

The present disclosure teaches the generation of drought tolerant plants. The present disclosure enables manipulation of a phenotypic characteristic referred to as 'stay-green' to facilitate drought adaptation in plants by recombinant, mutagenic and/or breeding and selection methods of manipulating StgX genes including Stg1, Stg2, Stg3a, Stg3b and Sig4. Plant management practice systems to increase crop yield and harvest efficiency in water-limited environments are also taught herein.