

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.

F1 Hybrid – The offspring of a controlled cross between two inbred parents, resulting in the next generation having increased uniformity and vigor.

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 offspring of a specific cross between two genetically distinct (usually inbred) parents.

Inbred – Condition in which both sets of chromosomes in an individual contain essentially the identical genes due to repeated self-pollination.

Marker (genetic) – A distinguishing feature that can be used to identify a particular gene location on a chromosome. Markers may be displayed physically (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 varieties and selecting plants with desired traits (higher yields, better nutrition, resistance to environmental conditions, etc).

More Information

Genes are Gems: Reporting Agri-Biotechnology (http://www.isaaa.org/kc/inforesources/publications/genesaregems/Genes_are_Gems_Ebook.pdf)

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.