Genotype by environment (GxE) interaction is the term which describes how the phenotype of an organism, with a specific genotype, can varying in different environments. For example, an individual plant with a drought-tolerant allele may grow larger than non-drought-tolerant individuals under restricted water conditions, but under normal water conditions both plants may grow equally well. It is important to think about GxE interactions prior to releasing a GMO as the fitness of the transgene may differ under different conditions.