

# California Seed Association Fact Sheet Series



## Background

**Biotechnology** – Any technique that uses organisms or parts thereof to make or modify products, to improve plants or animals, or to develop microorganisms for specific purposes.

**Cultivar** – A particular cultivated variety of a domesticated plant species.

**Genetically Modified Organism (GMO)** – Organism that has been modified by the application of recombinant DNA technology.

**Herbicide tolerance** – The ability of a plant to survive the application of an herbicide that would otherwise be expected to kill it.

**Hybrid** – The seed resulting from a controlled cross between two (usually inbred) parents, which when planted has increased uniformity and vigor.

**Inbred** – The genetic condition in which both sets of chromosomes in an individual contain essentially the identical genes due to repeated self-pollination (inbreeding).

**Marker (genetic)** – A distinguishing feature that can be used to identify a particular gene location on a chromosome. Markers may be displayed phenotypically (such as growth habit, leaf form or color), by use of biochemistry (enzymes or other proteins) or on the molecular level (DNA fragment size or specific DNA sequence.)

**Plant breeding** – A long practiced process that involves crossing closely related species and different cultivars and selecting progeny having desired traits (higher yields, better nutrition, resistance to disease, environmental stress tolerance, etc).

## More Information

**Genes are Gems: Reporting Agri-Biotechnology** ([http://www.isaaa.org/kc/inforesources/publications/genesaregems/Genes\\_are\\_Gems\\_Ebook.pdf](http://www.isaaa.org/kc/inforesources/publications/genesaregems/Genes_are_Gems_Ebook.pdf))

**Seed Biotechnologies Portal** (<http://www.seedquest.com/portal/biotechnology/page/90>)

**University California, Davis** (<http://anrcatalog.ucdavis.edu/pdf/8043.pdf>)

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Q What is the definition of seed industry terms such as GMO, biotechnology and hybrid plants?

A Here is a handy glossary to help clarify commonly used terms in the seed industry.