

## **I. Agricultural Biotechnology**

Genetically modified plants and animals have allowed scientists to increase food production, enhance the nutritional content of foods, decrease pesticide use, produce less industrial waste and clean up toxins in the environment.

Possible topics for research include: Animal Cloning; Genetically Modified Foods; Bioremediation (environmental clean-up); Pharming (genetically engineering plants to make pharmaceuticals); etc...

Below, we have provided a few reputable resources to get your project started. Please do not plagiarize from these sources, but put the information in your own words. As you write the text for each section of your poster, indicate the references used in that section by using an “in text” citation (see the contest directions for more information on using references correctly). In addition to the resources provided, we encourage all contestants to seek out other scientifically reliable sources of information, media images, and artistic elements in building the Biotech Expo poster entries.

### **Online Resources on Agricultural Biotechnology:**

AgBioWorld

<http://www.agbioworld.org/>

AgrowKnowledge

<http://www.agrowknow.org/>

Arcadia Biosciences

<http://www.arcadiabio.com/>

Bill & Melinda Gates Foundation—Agricultural Development

<http://www.gatesfoundation.org/topics/Pages/agricultural-development.aspx#>

CheckBiotech

<http://www.checkbiotech.org/>

The Center for Global Food Issues

<http://www.cgfi.org/>

Consultative Group on International Agricultural Research (CGIAR)

<http://www.cgiar.org/index.html>

DuPont Biotechnology

[http://www2.dupont.com/Biotechnology/en\\_US/](http://www2.dupont.com/Biotechnology/en_US/)

Food & Agriculture Organization of the United Nations (FAO)

<http://www.fao.org/>

GeneGenie

<http://www.genegenie.com.au/>

Golden Rice Project

<http://www.goldenrice.org/>

International Maize & Wheat Improvement Center (CIMMYT)

[http://www.cimmyt.org/english/wpp/gen\\_res/index.cfm](http://www.cimmyt.org/english/wpp/gen_res/index.cfm)

International Rice Research Institute (IRRI)

<http://www.irri.org/>

Planet Biotechnology

<http://www.planetbiotechnology.com/>

Molecular Farming News

<http://www.molecularfarming.com/news2.html>

Monsanto

<http://www.monsanto.com/>

National Association of Biology Teachers—Ethics Resources

<http://www.nabt.org/sites/S1/index.php?p=207>

Science Daily

[http://www.sciencedaily.com/news/plants\\_animals/biotechnology/](http://www.sciencedaily.com/news/plants_animals/biotechnology/)

Syngenta Foundation for Sustainable Agriculture

<http://www.syngentafoundation.org/>

USDA Biotechnology

<http://www.aphis.usda.gov/biotechnology/>

Ventria Bioscience

<http://www.ventria.com/>

## **Articles & Books on Ag Biotech:**

Genetically Modified Planet: Environmental Impacts of Genetically Engineered Plants, C. Neal Stewart, 2004,

[http://www.amazon.com/Genetically-Modified-Planet-Environmental-Engineered/dp/0195157451/ref=sr\\_1\\_1?ie=UTF8&s=books&qid=1215369175&sr=1-1](http://www.amazon.com/Genetically-Modified-Planet-Environmental-Engineered/dp/0195157451/ref=sr_1_1?ie=UTF8&s=books&qid=1215369175&sr=1-1)

Mendel in the Kitchen: A Scientist's View of Genetically Modified Food, Nina V. Fedoroff and Nancy Marie Brown, 2004,

[http://www.amazon.com/Mendel-Kitchen-Scientists-Genetically-Modified/dp/030909738X/ref=pd\\_bbs\\_sr\\_1?ie=UTF8&s=books&qid=1215370072&sr=1-1](http://www.amazon.com/Mendel-Kitchen-Scientists-Genetically-Modified/dp/030909738X/ref=pd_bbs_sr_1?ie=UTF8&s=books&qid=1215370072&sr=1-1)

Liberation Biology: The Scientific And Moral Case For The Biotech Revolution, Ronald Bailey, 2005,

[http://www.amazon.com/Liberation-Biology-Scientific-Biotech-Revolution/dp/1591022274/ref=sr\\_1\\_1?ie=UTF8&s=books&qid=1215369387&sr=1-1](http://www.amazon.com/Liberation-Biology-Scientific-Biotech-Revolution/dp/1591022274/ref=sr_1_1?ie=UTF8&s=books&qid=1215369387&sr=1-1)

Seeds for the Future: The Impact of Genetically Modified Crops on the Environment, Jennifer A. Thomson, 2007,

[http://www.amazon.com/Seeds-Future-Genetically-Modified-Environment/dp/0801473683/ref=sr\\_1\\_2?ie=UTF8&s=books&qid=1215428612&sr=1-2](http://www.amazon.com/Seeds-Future-Genetically-Modified-Environment/dp/0801473683/ref=sr_1_2?ie=UTF8&s=books&qid=1215428612&sr=1-2)

Starved for Science: How Biotechnology Is Being Kept Out of Africa, Robert Paarlberg, Norman Borlaug, and Jimmy Carter, 2008,

[http://www.amazon.com/Starved-Science-Biotechnology-Being-Africa/dp/0674029739/ref=sr\\_1\\_1?ie=UTF8&s=books&qid=1215370858&sr=1-1](http://www.amazon.com/Starved-Science-Biotechnology-Being-Africa/dp/0674029739/ref=sr_1_1?ie=UTF8&s=books&qid=1215370858&sr=1-1)

The Bottom Billion: Why the Poorest Countries are Failing and What Can Be Done About It, Paul Collier, 2008,

[http://www.amazon.com/Bottom-Billion-Poorest-Countries-Failing/dp/0195373383/ref=sr\\_1\\_1?ie=UTF8&s=books&qid=1215369569&sr=1-1](http://www.amazon.com/Bottom-Billion-Poorest-Countries-Failing/dp/0195373383/ref=sr_1_1?ie=UTF8&s=books&qid=1215369569&sr=1-1)

Tomorrow's Table: Organic Farming, Genetics, and the Future of Food, Pamela C. Ronald and R. W. Adamchak, 2008,  
[http://www.amazon.com/Tomorrows-Table-Organic-Farming-Genetics/dp/0195301757/ref=sr\\_1\\_1?ie=UTF8&s=books&qid=1215370912&sr=1-1](http://www.amazon.com/Tomorrows-Table-Organic-Farming-Genetics/dp/0195301757/ref=sr_1_1?ie=UTF8&s=books&qid=1215370912&sr=1-1)

Risk: The Science and Politics of Fear, Dan Gardner, 2008,  
[http://www.amazon.com/Risk-Science-Politics-Dan-Gardner/dp/0771032595/ref=sr\\_1\\_1?ie=UTF8&s=books&qid=1215370221&sr=1-1](http://www.amazon.com/Risk-Science-Politics-Dan-Gardner/dp/0771032595/ref=sr_1_1?ie=UTF8&s=books&qid=1215370221&sr=1-1)

The Unfolding Gene Revolution: The Ideology, Science, and Regulation of Plant Biotechnology, Eufemio T. Rasco, Jr., 2008,  
<http://www.isaaa.org/purchasepublications/itemdescription.asp?ItemType=BOOKS&Control=BK001>

***Note: We are using the above links to suggested reading materials for reasons of convenience and do not specifically endorse Amazon.com or other publishers/book vendors. Opinions and philosophies expressed by the authors of suggested reading materials are not necessarily those of our program and should be viewed as part of the larger societal discussion surrounding biotechnology. Nor do we recommend that students buy suggested reading materials. Please consider using the school and/or public library systems to obtain these materials. Remember, the websites, articles and books listed above are only suggested source materials and are not required.***

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