

Figure S1. Twelve publicly available lines, including 6 accumulators and 6 non-accumulators, have a GB accumulation pattern similar to the entire set of germplasm studied.

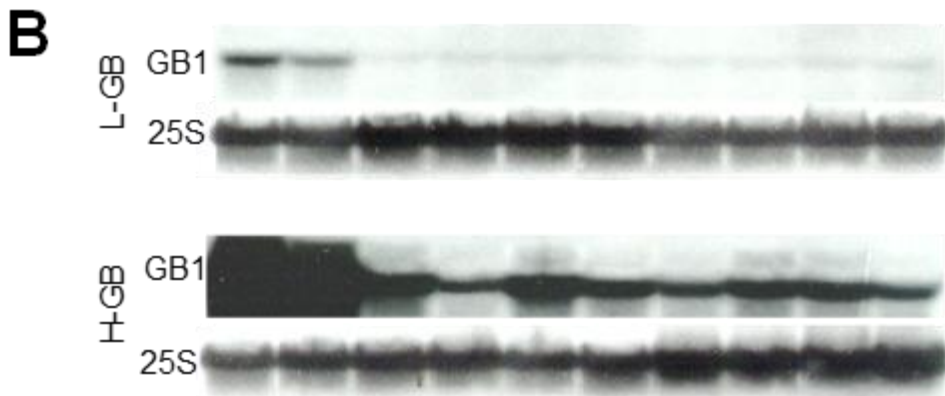
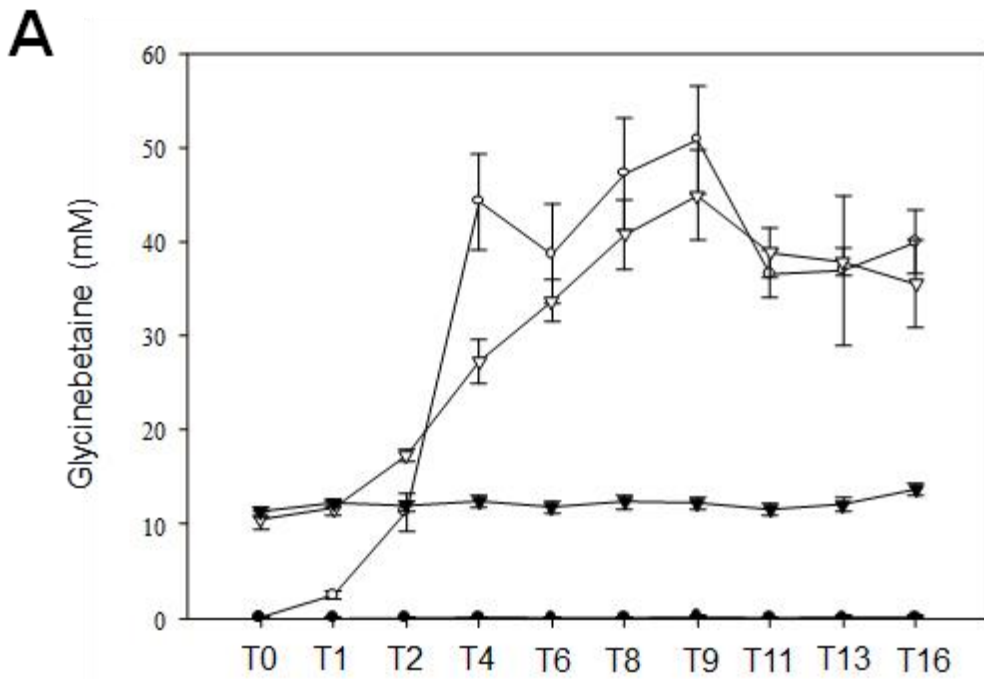


Figure S2. GB1 mRNA accumulation is not induced by exogenous GB.

- A. GB concentration in leaves of H-GB and L-GB genotypes irrigated with a GB solution. Average of three replicates is indicated for H-GB (triangles) and L-GB (circles) genotypes for both 50 mM GB (open symbols) and water control treatments (filled symbols). T0 samples were harvested at treatment start, T1 3 hours after first GB irrigation, T2 to T16 indicate number of days from T0.
- B. Northern blot analysis for H-GB and L-GB genotypes irrigated with GB. GB1 cDNA and 25S rRNA cDNA were used as probes. Lanes correspond with sample times indicated in panel A.

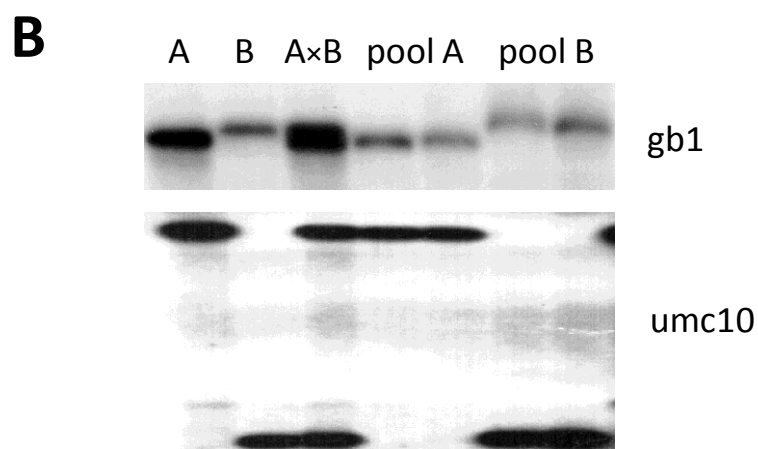
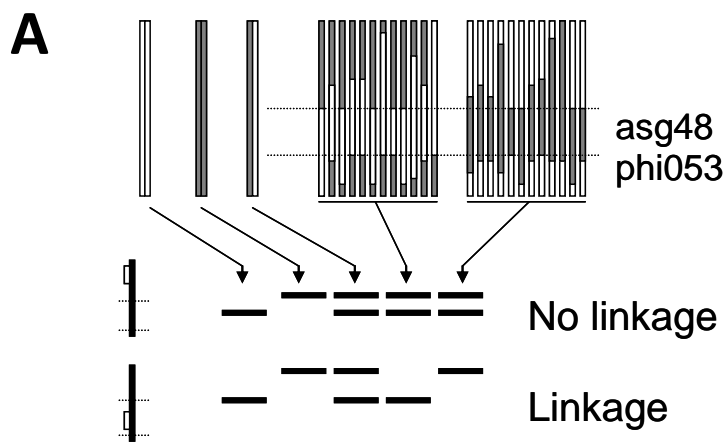


Figure S3. *Gb1* maps to the 3.04 chromosome region. (A) Schematic diagram of the RIL selection used for *Gb1* mapping and expected hybridization pattern for linked and not linked DNA fragments. (B) Southern blot analysis of B73×Mo17 RIL mapping population using *gb1* or *umc10* as probes. A = B73 parental line; B = Mo17 parental line; A×B = F1 cross; Pool A = RILs homozygous for allele B73 at 3.04 region; Pool B = RILs homozygous for allele Mo17 at 3.04 region.