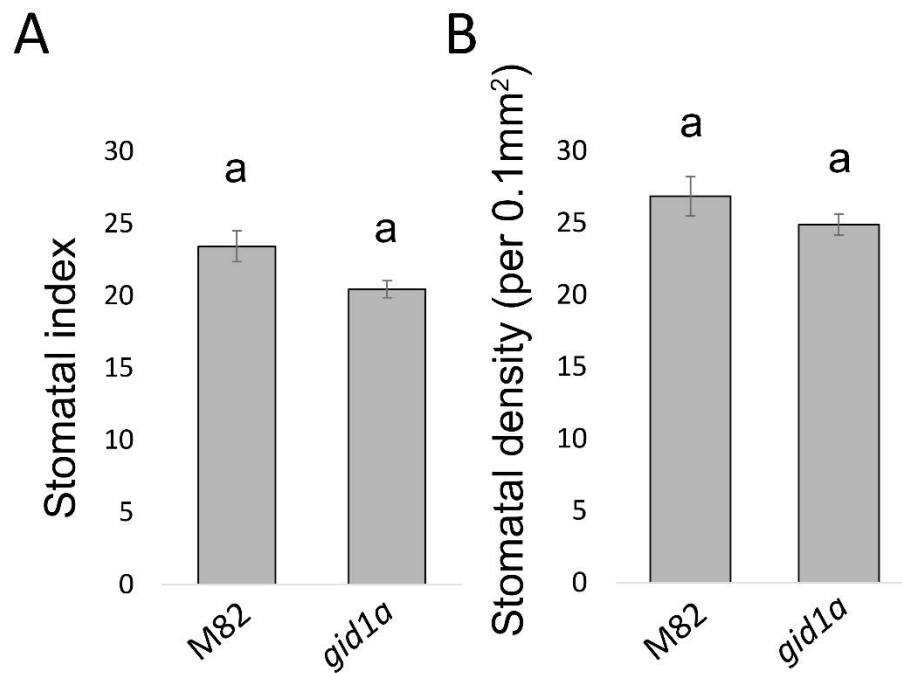
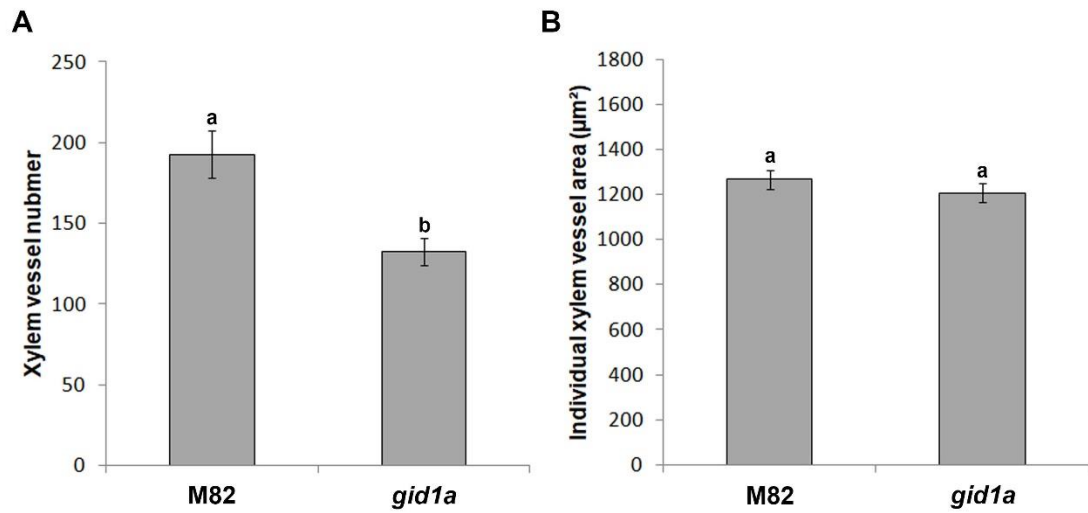


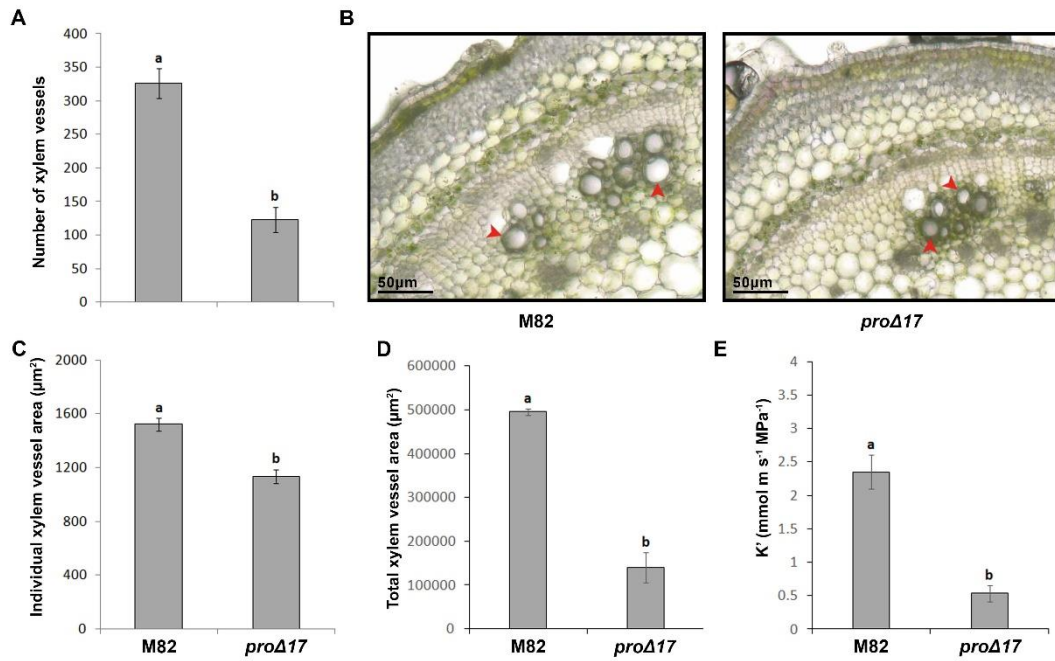
## Supplementary Figures



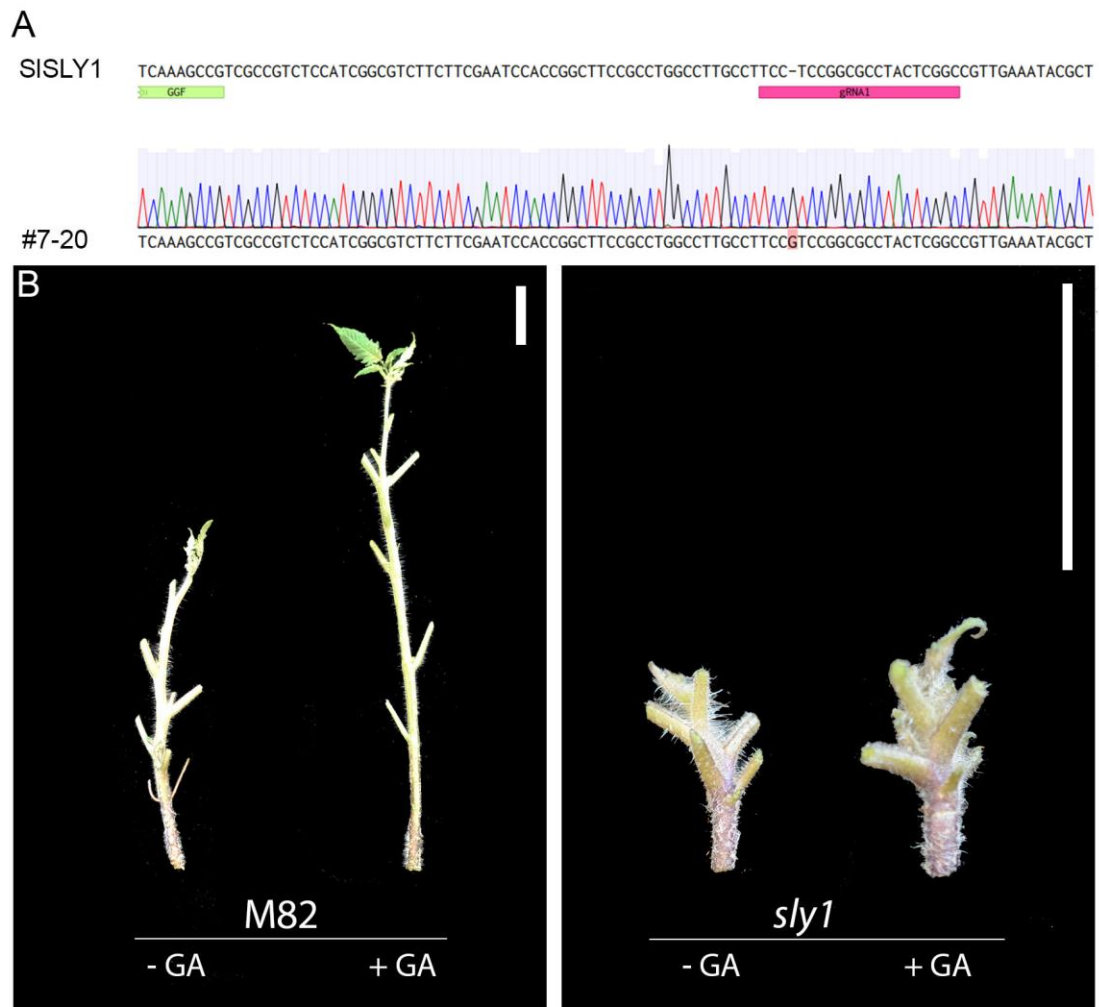
**Fig. S1.** The loss of GID1a has no effect on stomatal density or index. **A.** Stomatal index (number of stomata to epidermal cells). **B.** Stomatal density (per 0.1 mm<sup>2</sup>). Values are means of five replicates (5 different plants) ± SE. Letters above the columns represent significant differences between respective lines (Student's t test,  $P < 0.05$ ).



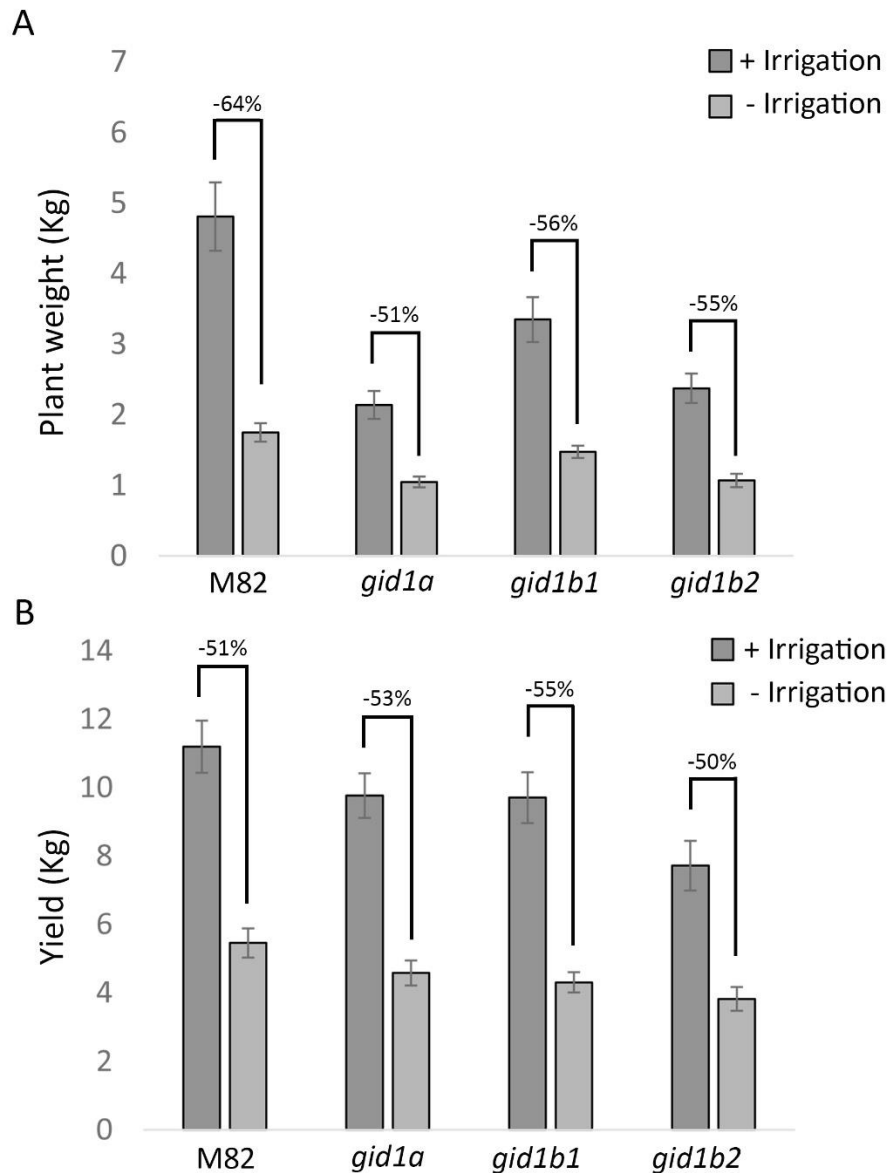
**Fig. S2. A.** Xylem vessel number in M82 and *gid1a* stems. **B.** Area mean of individual xylem vessel in M82 and *gid1a* stems. Values in **A** and **B** are means of 6 plants  $\pm$  SE. Letters above the columns represent significant differences between respective lines (Student's t test,  $P < 0.05$ ).



**Fig. S3. A.** Xylem vessel number in the stems of five-weeks-old M82 and 35:*proΔ17* plants. **B.** Representative stem cross-sections of M82 and 35:*proΔ17*. Scale bar = 50  $\mu\text{m}$ . **C.** Area mean of individual xylem vessel in M82 and 35:*proΔ17* stems. **D.** Total xylem vessel area in M82 and 35:*proΔ17* stems. **E.** Hydraulic conductance measured in detached stem segments, taken from five-weeks-old M82 and 35:*proΔ17*. Values in **A**, **C**, **D** and **E** are means of 6 plants  $\pm$  SE. Small letters represent significant differences between the lines (Student's t test,  $P < 0.05$ ).



**Fig. S4.** Molecular and phenotypic characterization of *sly1*. Sequence of *SISLY1* mutant alleles. **A.** Sequences of *SLY1* wild-type (upper) and *sly1* mutant allele #7-20 with one nucleotide insertion (G, marked pink). Pink bar represents RNA guide sequence. **B.** Effect of 100  $\mu$ M GA3 treatment on the elongation of M82 and *sly1*. Leaves were removed to show internode elongation. Scale bar = 2 cm.



**Fig. S5.** Field test for yield loss under drought. M82 and all single *gid1* mutant were planted in the field. Plants from each line were planted randomly and were irrigated normally throughout the experiment. Half of the plants of each line were irrigated normally for three weeks and then irrigation was stopped until harvesting (approximately three more months). **A.** Reduction in plant weight under drought. **B.** Reduction in fruit yield under drought. Numbers above columns are percentage of loss.

## Supplementary Table

**Table S1.** Primers used in this study.

Gene	Used for	Sequence (5'-3')
<i>GID1a</i>	qRT-PCR	Forward- TCTTGTTGTTGTCGCAGGTT Reverse- CCCTATTGTTGCCTTCTCCA
<i>GID1b1</i>	qRT-PCR	Forward- GGCTGCTCTTCAATGGGTAA Reverse- TAAACCTCGACGCCTGATT
<i>GID1b2</i>	qRT-PCR	Forward- TGAGGCTGATTGGGGTAAAA Reverse- TAGGCGGCGACAAAATGTAT
<i>SIACTIN</i>	qRT-PCR	Forward- GTCCTCTTCCAGCCATCCAT Reverse- ACCACTGAGCACAATGTTACCG
<i>SISLY1</i>	CRISPR/ Cas9	Guide 1- GCCGAGTAGGCGCCGGAGGA Guide 2- GGTTATAGAGTCGCCGGATG
<i>SISLY1</i>	Cloning to pBridge	Forward- ATGAAGCGGCAATTCGAC Reverse- TTATTTATTAGCTTTGAAATTCATCTTCTCGTAG

