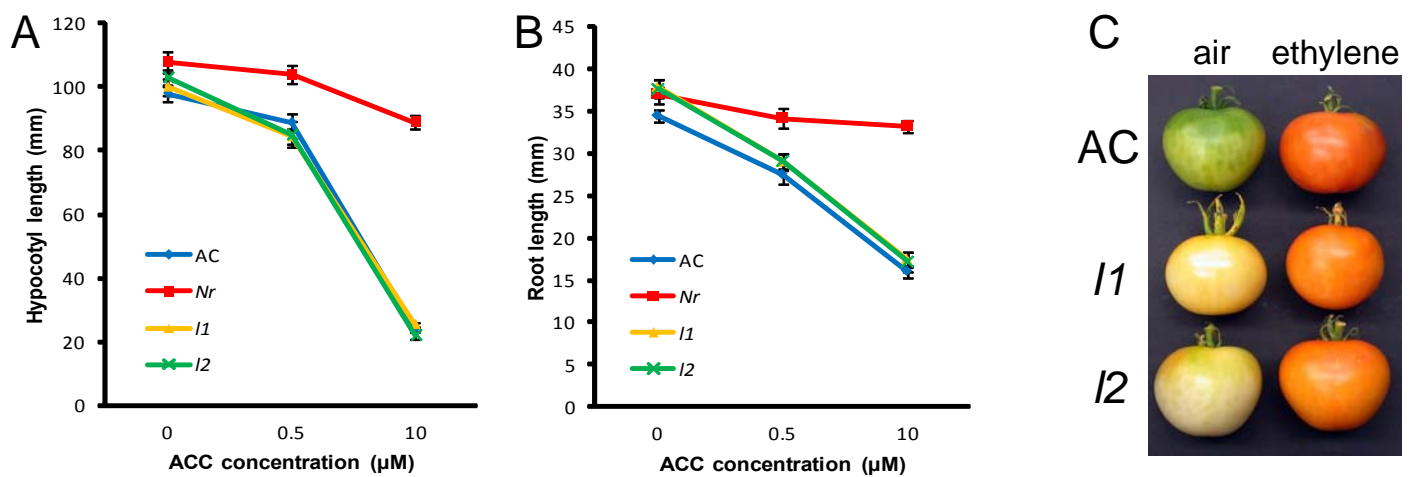
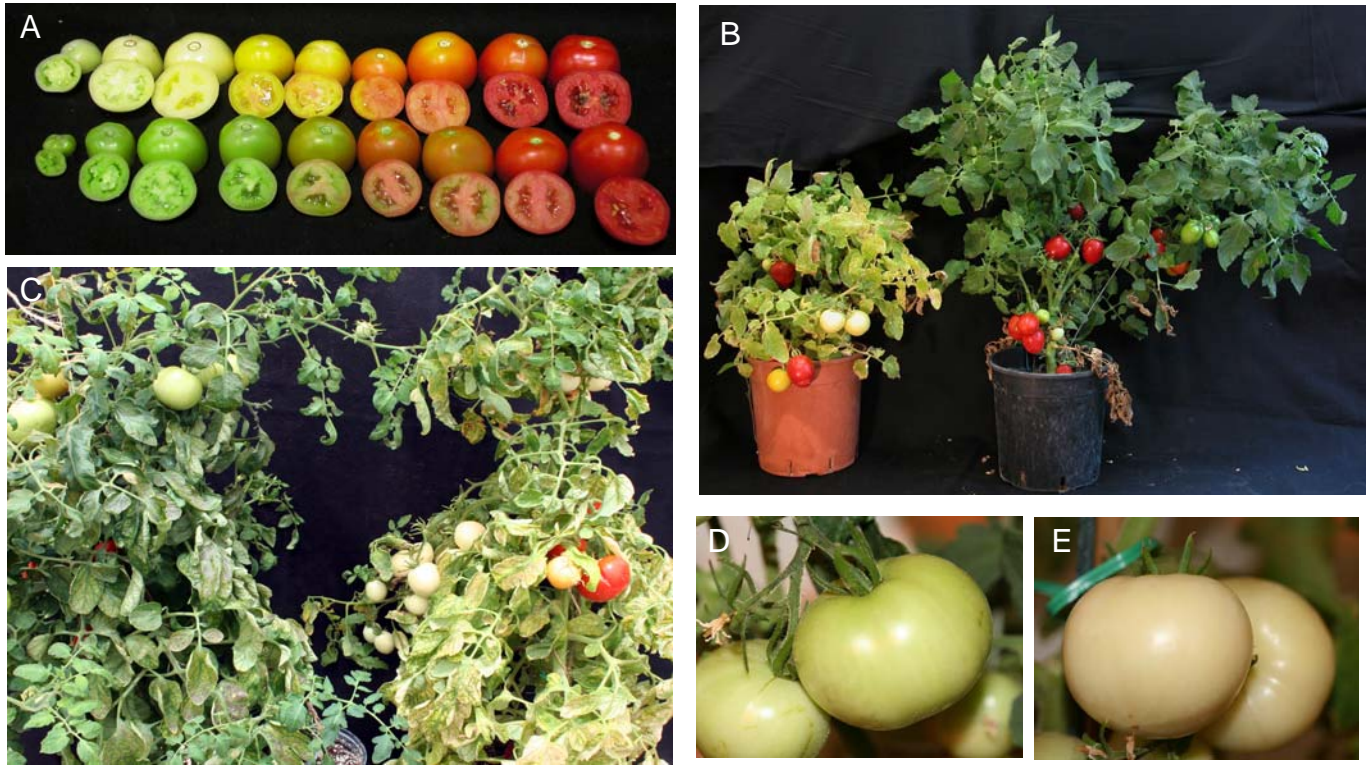


Supplementary Fig. S1 Carotenoid composition in ripe fruits of the *lutescent* mutants. Carotenoid composition were determined by HPLC as previously described (Ronen et al., 1999). Total carotenoids are the sum of all the peaks area of each genotype. Data are shown as means \pm se ($n = 2$).

Ronen G, Cohen M, Zamir D, Hirschberg J (1999) Regulation of carotenoid biosynthesis during tomato fruit development: Expression of the gene for lycopene epsilon-cyclase is down-regulated during ripening and is elevated in the mutant *Delta*. *Plant J.* **17**: 341-351



Supplementary Fig. S2. *lutescent* mutants possess a normal response to ethylene. (A) and (B) hypocotyl and root lengths, respectively of dark-grown *AC*, *Nr*, *I1* and *I2* seedlings germinated and grown in the presence of ACC for eight days. Data presented are the means \pm SE of at least 19 seedlings. (C) Phenotypes of mature *AC*, *I1* and *I2* fruits treated with $10 \mu\text{l l}^{-1}$ ethylene for 24h and held at room temperature for a further 72 h. Control fruits held in air are shown for comparison.



Supplementary Fig. S3. Phenotypes of *I2* mutant alleles. (A) Phenotype of *I2*^{*e3779*} fruit (upper row) compared with those of wild type (M82) (lower row). (B) Phenotype of mature *I2*^{*e3779*} (left) and M82 (right) plants. (C) Phenotype of mature plants of the Fireball (left) and Lutescent Fireball (right) cultivars. Note yellow foliage of the Lutescent Fireball cultivar. (D) Phenotype of mature green fruit of the Fireball cultivar. (E) Phenotype of mature fruit of the Lutescent Fireball cultivar.