Meza TJ, et al. The frequency of silencing in Arabidopsis thaliana varies highly between progeny of siblings and can be influenced by environmental factors. Transgenic Res., 10(2001), 53-67.

Genetically modified *Arabidopsis thaliana* was grown under a number of different conditions, including heat stress treatment. The heat stress treatment appeared to significantly alter the rate of expression of the transgene.

The authors suggest that some genomic regions can experience alterations during heat stress treatment (e.g. methylation), leading to the silencing of the gene.

Comment

The elements that contribute to the stability of the genome are as yet not fully understood.

It is unclear to what degree any effects the growing conditions of the GM plants may have on their expression are included in risk assessments.