. Three replicates from each line were used for hybridization. Similarly treated wild type (WT) plants were used as control.

Figure 2

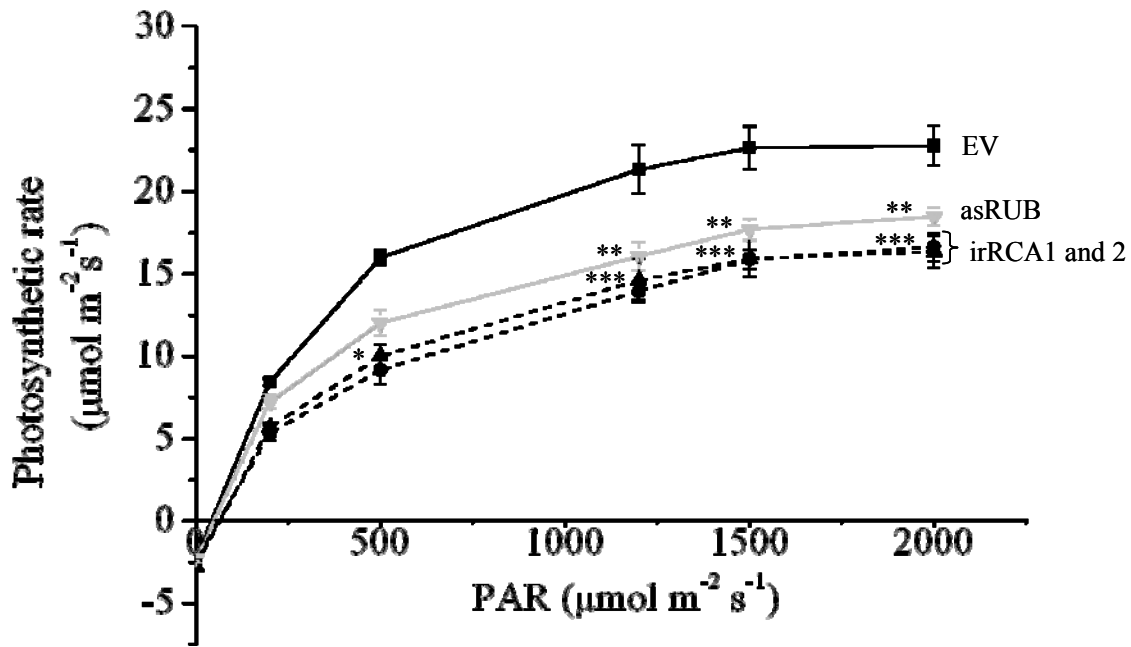


Figure 2. CO₂ Assimilation Rates (light curve). A light curve was generated at the CO₂ concentration of 400 µmol mol⁻¹ and at six different levels of irradiance (PAR), namely 0, 200, 500, 1200, 1500, and 2000 µmol m⁻² s⁻¹ at the rosette stage of growth for EV, irRCA (lines 1 and 2), and asRUB plants. The assimilation rates of irRCA and asRUB plants was 40-50% lower than those of EV plants at different PAR levels.

Figure 3

With Competition

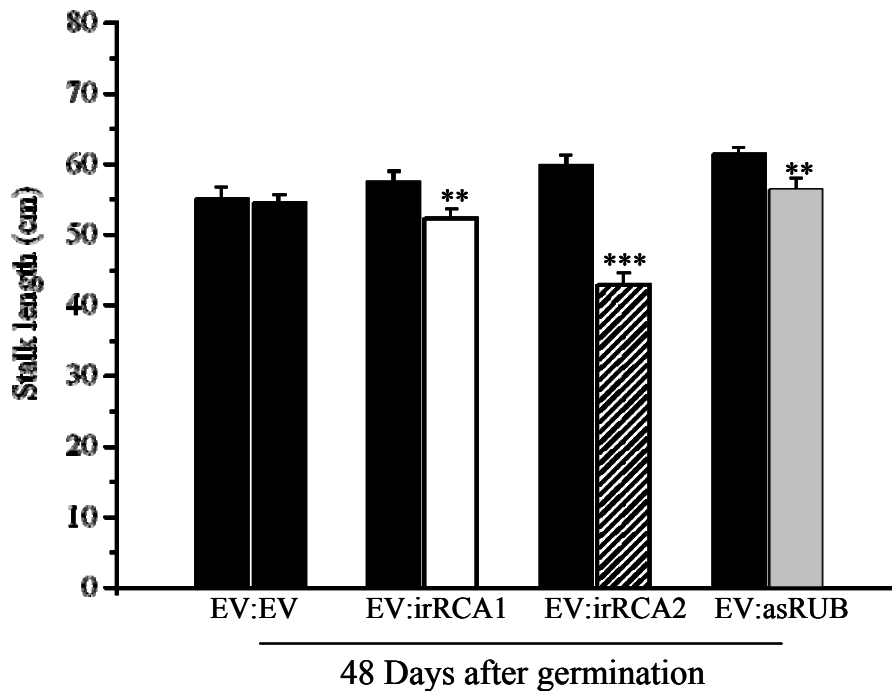


Figure 3. Growth of RCA- and RuBPCase-Silenced Plants Is Strongly Impaired Under Competitive Growth Conditions. The stalk lengths of competition-grown EV-EV, EV-irRCA, and EV-asRUB plants were recorded after 48 days of germination. The stalk lengths of irRCA (lines 1 and 2) and asRUB plants were significantly less than those of EV plants. Values are means (\pm SEM) of ten replicate plants from each genotype. Asterisks indicate a significant difference at $P < 0.005$ (*), $P < 0.005$ (**) and $P \leq 0.0001$ (***).