Handy genome-editing fact sheet

Genome editing comprises a range of molecular techniques that allow targeted changes to be made to the genomes of organisms.

Also referred to as genome engineering or site-directed mutagenesis, genome editing can:

- modify genetic information within genomes to create new traits
- remove specific regions from genomes
- add transgenes (genes from other organisms) to specific locations in genomes

Genome editing is more precise than conventional crop breeding methods, as well as many standard genetic engineering (transgenic) methods, for introducing desirable traits in crops.

Standard genetic engineering techniques include using the naturally occurring plant pathogen *Agrobacterium* to insert genes in the genome of an organism, typically at a random position.

It is unclear how existing regulations for GMOs apply to plants modified by genome editing methods.

Access the complete PDF factsheet, with images, here: Science Media Centre Fact Sheet: Genome editing