



Figure 4. *Arabidopsis thaliana* soil carbonate tolerance inheritance and BSA-Seq (A) Rosette diameter (mm); (B) percentage of flowered plants and plants with more or less than 10 siliques; and (C) fitness (silique number) of A1(c+), T6(c-) parents, F1 and F2 progeny from reciprocal crosses cultivated in natural carbonated soil. (D) Percentage of plants that did not prosper (NP, purple bars), plants that did not flower (NF, grey bars), and plants that produce more than 10 siliques (orange bars) from A1xT6 F3 and T6xA1 F3 progeny cultivated in natural carbonated soil. Selected families for BSA analysis are indicated in bold. (E) Allele frequency distribution of SNPs detected between the sensitive parent (T6(c-)) and the F3 tolerant pool. (F) Chromosome distribution of genes associated with the SNPs from BSA left and right tails. (G) Summary table of the SNPs and genes detected and shared between parent's comparison (A1 vs T6) and between T6(c-) and the F3 tolerant pool comparison. Letters indicate significant differences (Tukey's HSD, $p < 0.05$).