

Chapter 4 - Agronomic and Environmental Effects of Genetically Engineered Crops

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“Not Reported” = No funding information was reported on WebOfScience.com. “N/A” = Not applicable because reference is not a scientific paper.

Reference	Year	Title	Publication	Primary Author	Primary Author Affiliation	Funding Source	Funders
Abedullah, S. et al.	2015	Bt cotton, pesticide use and environmental efficiency in Pakistan	Journal of Agricultural Economics 66:66–86	Abedullah, S.	University of Agriculture Faisalabad	Government (Non-U.S.)	Higher Education Commission (HEC) of Pakistan
Adamczyk and Hubbard	2006	Changes in Populations of <i>Heliothis virescens</i> (F.) (Lepidoptera: Noctuidae) and <i>Helicoverpa zea</i> (Boddie) (Lepidoptera: Noctuidae) in the Mississippi Delta from 1986 to 2005 as Indicated by Adult Male Pheromone Traps	Journal of Cotton Science 10:155–160.	Adamczyk, J.J.	U.S. Department of Agriculture-Agricultural Research Service	Not Reported	
Afidchao, M.M. et al.	2014	Analysing the farm level economic impact of GM corn in the Philippines	NJAS – Wageningen Journal of Life Sciences 70–71:113–121	Afidchao, M.M.	Leiden University Isabela State University	Academia	Louwes scholarship program of Leiden University in the Netherlands
Aguilar, J. et al.	2015	Analysing the farm level economic impact of GM corn in the Philippines	NJAS – Wageningen Journal of Life Sciences 70–71:113–121.	Aguilar, J.	Leiden University	Academia	Louwes scholarship program of Leiden University in the Netherlands

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Allen and Pitre	2006	Influence of transgenic corn expressing insecticidal proteins of <i>Bacillus thuringiensis</i> Berliner on natural populations of corn earworm (Lepidoptera: Noctuidae) and southwestern corn borer (Lepidoptera: Crambidae).	Journal of Entomological Science 41:221–231	Allen, K.C.	Mississippi State University	Not Reported	
Andow, D.A.	2010	Bt Brinjal: The Scope and Adequacy of the GEAC Environmental Risk Assessment	http://www.researchgate.net/publication/228549051_Bt_Brinjal_The_scope_and_adequacy_of_the_GEAC_environmental_risk_assessment	Andow, D.A.	University of Minnesota	Not Reported	
Andow, D.A. et al.	2016	Early detection and mitigation of resistance to Bt maize by western corn rootworm (Coleoptera: Chrysomelidae)	Journal of Economic Entomology 109:1–12.	Andow, D.A.	University of Minnesota	Government (U.S.)	U.S. Department of Agriculture
						Academia	State of Nebraska Agricultural Experiment Stations in Minnesota, Iowa, Illinois
Aono, M. et al.	2006	Detection of feral transgenic oilseed rape with multiple-herbicide resistance in Japan	Environmental Biosafety Research 5:77–87	Aono, M.	National Institute for Environmental Studies	Not Reported	
Areal et al.	2013	Economic and agronomic impact of commercialized GM crops: A meta-analysis	Journal of Agricultural Science 151:7–33	Areal, F.J.	University of Reading	Not Reported	

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Armstrong and Sprague	2010	Weed management in wide- and narrow-row glyphosate-resistant sugarbeet	Weed Technology 24:523–528	Armstrong, J.J.Q.	Michigan State University	Industry	Michigan Sugar Company
Badgett and Davis	2015	Population trends of monarchs at a northern monitoring site: Analyses of 19 years of fall migration counts at Peninsula Point, MI	Annals of the Entomological Society of America 108:700–706	Badgett, G.	University of Georgia	Not Reported	
Badran, A.H. et al.	2016	Continuous evolution of <i>Bacillus thuringiensis</i> toxins overcomes insect resistance	Nature 533:58–63	Badran, A.H.	Harvard University	Government (U.S.)	National Institutes of Health National Institute of Biomedical Imaging and Bioengineering Defense Advanced Research Projects Agency U.S. Department of Agriculture - National Institute of Food and Agriculture, Agricultural Research Service Biotechnology Risk Assessment Grant Program
						Nonprofit	Howard Hughes Medical Institute

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Bagavathianna, M.V. et al.	2012	Modelling of the dynamics of feral alfalfa populations and its management implications	PLoS ONE 7:e39440.	Bagavathianna, M.V.	University of Manitoba	Government (Non-U.S.)	Agri-Food Research and Development Initiative Natural Sciences and Engineering Research Council Scottish Government
						Academia	University of Manitoba
Bagla, P.	2010	Hardy cotton-munching pests are latest blow to GM crops	Science 327:1439	Bagla, P.	New Delhi Television	Not Reported	
Baker, J.M. et al.	2007	Tillage and soil carbon sequestration—What do we really know?	Agriculture, Ecosystems & Environment 118:1–5	Baker, J.M.	U.S. Department of Agriculture	Not Reported	
Barfoot, P. And Brookes, G.	2014	Key global economic and environmental impacts of genetically modified (GM) crop use 1996-2012	GM Crops and Food: Biotechnology in Agricultural and the Food Chain 5:149–160	Barfoot, P.	PG Economics Limited	Industry	Monsanto Company
Bärwald Bohm, G.M. et al.	2014	Glyphosate effects on yield, nitrogen fixation, and seed quality in glyphosate-resistant soybean	Crop Science 54:1737–1743	Bärwald Bohm, G.M.	Instituto Federal Sul-Rio-Grandense	Government (Non-U.S.)	Brazilian National Research Council (CNPq) Empresa Brasileira de Pesquisa Agropecuaria (Embrapa)
Bauer, P.J. et al.	2006	A comparison of Bollgard/glyphosate tolerant cotton cultivars to their conventional parents for open end yarn processing performance	Journal of Cotton Science 10:168–174	Bauer, P.J.	U.S. Department of Agriculture-Agricultural Research Service	Not Reported	

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Baute, T.S. et al.	2002	Use of transgenic <i>Bacillus thuringiensis</i> Berliner corn hybrids to determine the direct economic impact of the European corn borer (Lepidoptera: Crambidae) on field corn in eastern Canada	Journal of Economic Entomology 95:57–64	Baute, T.S.	University of Guelph	Government (Non-U.S.)	Agriculture and Agri-Food Canada Ontario Ministry of Agriculture, Food and Rural Affairs
						Industry	Novartis Seeds, Inc.
						Academia	University of Guelph
Beckie, H.J. et al.	2011	GM canola: The Canadian experience	Farm Policy Journal 8:43-49	Beckie, H.J.	Agriculture and Agri-Food Canada	Not Reported	
Beltramin da Fonseca, P.R. et al.	2013	Leaf chlorophyll content and agronomic performance of Bt and non-Bt soybean	Journal of Agricultural Science 5:117–125	Beltramin da Fonseca, P.R.	The Federal University of Grande Dourados	Not Reported	
Benbrook, C.M.	2012	Impacts of genetically engineered crops on pesticide use in the U.S. – the first sixteen years	Environmental Sciences Europe 24:24	Benbrook, C.M.	Washington State University	Nonprofit	Institute for Agriculture and Trade Policy
Bernardi, O. et al.	2014	Low susceptibility of <i>Spodoptera cosmioides</i> , <i>Spodoptera eridania</i> and <i>Spodoptera frugiperda</i> (Lepidoptera: Noctuidae) to genetically-modified soybean expressing Cry1Ac protein	Crop Protection 58:33–40	Bernardi, O.	Universidade de Sao Paulo	Government (Non-U.S.)	Conselho Nacional de Desenvolvimento Científico e Tecnológico (CNPq)
Binimelis, R. et al.	2009	“Transgenic treadmill”: Responses to the emergence and spread of glyphosate-resistant johnsongrass in Argentina	Geoforum 40:623–633	Binimelis, R.	Autonomous University of Barcelona	Government (Non-U.S.)	European Union

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Bohnenblust, E.W. et al.	2014	Current European corn borer, <i>Ostrinia nubilalis</i> , injury levels in the northeastern United States and the value of Bt field corn	Pest Management Science 70:1711–1719	Bohnenblust, E.W.	Penn State University	Not Reported	
Bowen, K.L. et al.	2014	Insect damage, aflatoxin content, and yield of Bt corn in Alabama	Journal of Economic Entomology 107:1818–1827	Bowen, K.L.	Auburn University	Not Reported	
Brévault, T. et al.	2015	A seed mixture increases dominance of resistance to Bt cotton in <i>Helicoverpa zea</i>	Scientific Reports 5:9807.	Brévault, T.	CIRAD - Agricultural Research for Development	Government (U.S.)	U.S. Department of Agriculture Biotechnology Risk Assessment Grant
Brower, L.P. et al.	2012	Decline of monarch butterflies overwintering in Mexico: Is the migratory phenomenon at risk?	Insect Conservation and Diversity 5:95–100	Brower, L.P.	Sweet Briar College	Not Reported	
Buntin, G.D. et al.	2001	Evaluation of YieldGard transgenic resistance for control of fall armyworm and corn earworm (Lepidoptera: Noctuidae) on corn	Florida Entomologist 84:37–42	Buntin, G.D.	University of Georgia	Not Reported	
Buntin, G.D. et al.	2004	Plant-incorporated <i>Bacillus thuringiensis</i> resistance for control of fall armyworm and corn earworm (Lepidoptera: Noctuidae) in corn	Journal of Economic Entomology 97:1603–1611	Buntin, G.D.	University of Georgia	Not Reported	
Carpenter, J.E.	2011	Impact of GM crops on biodiversity	GM Crops 2:7–23	Carpenter, J.E.	J E Carpenter Consulting LLC	Not Reported	

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Carrière, Y. et al.	2003	Long-term regional suppression of pink bollworm by <i>Bacillus thuringiensis</i> cotton	Proceedings of the National Academy of Sciences of the United States of America. 100:1519–1524	Carrière, Y.	University of Arizona	Government (U.S.)	U.S. Department of Agriculture
						Industry	Cotton Producers of Arizona
Carrière, Y. et al.	2016	Can pyramids and seed mixtures delay resistance to Bt crops?	Trends in Biotechnology 34:291–302.	Carrière, Y.	University of Arizona	Not Reported	
Catarino, R. et al.	2015	The impact of secondary pests on <i>Bacillus thuringiensis</i> (Bt) crops	Plant Biotechnology Journal 13:601–612	Catarino, R.	University of Reading	Government (Non-U.S.)	European Commission
Cerdeira and Duke	2006	The current status and environmental impacts of glyphosate-resistant crops	Journal of Environment Quality 35:1633–1658	Cerdeira, A.L.	U.S. Department of Agriculture - Agricultural Research Service	Not Reported	
Chang, J. et al.	2014	Water stress impacts on transgenic drought-tolerant corn in the northern Great Plains	Agronomy Journal 106:125–130.	Chang, J.	South Dakota State University	Industry	Monsanto Company
Choudhary, G. et al.	2013	Molecular genetic diversity of major Indian rice cultivars over decadal periods	PLoS One 8:e66197	Choudhary, G.	Acharya N. G. Ranga Agricultural University	Academia	Acharya NG Ranga Agricultural University
Choudhary, B. et al.	2014	The Status of Commercialized Bt Brinjal in Bangladesh	International Service for the Acquisition of Agri-biotech Applications	Choudhary, B.	International Service for the Acquisition of Agri-Biotech Applications (ISAAA)	Not Reported	

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Clayton, G.W. et al.	2004	Fall and spring seeding date effects on herbicide-tolerant canola (<i>Brassica napus</i> L.) cultivars	Canadian Journal of Plant Science 84:419–430	Clayton, G.W.	Agriculture & Agri Food Canada	Government (Non-U.S.)	Agriculture and Agri-Food Canada and the Matching Investment Initiative
						Industry	Alberta Canola Producers' Commission Bayer CropScience Monsanto Company
Cotter, J.	2014	GE Crops – Necessary?	Presentation to Committee	Cotter, J.	Greenpeace International	N/A	
Crawley, M.J.	1993	Ecology of transgenic oilseed rape in natural habitats	Letters to Nature 363:620–623	Crawley, M.J.	Imperial College London	Government (Non-U.S.)	Department of Trade and Industry (UK) The Agriculture and Food Research Council
Crewe and McCracken	2015	Long-term trends in the number of monarch butterflies (<i>Lepidoptera: Nymphalidae</i>) counted on fall migration at Long Point, Ontario, Canada (1995–2014)	Annals of the Entomological Society of America 108:707–717	Crewe, T.L.	University of Western Ontario	Nonprofit	Bird Studies Canada Mitacs Accelerate World Wildlife Fund-Canada
						Government (Non-U.S.)	Endangered Species Recovery Fund Environment Canada Ontario Ministry of Natural Resources and Forestry (OMNRF) National Science and Engineering Research Council (Canada)

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						Government (U.S.)	U.S. Fish and Wildlife Service
Crost, B. and B. Shankar	2008	Bt-cotton and production risk: Panel data estimates		Crost, B.	University of California, Berkeley	Not Reported	
CSPI	2009	Complacency on the Farm		CSPI (Center for Science in the Public Interest)		N/A	
Culpepper, A.S.	2006	Glyphosate-induced weed shifts	Weed Technology 20:277–281	Culpepper, A.S.	University of Georgia	Not Reported	
Culpepper, A.S.	2007	Glyphosate-resistant palmer amaranth (<i>Amaranthus palmeri</i>) confirmed in Georgia	Weed Science 54:620–626	Culpepper, A.S.	University of Georgia	Not Reported	
Davis, A.S. et al.	2012	Increasing cropping system diversity balances productivity, profitability and environmental health	PLoS One 7:e47149	Davis, A.S.	U.S. Department of Agriculture - Agricultural Research Service	Government (U.S.)	U.S. Department of Agriculture National Research Initiative
						Academia	Leopold Center for Sustainable Agriculture
						Nonprofit	Iowa Soybean Association Organic Center
De Vries and Fehr	2011	Impact of the MON89788 event for glyphosate tolerance on agronomic and seed traits of soybean	Crop Science 51:1023–1027	De Vries, B.D.	Iowa State University	Government (U.S.)	Hatch Act State of Iowa
						Academia	Raymond F. Baker Center for Plant Breeding
						Nonprofit	Iowa Soybean Association United Soybean Board

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Dever, J.	2015	Conventional Breeding at Public Institutions	Presentation to Committee	Dever, J.	Texas A&M AgriLife Research	N/A	
Dillehay, B.L. et al.	2004	Performance of Bt corn hybrids, their near isolines, and leading corn hybrids in Pennsylvania and Maryland	Agronomy Journal 96:818–824	Dillehay, B.L.	Pennsylvania State University	Government (U.S.)	U.S. Department of Agriculture-CREES Northeast IPM Grant
Dorhout and Rice	2010	Intraguild competition and enhanced survival of western bean cutworm (Lepidoptera: Noctuidae) on transgenic Cry1Ab (MON810) <i>Bacillus thuringiensis</i> corn	Journal of Economic Entomology 103:54–62	Dorhout, D.L.	Iowa State University	Not Reported	
Douglas and Tooker	2015	Large-scale deployment of seed treatments has driven rapid increase in use of neonicotinoid insecticides and preemptive pest management in U.S. field crops	Environmental Sciences & Technology 49:5088–5097	Douglas, M.	Pennsylvania State University	Not Reported	
Dowd-Uribe, B. and M.A. Schnurr	2016	Burkina Faso's reversal on genetically modified cotton and the implications for Africa	African Affairs 115:161–172.	Dowd-Uribe, B.	University of San Francisco	Government (Non-U.S.)	Social Sciences and Humanities Research Council of Canada
Duan, J.J.	2008	A meta-analysis of effects of Bt crops on honey bees (Hymenoptera: Apidae)	PLoS One 3:e1415	Duan, J.J.	Santa Clara University	Government (U.S.)	U.S. Environmental Protection Agency
Duke, S.O.	2015	Perspectives on transgenic, herbicide-resistant crops in the USA almost 20 years after introduction	Pest Management Science 71:652–657	Duke, S.O.	U.S. Department of Agriculture - Agricultural Research Service	Not Reported	
Duvick, D.N.	2005	Genetic progress in yield of United States maize (<i>Zea mays</i> L.)	Maydica 50:193–202.	Duvick, D.N.	Iowa State University	Not Reported	

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Dyer, L.A. and M.L. Forister	2016	Wherefore and whither the modeler: Understanding the population dynamics of monarchs will require integrative and quantitative techniques	Annals of the Entomological Society of America sav160	Dyer, L.A.	University of Nevada Reno	Not Reported	
Egan, J.F. et al.	2011	2,4-Dichlorophenoxyacetic acid (2,4-D)-resistant crops and the potential for evolution of 2,4-D-resistant weeds	Proceedings of the National Academy of Sciences of the United States of America 108: E37	Egan, J.F.	Pennsylvania State University	Not Reported	
Ellert, B.H. and J.R. Bettany	1995	Calculation of organic matter and nutrients stored in soils under contrasting management regimes	Canadian Journal of Soil Science 75:529-538	Ellert, B.H.	University of Saskatchewan	Not Reported	
EPA (U.S. Environmental Protection Agency)	1997	Plant pesticides resistance management; Notice of meeting	Federal Register 62:19115-19117	EPA (U.S. Environmental Protection Agency)		N/A	
EPA (U.S. Environmental Protection Agency)	1998	Memorandum: Transmittal of the Final Report of the FIFRA Scientific Advisory Panel Subpanel on Bacillus thuringiensis (Bt) Plant-Pesticides and Resistance Management	Meeting held on February 9 and 10, 1998. Available at http://archive.epa.gov/scipoly/sap/meetings/web/pdf/finalfeb.pdf . Accessed November 22, 2015.	EPA (U.S. Environmental Protection Agency)		N/A	

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EPA (U.S. Environmental Protection Agency)	2001	Biopesticides Registration Action Document – Bacillus thuringiensis Plant-Incorporated Protectants	Available at http://www3.epa.gov/pesticides/chem_search/reg_actions/pip/bt_brad.htm . Accessed November 22, 2015.	EPA (U.S. Environmental Protection Agency)		N/A	
EPA (U.S. Environmental Protection Agency)	2002	Memorandum: Transmittal of Meeting Minutes of the FIFRA Scientific Advisory Panel	Meeting Held August 27-29, 2002. Available at http://archive.epa.gov/scipoly/sap/meetings/web/pdf/august2002final.pdf . Accessed November 22, 2015.	EPA (U.S. Environmental Protection Agency)		N/A	

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EPA (U.S. Environmental Protection Agency)	2011	Memorandum: Transmittal of Meeting Minutes of the FIFRA Scientific Advisory Panel	Meeting Held December 8-9, 2010 to Address Scientific Issues Associated with Insect Resistance Management for SmartStax™ Refuge-in-the-Bag, a Plant-Incorporated Protectant (PIP) Corn Seed Blend.	EPA (U.S. Environmental Protection Agency)		N/A	
EPA (U.S. Environmental Protection Agency)	2014	Final Registration of Enlist Duo™ Herbicide	Available at http://www2.epa.gov/sites/production/files/2014-10/documents/final_registration_-_enlist_duo.pdf . Accessed November 24, 2015.	EPA (U.S. Environmental Protection Agency)		N/A	

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EPA (U.S. Environmental Protection Agency)	2014	SAP Minutes No. 2014-01: A Set of Scientific Issues Being Considered by the Environmental Protection Agency Regarding Scientific Uncertainties Associated with Corn Rootworm Resistance Monitoring for Bt Corn Plant Incorporated Protectants (PIPs).	Available at http://www2.epa.gov/sites/production/files/2015-06/documents/120413minutes.pdf . Accessed November 22, 2015.	EPA (U.S. Environmental Protection Agency)		N/A	
Evans, J.A. et al.	2016	Managing the evolution of herbicide resistance	Pest Management Science 72:74–80	Evans, J.A.	U.S. Department of Agriculture - Agricultural Research Service	Government (U.S.)	U.S. Department of Agriculture NIFA AFRI Project
						Industry	Monsanto Company
						Nonprofit	Illinois Soybean Association Soybean Checkoff
Farias, J.R. et al.	2014	Field-evolved resistance to Cry1F maize by Spodoptera frugiperda (Lepidoptera: Noctuidae) in Brazil	Crop Protection 64:150–158	Farias, J.R.	Universidade de Sao Paulo	Foundation	National Council for the Improvement of Higher Education (CAPES)
Fausti, S.W. et al.	2012	Insecticide use and crop selection in regions with high GM adoption rates	Renewable Agriculture and Food Systems 27:295–304	Fausti, S.W.	South Dakota State University	Government (U.S.)	U.S. Department of Agriculture National Institutes of Health
						Academia	South Dakota Agricultural Experiment Station Capital University Center

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Fernandez-Cornejo and McBride	2002	Adoption of Bioengineered Crops	Economic Report No. 810. Washington, DC: U.S. Department of Agriculture–Economic Research Service	Fernandez-Cornejo J.	U.S. Department of Agriculture - Economic Research Service	Not Reported	
Fernandez-Cornejo J. et al.	2012	Conservation tillage, herbicide use, and genetically engineered crops in the United States: The case of soybeans	AgBioForum 15:231–241	Fernandez-Cornejo J.	U.S. Department of Agriculture - Economic Research Service	Not Reported	
Fernandez-Cornejo J. et al.	2014	Genetically Engineered Crops in the United States	Washington, DC: U.S. Department of Agriculture–Economic Research Service	Fernandez-Cornejo J.	U.S. Department of Agriculture - Economic Research Service	Not Reported	
Ferreira, S.A. et al.	2002	Virus coat protein transgenic papaya provides practical control of Papaya ringspot virus in Hawaii	Plant Disease 86:101–105	Ferreira, S.A.	University of Hawaii	Government (U.S.)	U.S. Department of Agriculture/CSREES Grant
Finger, R. et al.	2011	A meta analysis on farm-level costs and benefits of GM crops	Sustainability 3:743–762	Finger, R.	Swiss Federal Institute of Technology Zurich	Government (Non-U.S.)	European Commission
Forster, D. et al.	2013	Yield and economic performance of organic and conventional cotton-based	PLoS ONE 8:e81039	Forster, D.	Research Institute of Organic Agriculture (FiBL)	Foundation	Biovision Foundation for Ecological Development
						Industry	Coop Sustainability Fund

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		farming systems—results from a field trial in India				Government (Non-U.S.)	Liechtenstein Development Service (LED) Swiss Agency for Development and Cooperation (SDC)
Frank, D.L. et al.	2015	Effect of seed blends and soil-insecticide on western and northern corn rootworm emergence from mCry3A+ eCry3.1Ab Bt maize	Journal of Economic Entomology tov081.	Frank, D.L.	University of Missouri Columbia	Industry	Syngenta
						Government (U.S.)	Biotechnology Risk Assessment Grant Program from the U.S. Department of Agriculture National Institute of Food and Agriculture
Fuchs, M. and D. Gonsalves	2008	Safety of virus-resistant transgenic plants two decades after their introduction: Lessons from realistic field risk assessment studies	Annual Review of Phytopathology 45:173–202	Fuchs, M.	Cornell University	Government (U.S.)	U.S. Department of Agriculture/CSREES Grant
						Government (Non-U.S.)	European Union
FuturaGene	2015	FuturaGene's eucalyptus is approved for commercial use in Brazil	Available at http://www.futuragene.com/FuturaGene-eucalyptus-approved-for-commercial-use.pdf . Accessed September 23, 2015.	FuturaGene		Not Reported	

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Gasparri, N.I. et al.	2013	Linkages between soybean and neotropical deforestation: Coupling and transient decoupling dynamics in a multi-decadal analysis	Global Environment al Change 23:1605–1614.	Gasparri, N.I.	Consejo Nacional de Investigaciones Cientificas y Tecnicas (CONICET)	Government (Non-U.S.)	Argentina National Agency of Science and Technological Research (PICT)
						Industry	Conservation Found of the Argentina Galicia Bank
Gassmann, A. J. et al.	2014	Field-evolved resistance by western corn rootworm to multiple Bacillus thuringiensis toxins in transgenic maize	Proceedings of the National Academy of Sciences of the United States 111:5141–5146	Gassmann, A. J.	Iowa State University	Government (U.S.)	U.S. Department of Agriculture -National Institute of Food and Agriculture
Gepts, P.	2006	Plant genetic resources conservation and utilization: The accomplishments and future of a societal insurance policy	Crop Science 46:2278–2292	Gepts, P.	University of California Davis	Government (U.S.)	U.S. Department of Agriculture-CSREES-NRI U.S. Agency for International Development"
						Foundation	McKnight Foundation
Giller, K.E. et al.	2005	Beyond conservation agriculture	Frontiers in Plant Science 6:870	Giller, K.E.	Wageningen University & Research Center	Not Reported	
Giller, K.E. et al.	2009	Conservation agriculture and smallholder farming in Africa: The heretics view	Field Crops Research 114:23–34.	Giller, K.E.	Wageningen University & Research Center	Not Reported	
Goldberger, J. et al.	2005	Bt corn farmer compliance with insect resistance management requirements in Minnesota and Wisconsin	AgBioForum 8:151–160	Goldberger, J.	University of Wisconsin, Madison	Not Reported	

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Gonzales, L.A. et al.	2009	Modern Biotechnology and Agriculture: A History of the Commercialization of Biotech Maize in the Philippines	Los Baños, Philippines: STRIVE Foundation	Gonzales, L.A.	Strive Foundation, Inc.	N/A	
Goodman, M.	2014		Presentation to Committee	Goodman, M.	North Carolina State University	N/A	
Gould, F.	1995	Comparisons between resistance management strategies for insects and weeds	Weed Technology 9:830–839	Gould, F.	North Carolina State University	Not Reported	
Gould, F.	1998	Sustainability of transgenic insecticidal cultivars: Integrating pest genetics and ecology	Annual Review of Entomology 43:701–726	Gould, F.	North Carolina State University	Not Reported	
Grau, H.R. et al.	2005	Agriculture expansion and deforestation in seasonally dry forests of north-west Argentina	Environmental Conservation 32:140–148	Grau, H.R.	Consejo Nacional de Investigaciones Cientificas y Tecnicas (CONICET)	Academia	University of Puerto Rico Tucuman National University
						Government (U.S.)	Inter-American Institute for Global Change Research
						Foundation	Fundacion Antorchas, Argentina
Greene, S.L. et al.	2005	Occurrence of transgenic feral alfalfa (Medicago sativa subsp. sativa L) in alfalfa seed production areas in the United States	PLoS ONE 10:e0143296.	Greene, S.L.	U.S. Department of Agriculture	Government (U.S.)	U.S. Department of Agriculture
Gulden, R.H. et al.	2010	Glyphosate-resistant cropping systems in Ontario: Multivariate and nominal trait-based weed community structure	Weed Science 58:278–288	Gulden, R.H.	University of Guelph	Industry	Monsanto Canada, Inc.

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Gurian-Sherman, D.	2009	Failure to Yield: Evaluating the Performance of Genetically Engineered Crops	Cambridge, MA: UCS Publications	Gurian-Sherman, D.	Center for Food Safety	Not Reported	
Gurian-Sherman, D.	2014		Presentation to Committee	Gurian-Sherman, D.	Center for Food Safety	N/A	
Guza, C.J. et al.	2002	Weed control in glyphosate-resistant sugarbeet (<i>Beta vulgaris</i> L.)	Journal of Sugar Beet Research 39:109–123	Guza, C.J.	Oregon State University	Not Reported	
Haegele and Below	2013	Transgenic corn rootworm protection increases grain yield and nitrogen use of maize	Crop Science 53:585–594	Haegele, J.W.	University of Illinois Urbana-Champaign	Not Reported	
Hajjar, R. et al.	2008	The utility of crop genetic diversity in maintaining ecosystem services	Agriculture, Ecosystems & Environment 123:261–270	Hajjar, R.	University of British Columbia	Not Reported	
Hannula, S.E. et al.	2014	Do genetic modifications in crops affect soil fungi?	A review. Biology and Fertility of Soils 50:433–446	Hannula, S.E.	Netherlands Institute of Ecology	Government (Non-U.S.)	Netherlands Organization for Scientific Research
Harker, K.N. et al.	2000	Herbicide-tolerant canola: weed control and yield comparisons in western Canada	Canadian Journal of Plant Science 80:647–654	Harker, K.N.	Agriculture & Agri Food Canada	Not Reported	
Hartzler, R.G.	2010	Reduction in common milkweed (<i>Asclepias syriaca</i>) occurrence in Iowa cropland from 1999 to 2009	Crop Protection 29:1542–1544	Hartzler, R.G.	Iowa State University	Not Reported	
HASS (Hawaii Agricultural Statistic Service)	1993	Statistics of Hawaiian Agriculture 1992	Honolulu: Hawaii Department of Agriculture	HASS (Hawaii Agricultural Statistic Service)		N/A	

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HASS (Hawaii Agricultural Statistic Service)	2000	Statistics of Hawaiian Agriculture 1998	Honolulu: Hawaii Department of Agriculture	HASS (Hawaii Agricultural Statistic Service)		N/A	
Heap, I.	2014	Global perspective on herbicide-resistant weeds	Pest Management Science 70:1306–1315	Heap, I.	International Survey of Herbicide Resistant Weeds	Industry	Herbicide Resistance Action Committee (HRAC)
Heard, M.S. et al.	2003	Weeds in fields with contrasting conventional and genetically modified herbicide-tolerant crops: I. Effects on abundance and diversity	Philosophical Transactions of the Royal Society B 358:1819–1832.	Heard, M.S.	Natural Environment Research Council	Not Reported	
Heinemann, J.A. et al.	2014	Sustainability and innovation in staple crop production in the US Midwest	International Journal of Agricultural Sustainability 12:71–88	Heinemann, J.A.	University of Canterbury	Not Reported	
Hellmich, R.L. et al.	2001	Monarch larvae sensitivity to Bacillus thuringiensis-purified proteins and pollen	Proceedings of the National Academy of Sciences of the United States of America 98:11925–11930	Hellmich, R.L.	Iowa State University	Government (U.S.)	U.S. Department of Agriculture ABSTC
						Government (Non-U.S.)	Canadian Food Inspection Agency Environment Canada Ontario Ministry of Agriculture, Food and Rural Affairs

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Héma, O. et al.	2009	Efficacy of transgenic cotton plant containing Cry1Ac and Cry2Ab genes of <i>Bacillus thuringiensis</i> against <i>Helicoverpa armigera</i> and <i>Syllepte derogata</i> in cotton cultivation in Burkina Faso	Crop Protection 28:205–214	Héma, O.	INERA - Institut de l'Environnement et de Recherches Agricoles	Not Reported	
Hill, J.	2015	Pest Management in Corn and Vegetable Production	Presentation to Committee	Hill, J.	New Mexico Farmer	N/A	
Hjältén, J. et al.	2012	Increased resistance of Bt aspens to <i>Phratora vitellinae</i> (Coleoptera) leads to increased plant growth under experimental conditions	PLoS ONE 7:e30640	Hjältén, J.	Swedish University of Agricultural Sciences	Government (Non-U.S.)	Swedish Research Council Formas
Howard and Davis	2015	Investigating long-term changes in the spring migration of monarch butterflies (Lepidoptera: Nymphalidae) using 18 years of data from Journey North, a citizen science program	Annals of the Entomological Society of America 108:664–669	Howard, E.	University of Georgia	Foundation	Annenberg Foundation
Hu, J.J. et al.	2001	Field evaluation of insect-resistant transgenic <i>Populus nigra</i> trees	Euphytica 121:123–127	Hu, J.J.	Chinese Academy of Forestry	Not Reported	
Huang, F. et al.	2011	Success of the high-dose/refuge resistance management strategy after 15 years of Bt crop use in North America	Entomologia Experimentalis et Applicata 140:1–16	Huang, F.	Louisiana State University	Government (U.S.)	U.S. Department of Agriculture
						Academia	Louisiana State University Agricultural Center

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Hungria, M. et al.	2014	Effects of the glyphosate-resistance gene and herbicides on soybean: Field trials monitoring biological nitrogen fixation and yield	Field Crops Research 158:43–54	Hungria, M.	Empresa Brasileira de Pesquisa Agropecuaria (Embrapa)	Government (Non-U.S.)	Empresa Brasileira de Pesquisa Agropecuaria (Embrapa) National Council for Scientific and Technological Development (Brazil)
Hungria, M. et al.	2015	Impact of the ahas transgene for herbicides resistance on biological nitrogen fixation and yield of soybean	Transgenic Research 24:155–165	Hungria, M.	Empresa Brasileira de Pesquisa Agropecuaria (Embrapa)	Government (Non-U.S.)	National Council for Scientific and Technological Development (Brazil)
Hutchison, W.D. et al.	2010	Areawide suppression of European corn borer with Bt maize reaps savings to non-Bt maize growers	Science 330:222–225	Hutchison, W.D.	University of Minnesota Twin Cities	Academia	University of Minnesota
Inamine, H. et al.	2016	Linking the continental migratory cycle of the monarch butterfly to understand its population decline	Oikos Online	Inamine, H.	Cornell University	Academia	Atkinson Center for a Sustainable Future at Cornell University
Inman, M.D. et al.	2016	Long-term management of Palmer amaranth (Amaranth palmeri) in dicamba-tolerant cotton	Weed Science 6:161–169.	Inman, M.D.	University of North Carolina	Industry	Monsanto Company
James, C.	2006	Global Status of Commercialized Biotech/GM Crops: 2006	Ithaca, NY: International Service for the Acquisition of Agri-biotech Applications	James, C.	International Service for the Acquisition of Agri-biotech Applications	Not Reported	

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James, C.	2008	Global Status of Commercialized Biotech/GM Crops: 2008	Ithaca, NY: International Service for the Acquisition of Agri-biotech Applications	James, C.	International Service for the Acquisition of Agri-biotech Applications	Not Reported	
James, C.	2010	Global Status of Commercialized Biotech/GM Crops: 2010	Ithaca, NY: International Service for the Acquisition of Agri-biotech Applications	James, C.	International Service for the Acquisition of Agri-biotech Applications	Not Reported	
James, C.	2012	Global Status of Commercialized Biotech/GM Crops: 2012	Ithaca, NY: International Service for the Acquisition of Agri-biotech Applications	James, C.	International Service for the Acquisition of Agri-biotech Applications	Not Reported	
James, C.	2015	Global Status of Commercialized Biotech/GM Crops: 2015	Ithaca, NY: International Service for the Acquisition of Agri-biotech Applications	James, C.	International Service for the Acquisition of Agri-biotech Applications	Not Reported	
Johnson, R.M. et al.	2015	Honey bee toxicology	Annual Review of Entomology 60:415–434	Johnson, R.M.	Ohio State University	Not Reported	
Johnson, W.G., et al.	2009	Influence of glyphosate-resistant cropping systems on weed species shifts and glyphosate-resistant weed populations	European Journal of Agronomy 31:162–172	Johnson, W.G.	Purdue University	Not Reported	

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Kaimowitz, D. and J. Smith	2001	Soybean technology and the loss of natural vegetation in Brazil and Bolivia	Pp. 195–211 in Agricultural Technologies and Tropical Deforestation , A. Angelsen and D. Kaimowitz, eds. Oxon, UK: CABI Publishing.	Kaimowitz, D.	Center for International Forestry Research (CIFOR)	Not Reported	
Kasabe, N.	2016	Efforts on to Protect Cotton Crop from Pink Bollworm During Coming Season	Online. The Financial Express. Available at http://www.financialexpress.com/article/markets/commodities/efforts-on-to-protect-cotton-crop-from-pink-bollworm-during-coming-season/213353/ . Accessed April 5, 2016.	Kasabe, N.	The Financial Express	Not Reported	
Kathage and Qaim	2012	Economic impacts and impact dynamics of Bt (Bacillus thuringiensis) cotton in India	Proceedings of the National Academy of	Kathage, J.	University of Gottingen	Foundation	German Research Foundation

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			Sciences of the United States 109:11652–11656			Nonprofit	German Agricultural Society
Kemp, N.J.	2009	Weed management in glyphosate- and glufosinate-resistant sugar beet	Weed Technology 23:416–424	Kemp, N.J.	Michigan State University	Not Reported	
Kerns, D.D. et al.	2015	Effectiveness of Bt cotton towards bollworms and benefit of supplemental oversprays	Pp. 819–829 in Proceedings of the 2015 Beltwide Cotton Conferences, January 5–7, San Antonio, TX.	Kerns, D.D.	Louisiana State University Agricultural Center	Not Reported	
Kinchy, A.	2012	Seeds, Science, and Struggle: The Global Politics of Transgenic Crops	Cambridge: The MIT Press	Kinchy, A.	Rensselaer Polytechnic Institute	N/A	
Kirkegaard J.A. et al.	2014	Sense and nonsense in conservation agriculture: Principles, pragmatism and productivity in Australian mixed farming systems	Agriculture, Ecosystems & Environment 187:133–145	Kirkegaard J.A.	Commonwealth Scientific & Industrial Research Organisation (CSIRO)	Not Reported	
Klocko, A.L. et al.	2014	Bt-Cry3Aa transgene expression reduces insect damage and improves growth in field-grown hybrid poplar	Canadian Journal of Forest Research 44:28–35	Klocko, A.L.	Oregon State University	Academia	Tree Biosafety and Genomics Research Cooperative (Oregon State University)

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Klümper and Qaim	2014	A meta-analysis of the impacts of genetically modified crops	PLoS ONE 9:e111629	Klümper, W.	University of Gottingen	Government (Non-U.S.)	German Federal Ministry of Economic Cooperation and Development (BMZ) European Union's Seventh Framework Programme (FP7)
Knispel, A.L. and S.M. McLachlan	2010	Landscape-scale distribution and persistence of genetically modified oilseed rape (<i>Brassica napus</i>) in Manitoba, Canada	Canada. Environmental Science and Pollution Research 17:13–25.	Knispel, A.L.	University of Manitoba	Government (Non-U.S.)	Manitoba Rural Adaptation Council Social Sciences and Humanities Research Council Manitoba Conservation Natural Sciences and Engineering Research Council
						Academia	Graduate Students Association at the University of Manitoba
Knispel, A.L.	2008	Gene flow and multiple herbicide resistance in escaped canola populations	Weed Science 56:72–80.	Knispel, A.L.	University of Manitoba	Not Reported	
Kniss, A.R.	2010	Comparison of conventional and glyphosate-resistant sugarbeet the year of commercial introduction in Wyoming	Journal of Sugar Beet Research 47:127–134	Kniss, A.R.	University of Wyoming	Not Reported	
Kniss and Coobum	2015	Quantitative evaluation of the Environmental Impact Quotient (EIQ) for comparing herbicides	PLoS One 10:e0131200	Kniss A.R.	University of Wyoming	Not Reported	

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Kniss, A.R. et al.	2004	Economic evaluation of glyphosate-resistant and conventional sugar beet	Weed Technology 18:388–396	Kniss, A.R.	University of Wyoming	Not Reported	
Kouser and Qaim	2011	Impact of Bt cotton on pesticide poisoning in smallholder agriculture: A panel data analysis	Ecological Economics 70:2105–2113	Kouser, S.	University of Gottingen	Foundation	German Research Foundation
						Government (Non-U.S.)	The Higher Education Commission (HEC) of Pakistan
						Nonprofit	German Agricultural Society (DLG)
Kovach, J. et al.	1992	A method to measure the environmental impacts of pesticides	New York Food and Life Sciences Bulletin 139	Kovach, J.	Cornell University	Not Reported	
Kranthi, K.R.	2015	Pink Bollworm Strikes Bt-Cotton.	Cotton Statistics & News. Mumbai, India: Cotton Association of India.	Kranthi, K.R.	Central Institute for Cotton Research	Not Reported	
Krishna and Qaim	2008	Potential impacts of Bt eggplant on economic surplus and farmers' health in India	Agricultural Economics 38:167–180	Krishna, V.V.	University Hohenheim	Government (U.S.)	U.S. Agency for International Development
						Foundation	German Research Foundation
Krishna, V.V. et al.	2016	Transgenic crops, production risk, and agrobiodiversity. ZEF-Discussion Papers on Development Policy No. 186.	http://dx.doi.org/10.2139/ssrn.2405466	Krishna, V.V.	University Hohenheim	Not Reported	

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Kruger, M.J. et al.	2011	Resistance to Bt maize in <i>Busseola fusca</i> (Lepidoptera: Noctuidae) from Vaalharts, South Africa	Environmental Entomology 40:477–483	Kruger, M.J.	North West University - South Africa	Not Reported	
Kruger, M.J. et al.	2010	Transgenic Bt maize: Farmers' perceptions, refuge compliance and reports of stem borer resistance in South Africa			North West University - South Africa	Government (Non-U.S.)	National Research Foundation
Kumar, S. et al.	2010	Economic Benefits of Bt Brinjal—An Ex-ante Assessment	New Delhi: National Centre for Agricultural Economics and Policy Research	Kumar, S.	National Centre for Agricultural Economics and Policy Research	Not Reported	
Lapola, D.M. et al.	2010	Indirect land-use changes can overcome carbon savings from biofuels in Brazil	Proceedings of the National Academy of Sciences of the United States 107: 3388–3393	Lapola, R.	University of Kassel	Academia	International Max Planck Research School on Earth System Modelling in Hamburg, Germany
Lark, T.J.	2015	Cropland expansion outpaces agricultural and biofuel policies in the United States	Environmental Research Letters 10:044003	Lark, T.J.	University of Wisconsin Madison	Academia	Wisconsin Bioenergy Initiative
						Government (U.S.)	California Air Resources Board
Leibman, M. et al.	2014	Comparative analysis of maize (<i>Zea mays</i>) crop performance: Natural variation, incremental improvements and economic impacts	Plant Biotechnology Journal 12:941–950	Leibman, M.	Monsanto Company	Industry	Monsanto Company

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Liesner, L.	2014	Arizona pink bollworm eradication program update	Pp. 848–851 in Proceedings of the 2015 Beltwide Cotton Conferences, January 5–7, San Antonio, TX.	Liesner, L.	Arizona Cotton Research and Protection Council	N/A	
Liu, Y-B. et al.	2014	The effect of Bt-transgene introgression on plant growth and reproduction in wild Brassica juncea	Transgenic Research 24:537–547	Liu, Y-B.	Chinese Research Academy of Environmental Sciences	Government (Non-U.S.)	Natural Science Foundation of China French Embassy at Beijing (CNOUS)
						Government (U.S.)	U.S. Department of Agriculture Biotechnology Risk Assessment Grant
Livingston, M. et al.	2015	The Economics of Glyphosate Resistance Management in Corn and Soybean Production	Washington, DC: U.S. Department of Agriculture–Economic Research Service	Livingston, M.	U.S. Department of Agriculture	Not Reported	
Lobell, D.B. et al.	2009	Crop yield gains: Their importance, magnitudes and causes	Annual Review of Environment and Resources 34:179–204	Lobell, D.B.	Stanford University	Government (U.S.)	NASA New Investigator Grant
Losey, J.E. et al.	1999	Transgenic pollen harms Monarch larvae	Nature 399:214	Losey, J.E.	Cornell University	Not Reported	

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Lu, Y. et al.	2010	Mirid bug outbreaks in multiple crops correlated with wide-scale adoption of Bt cotton in China	Science 328:1151–1154	Lu, Y.	Chinese Academy of Agricultural Sciences	Government (Non-U.S.)	National Key Basic Research Program National Natural Science Foundation of China Key Project for Breeding Genetically Modified Organisms Commonwealth Agricultural Scientific Research Project
Lu, Y. et al.	2011	Wide-spread adoption of Bt cotton and insecticide decrease promotes biocontrol services	Nature 487: 362–365	Lu, Y.	Chinese Academy of Agricultural Sciences	Government (Non-U.S.)	Key Project for Breeding Genetically Modified Organisms International Science and Technology Cooperation Project
Lu, Z.B. et al.	2014	No direct effects of two transgenic Bt rice lines, T1C-19 and T2A-1, on the arthropod communities	Environmental Entomology 43:1453–1463	Lu, Z.B.	Zhejiang University	Government (Non-U.S.)	Special Research Projects for Developing Transgenic Plants 2013ZX08011-001 National Special Agricultural Research Projects for Public Welfare, China China National Science Fund for Innovative Research Group of Biological Control

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Lundgren, J.	2015	Risks of GM Crops and Sustainable Pest Management Alternatives	Presentation at Workshop on Comparing the Environmental Effects of Pest Management Practices Across Cropping Systems, March 4, Washington, DC.	Lundgren, J.	U.S. Department of Agriculture	N/A	
Lundgren, J.G. et al.	2009	Ecological compatibility of GM crops and biological control	Crop Protection 28:1017–1030	Lundgren, J.G.	U.S. Department of Agriculture	Not Reported	
Luttrell, R.G. and R.E. Jackson	2012	Helicoverpa zea and Bt cotton in the United States	GM Crops and Food: Biotechnology in Agriculture and the Food Chain 3:213–227.	Luttrell, R.G.	U.S. Department of Agriculture - Agricultural Research Service	Not Reported	
Mallet, J. and P. Porter	1992	Preventing insect adaptation to insect-resistant crops are seed mixtures or refugia the best strategy?	Proceedings of the Royal Society London B: Biological Sciences 250:165–169	Mallet, J.	University of London	Government (U.S.)	U.S. Department of Agriculture-CSRS grant
						Academia	Hatch funds from Mississippi State University

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Mamy, L. et al.	2010	Comparative environmental impacts of glyphosate and conventional herbicides when used with glyphosate-tolerant and non-tolerant crops	Environmental Pollution 158:3172–3178	Mamy, L	National Institute for Agricultural Research, France	Government (Non-U.S.)	National Institute for Agricultural Research, France National Centre for Scientific Research Interprofessional Technical Centre for Metropolitan Oilseeds (CETIOM)
Manshardt, R.	2012	The papaya in Hawai'i	HortScience 47:1399–1404.	Manshardt, R.	University of Hawaii Manoa	Not Reported	
Marvier, M. et al.	2007	A meta-analysis of effects of Bt cotton and maize on nontarget invertebrates	Science 316:1475–1477	Marvier, M.	Santa Clara University	Government (U.S.)	U.S. Environmental Protection Agency Grant
Mensah, E.C.	2007	Economics of Technology Adoption: A Simple Approach	Saarbrücken, Germany: VDM Verlag	Mensah, E.C.		N/A	
Micinski, S. et al.	2008	Abundance of Helicoverpa zea and Heliothis virescens in pheromone traps during the past twenty years in northwestern Louisiana	Southwestern Entomologist 33:139–149	Micinski, S.	Louisiana State University	Not Reported	
Mijatović, D. et al.	2013	The role of agricultural biodiversity in strengthening resilience to climate change: towards an analytical framework	International Journal of Agricultural Sustainability 11:95–107	Mijatović, D.	Bioversity International	Foundation	Christensen Fund

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Mohan, K.S. et al.		Field resistance to the <i>Bacillus thuringiensis</i> protein Cry1Ac expressed in Bollgard® hybrid cotton in pink bollworm, <i>Pectinophora gossypiella</i> (Saunders), populations in India	Pest Management Science 72:738–746	Mohan, K.S.	Monsanto Company	Not Reported	
Montgomery, D.R.	2007	Soil erosion and agricultural sustainability	Proceedings of the National Academy of Sciences of the United States 104:13268–13272	Montgomery, D.R.	University of Washington	Not Reported	
Mortensen, D.A. et al.	2012	Navigating a critical juncture for sustainable weed management	BioScience 62:75–84	Mortensen, D.A.	Penn State University	Not Reported	
Morton, D.C. et al.	2006	Cropland expansion changes deforestation dynamics in the southern Brazilian Amazon	Proceedings of the National Academy of Sciences of the United States 103:14637–14641	Morton, D.C.	University of Maryland College Park	Government (U.S.)	Grants from the National Aeronautics and Space Administration Large Scale Biosphere–Atmosphere Experiment in the Amazon
Nail, K.R. et al.	2015	Immature monarch survival: Effects of site characteristics, density, and time	Annals of the Entomological Society of America 108:680–690	Nail, K.R.	University of Minnesota Twin Cities	Government (U.S.)	National Science Foundation
						Nonprofit	Xerces Society

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Naranjo, S.E. et al.	2008	The present and future role of insect-resistant genetically modified cotton in IPM	Pp. 159–194 in Integration of Insect-Resistant Genetically Modified Crops with IPM Systems, J. Romeis, A.M. Shelton, and G.G. Kennedy, eds. Springer: Berlin	Naranjo, S.E.	U.S. Department of Agriculture	Not Reported	
Neher, D.A. et al.	2014	Impact of coleopteran-active Bt maize on non-target nematode communities in soil and decomposing corn roots	Soil Biology & Biochemistry 76:127–135	Neher, D.A.	University of Vermont	Government (U.S.)	U.S. Department of Agriculture-CSREES Biotechnology Risk Assessment Research Grants Program
Nelson, D.S. and G.C. Bullock	2003	Simulating a relative environmental effect of glyphosate-resistant soybeans	Ecological Economics 45:189–202	Nelson, D.S.	University of Illinois Urbana-Champaign	Academia	University of Illinois
Neve, P. et al.	2014	Expanding the eco-evolutionary context of herbicide resistance research	Pest Management Science 70:1385–1393	Neve, P.	University of Warwick	Industry	Grains Research and Development Corporation of Australia
						Government (Non-U.S.)	Biotechnology and Biological Sciences Research Council (UK)
						Foundation	Leverhulme Trust (UK)

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Nichterlein, H. et al.	2013	Yield of glyphosate-resistant sugar beets and efficiency of weed management systems with glyphosate and conventional herbicides under German and Polish crop production	Transgenic Research 22:725–736	Nichterlein, H.	KWS Saat AG	Not Reported	
Nichols, R.L. et al.	2009	Glyphosate-resistant Palmer amaranth (<i>Amaranthus palmeri</i>) spreads in the southern US	Resistant Pest Management Newsletter 18:8–10.	Nichols, R.L.	University of Georgia	Not Reported	
Nolan, E. and P. Santos	2012	The contribution of genetic modification to changes in corn yield in the United States	American Journal of Agricultural Economics 94:1171–1188	Nolan, E.	University of Sydney	Not Reported	
Nolte and Young	2002	Efficacy and economic return on investment for conventional and herbicide-resistant corn (<i>Zea mays</i>)	Weed Technology 16: 371–378	Nolte, S.A.	Southern Illinois University	Not Reported	
Novacek, M.	2014	Bt transgenes minimally influence grain yield and lodging across plant population	Maydica 59:90–95	Novacek, M.	DuPont Pioneer	Industry	Monsanto Company
NRC (National Research Council)	2000	Genetically Modified Pest-Protected Plants: Science and Regulation	Washington, DC: National Academy Press	NRC (National Research Council)		National Research Council	See Table 1-1
NRC (National Research Council)	2002	Environmental Effects of Transgenic Plants: The Scope and Adequacy of Regulation	Washington, DC: National Academy Press	NRC (National Research Council)		National Research Council	See Table 1-1

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NRC (National Research Council)	2010	The Impact of Genetically Engineered Crops on Farm Sustainability in the United States.	Washington, DC: National Academy Press	NRC (National Research Council)		National Research Council	See Table 1-1
NRC (National Research Council)	2010	Toward Sustainable Agricultural Systems in the 21st Century	Washington, DC: National Academy Press	NRC (National Research Council)		Foundation	Bill & Melinda Gates Foundation W.K. Kellogg Foundation
NRC (National Research Council)	2012	National Summit on Strategies to Manage Herbicide-Resistant Weeds: Proceedings of a Symposium	Washington, DC: National Academies Press	NRC (National Research Council)		National Research Council	
NRC (National Research Council)	2013	Assessing Risks to Endangered and Threatened Species from Pesticides	Washington, DC: National Academies Press	NRC (National Research Council)		National Research Council	
Oberhauser, K.S. et al.	2001	Temporal and spatial overlap between monarch larvae and corn pollen	Proceedings of the National Academy of Sciences of the United States of America 98:11919–11924.	Oberhauser, K.S.	University of Minnesota Twin Cities	Government (U.S.)	U.S. Department of Agriculture
						Government (Non-U.S.)	The Canadian Food Inspection Agency Environmental Canada Ontario Ministry of Agriculture, Food, and Rural Affairs
Owen, M.D.K. et al.	2010	Comparisons of genetically modified and non-genetically modified soybean cultivars and weed management systems	Crop Science 50:2597–2604	Owen, M.D.K.	Iowa State University	Not Reported	

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Owen, M.D.K.	2008	Weed species shifts in glyphosate-resistant crops	Pest Management Science 64:377–387	Owen, M.D.K.	Iowa State University	Not Reported	
Ozelame, O. and T. Andreatta	2013	Evaluation of technical and economic performance: A comparative study between hybrid corn and Bt corn	Custos e Agronegócio Online 9:210–232	Ozelame, O.	Sementes Coxilha Rica	Not Reported	
Pessel, F.D. et al.	2001	Persistence of oilseed rape (<i>Brassica napus</i> L.) outside of cultivated fields	Theoretical and Applied Genetics 102:841–846	Pessel, F.D.	University of Paris Sud	Not Reported	
Petzold-Maxwell, J.L. et al.	2013	Effect of Bt maize and soil insecticides on yield, injury, and rootworm survival: implications for resistance management	Journal of Economic Entomology 106:1941–1951	Petzold-Maxwell, J.L.	Iowa State University	Industry	Bayer CropScience Monsanto Company
Pleasants, J.M. and K.S. Oberhauser	2013	Milkweed loss in agricultural fields because of herbicide use: Effect on the monarch butterfly population	Insect Conservation and Diversity 6:135–144	Pleasants, J.M.	Iowa State University	Academia	National Center for Ecological Analysis and Synthesis
						Government (U.S.)	National Science Foundation
Pleasants, J.M. et al.	2001	Corn pollen deposition on milkweeds in and near cornfields	Proceedings of the National Academy of Sciences of the United States of America 98:11919–11924.	Pleasants, J.M.	Iowa State University	Not Reported	

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Pleasants, J.M. et al.	2016	Conclusion of no decline in summer monarch population not supported	Annals of the Entomological Society of America sav115	Pleasants, J.M.	Iowa State University	Not Reported	
Plourde, J.D. et al.	2013	Evidence for increased monoculture in the Central United States	Agriculture, Ecosystem & Environment 165:50–59	Plourde, J.D.	Purdue University	Government (U.S.)	U.S. Geological Survey Fish Habitat Assessment Project National Science Foundation III-CXT Project NOAA (Agricultural Indicators) via the EPA Great Lakes Restoration Initiative Department of Forestry and Natural Resources Partnering for Land Use Sustainability (PLUS) program
Powles S.B.	2008	Evolved glyphosate-resistant weeds around the world: Lessons to be learnt	Pest Management Science 64:360–365	Powles S.B.	University of Western Australia	Not Reported	
Powlson, D.S. et al.	2014	Limited potential of no-till agriculture for climate change mitigation	Nature Climate Change 4:678–683	Powlson, D.S.	Rothamsted Research	Nonprofit	CGIAR Research Program on Climate Change, Agriculture and Food Security (CCAFS)
Pray, C.E. et al.	2011	The impact of Bt cotton and the potential impact of biotechnology on other crops in China and India	Pp. 83–114 in Genetically Modified Food and Global Welfare, C.A.	Pray, C.E.	Rutgers State University	Foundation	Bill and Melinda Gates Foundation

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			Carter, G.C. Moschini, and I. Sheldon, eds. Bingley, UK: Emerald Group Publishing			Government (U.S.)	U.S. Department of Agriculture-Economic Research Service
Qaim, M. and G. Traxler	2005	Roundup Ready soybeans in Argentina: Farm level and aggregate welfare effects	Agricultural Economics 32: 73–86	Qaim, M.	University of Bonn	Foundation	The German Research Foundation
						Government (U.S.)	U.S. Department of Agriculture Initiative for Future Agriculture and Food Systems (IFAFS)
Qaim, M. and G. Traxler	2003	Yield effects of genetically modified crops in developing countries	Science 299:900–902	Qaim, M.	University of Bonn	Foundation	The German Research Foundation
Qiao, F.	2015	Fifteen years of Bt cotton in China: The economic impact and its dynamics	World Development 70:177–185	Qiao, F.	Central University of Finance & Economics	Government (Non-U.S.)	National Natural Science Foundation of China
Ramirez-Romero, R. et al.	2008	Does Cry1Ab protein affect learning performances of the honey bee <i>Apis mellifera</i> L. (Hymenoptera, Apidae)?	Ecotoxicology and Environmental Safety 70:327–333	Ramirez-Romero, R.	Instituto Nacional de Ecologia - Mexico	Government (Non-U.S.)	Agricultural French Ministry, CONACYT (Consejo Nacional de Ciencia y Tecnologia)
						Academia	Universidad de las Américas-Puebla
Reay-Jones and Wiatrak	2011	Evaluation of new transgenic corn hybrids producing multiple <i>Bacillus thuringiensis</i> toxins in South Carolina	Journal of Entomological Science 46:152–164	Reay-Jones, F.P.F.	Clemson University	Government (U.S.)	U.S. Department of Agriculture
						Industry	Monsanto Company DuPont Pioneer
Reay-Jones and Reisig	2014	Impact of corn earworm injury on yield of transgenic corn producing Bt toxin in the Carolinas	Journal of Economic Entomology 107: 1101–1109	Reay-Jones, F.P.F.	Clemson University	Government (U.S.)	U.S. Department of Agriculture

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Reay-Jones, F.P.F. et al.	2009	Evaluating the performance of transgenic corn producing <i>Bacillus thuringiensis</i> toxins in South Carolina	Journal of Agricultural and Urban Entomology 26:77–86	Reay-Jones, F.P.F.	Clemson University	Government (U.S.)	U.S. Department of Agriculture
Reichman J.R. et al.	2006	Establishment of transgenic herbicide-resistant creeping bentgrass (<i>Agrostis stolonifera</i> L.) in nonagronomic habitats	Molecular Ecology 15:4243–4255	Reichman J.R.	U.S. Environmental Protection Agency	Government (U.S.)	U.S. Environmental Protection Agency
Reisig, D.	2014	North Carolina Grower Experience with Crops Expressing Bt	Presentation to Committee	Reisig, D.	North Carolina Cooperative Extension	N/A	
Rice, M.E. and K. Ostlie	1997	European corn borer management in field corn: A survey of perceptions and practices in Iowa and Minnesota	Journal of Production Agriculture 10:628–634	Rice, M.E.	Iowa State University	Not Reported	
Ries, L. et al.	2015	The disconnect between summer and winter monarch trends for the eastern migratory population: Possible links to differing drivers	Annals of the Entomological Society of America 108:691–699	Ries, L.	University of Maryland College Park	Government (U.S.)	National Science Foundation
						Industry	Telcel
						Foundation	Carlos Slim Foundation
						Nonprofit	World Wildlife Fund U.S. World Wildlife Fund Canada
Romeis, J. et al.	2014	Potential use of an arthropod database to support the non-target risk assessment and monitoring of transgenic plants	Transgenic Research 23:995–1013	Romeis, J.	Agroscope	Government (Non-U.S.)	European Food Safety Authority
Romeu-Dalmau, C. et al.	2015	Asiatic cotton can generate similar economic benefits to Bt cotton under rainfed conditions	Nature Plants 1:15072	Romeu-Dalmau, C.	University of Oxford	Foundation	John Templeton Foundation

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Rosenbaum, K.K. et al.	2013	Comparison of weed control, yield, and net income in conventional, glyphosate-resistant, and glufosinate-resistant soybean	Crop Management 12	Rosenbaum, K.K.	University of Missouri	Not Reported	
Ruffo, M.L. et al.	2015	Evaluating management factor contributions to reduce corn yield gaps	Agronomy Journal 107:495–505	Ruffo, M.L.	University of Illinois Urbana-Champaign	Government (U.S.)	Multistate Agricultural Experiment Station project
						Industry	Illinois AES project BASF Koch Industries Inc. Monsanto Company Mosaic Company
Sadashivappa, P. and M. Qaim	2009	Bt cotton in India: Development of benefits and the role of government seed price interventions	AgBioForum 12:172–183	Sadashivappa, P.	University of Hohenheim	Foundation	The German Research Foundation
						Academia	The German Academic Exchange Service
Sanglestsawai, S. et al.	2014	Do lower yielding farmers benefit from Bt corn? Evidence from instrumental variable quantile regressions	Food Policy 44:285–296	Sanglestsawai, S.	Kasetsart University	Not Reported	
Schafer, M.G. et al.	2011	The establishment of genetically engineered canola populations in the US	PLoS ONE 6:e25736.	Schafer, M.G.	University of Arkansas Fayetteville	Government (U.S.)	U.S. Department of Agriculture -Cooperative Research and Extension Services
Schwartz, L.M. et al.	2015	Seedbank and field emergence of weeds in glyphosate-resistant cropping systems in the United States	Weed Science 63:425–439	Schwartz, L.M.	Southern Illinois University	Industry	Monsanto Company

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Sears, M.K. et al.	2001	Impact of Bt corn pollen on monarch butterfly populations: A risk assessment	Proceedings of the National Academy of Sciences of the United States of America 98:11937–11942	Sears, M.K.	University of Guelph	Government (U.S.)	Pooled grant provided by the U.S. Department of Agriculture-Agricultural Research Service
						Government (Non-U.S.)	Canadian Food Inspection Agency Environment Canada The Ontario Ministry of Agriculture, Food and Rural Affairs
						Industry	ABSTC: Aventis CropScience Dow AgroSciences DuPont Pioneer Monsanto Company Syngenta Seeds Inc.
						Academia	Leopold Center for Sustainable Agriculture The Maryland Agricultural Experiment Station
Sedjo, R.A.	2005	Will developing countries be the early adopters of genetically engineered forests?	AgBioForum 8:205–212	Sedjo, R.A.	Resources for the Future	Not Reported	
Shankar, B. et al.	2008	Production risk, pesticide use and GM crop technology in South Africa	Applied Economics. 40: 2489–2500	Shankar, B.	University of Reading	Not Reported	

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Sheaffer, C.C. et al.	2007	Comparing Roundup Ready and conventional systems of alfalfa establishment	Forage and Grazinglands 5	Sheaffer, C.C.	University of Minnesota	Not Reported	
Shi, G. et al.	2013	Commercialized transgenic traits, maize productivity, and yield risk	Nature Biotechnology 31:111–114	Shi, G.	University of Wisconsin Madison	Government (U.S.)	U.S. Department of Agriculture Hatch grant U.S. Department of Agriculture AFRI grant
Sinclair, T.R.	1994	Limits to crop yield?	Pp. 509–532 in Physiology and Determination of Crop Yield, K.J. Boote, J.M. Bennett, T.R. Sinclair, and G.M. Paulsen, eds. Madison, WI: ASA, CSSA, SSSA	Sinclair, T.R.	U.S. Department of Agriculture University of Florida	N/A	
Slatkin, M.	1987	Gene flow and the geographic structure of natural-populations	Science 236:787–792	Slatkin, M.	University of California Berkeley	Not Reported	
Smith, S. et al.	2010	Genetic diversity of widely used US sorghum hybrids 1980–2008	Crop Science 50:1664–1673	Smith, S.	DuPont	Not Reported	
Snow, A.A. and P.M. Palma	1997	Commercialization of transgenic plants: Potential ecological risks	Bioscience 47:86–96	Snow, A.A.	Ohio State University	Government (U.S.)	EPA, U.S. Department of Agriculture grant
Snow A.A. et al.	2003	A Bt transgene reduces herbivory and enhances fecundity in wild sunflowers	Ecological Applications 13:279–286	Snow A.A.	Ohio State University	Industry	Dow AgroSciences DuPont Pioneer
						Government (U.S.)	U.S. Department of Agriculture grants

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Sosnoskie, L.M. and A.S. Culpepper	2014	Glyphosate-resistant palmer amaranth (<i>Amaranthus palmeri</i>) increases herbicide use, tillage, and hand-weeding in Georgia cotton	Weed Science 62:393–402.	Sosnoskie, L.M.	University of Georgia	Not Reported	
Stanley-Horn, D.E. et al.	2001	Assessing the impact of Cry1Ab-expressing corn pollen on monarch butterfly larvae in field studies	Proceedings of the National Academy of Sciences of the United States of America 98:11931–11936	Stanley-Horn, D.E.	University of Guelph	Not Reported	
Steffy, G.	2015	Trends observed in fall migrant monarch butterflies (<i>Lepidoptera: Nymphalidae</i>) east of the Appalachian Mountains in an inland stopover in southern Pennsylvania over an eighteen year period	Annals of the Entomological Society of America 108:718–728	Steffy, G.		Not Reported	
Stenoien, C. et al.	2015	Habitat productivity and temporal patterns of monarch butterfly egg densities in the eastern United States	Annals of the Entomological Society of America 108:670–679	Stenoien, C.	University of Minnesota Twin Cities	Government (U.S.)	National Science Foundation
						Nonprofit	Xerces Society
Stringam, G.R.	2003	Transgenic herbicide tolerant canola – the Canadian Experience	Crop Science 43:1590–1593	Stringam, G.R.	University of Alberta	Not Reported	
Stone, G.D.	2011	Field versus farm in Warangal: Bt cotton, higher yields, and larger questions	World Development 39:387–398	Stone, G.D.	Washington University	Foundation	National Science Foundation

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Tabashnik, B. E.	1989	Managing resistance with multiple pesticide tactics: Theory, evidence, and recommendations	Journal of Economic Entomology 82:1263–1269	Tabashnik, B. E.	University of Hawaii	Government (U.S.)	U.S. Department of Agriculture
Tabashnik, B.E. et al.	2013	Insect resistance in Bt crops: Lessons from the first billion acres	Nature Biotechnology 31:510–521	Tabashnik, B.E.	University of Arizona	Government (U.S.)	U.S. Department of Agriculture U.S. Department of Agriculture Biotechnology Risk Assessment
Tan, S. R.R. et al.	2005	Imidazolinone-tolerant crops: History, current status and future	Pest Management Science 61:246–257	Tan, S. R.R.	BASF	Not Reported	
Thelen, K.D. and D. Penner	2007	Yield environment affects glyphosate-resistant hybrid response to glyphosate	Crop Science 47:2098–2107	Thelen, K.D.	Michigan State University	Not Reported	
Thelin, G.P. and W.W. Stone	2013	Estimation of Annual Agricultural Pesticide Use for Counties of the Conterminous United States, 1992–2009	Reston, VA: U.S. Geological Survey	Thelin, G.P.		Government (U.S.)	U.S. Geological Survey
Tilman D. et al.	2001	Forecasting agriculturally driven global change	Science 292:281–284	Tilman D.	University of Minnesota Twin Cities	Not Reported	

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Trigo, E. et al.	2009	The Case of Zero-Tillage Technology in Argentina	Washington, DC: International Food Policy Research Institute	Trigo, E.	Grupo CEO	Government (Non-U.S.)	Australia, Canada, China, Finland, France, Germany, India, Ireland, Italy, Japan, Netherlands, Norway, South Africa, Sweden, Switzerland, United Kingdom, United States World Bank CGIAR
Unglesbee, E.	2014	Soybeans: Monsanto Assessing Fit of Bt Varieties in the U.S.	AgFax. Available at http://agfax.com/2014/03/05/soybeans-monsanto-assessing-fit-bt-varieties-u-s-dtn/ . Accessed December 21, 2015	Unglesbee, E.	DTN News	N/A	
USDA–APHIS (U.S. Department of Agriculture–Animal and Plant Health Inspection Service)	2011	Bayer CropScience LP; Determination of nonregulated status of cotton genetically engineered for insect resistance and herbicide tolerance	Federal Register 76:63278–63279	USDA–APHIS (U.S. Department of Agriculture–Animal and Plant Health Inspection Service)		N/A	

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USDA–APHIS (U.S. Department of Agriculture– Animal and Plant Health Inspection Service)	2015	Determination of nonregulated status for Dow AgroSciences DAS- 8191Ø-7 cotton	Available at https://www.aphis.usda.gov/brs/aphisdocs/13_26201p_det.pdf . Accessed April 14, 2016	USDA–APHIS (U.S. Department of Agriculture– Animal and Plant Health Inspection Service)		N/A	
USDA–APHIS (U.S. Department of Agriculture– Animal and Plant Health Inspection Service)	2015	Record of Decision; Monsanto petitions (10- 188-01p and 12-185-01p) for determination of nonregulated status for dicamba-resistant soybean and cotton varieties	Available at https://www.aphis.usda.gov/brs/aphisdocs/dicamba_feis_rod.pdf . Accessed April 14, 2016	USDA–APHIS (U.S. Department of Agriculture– Animal and Plant Health Inspection Service)		N/A	
USDA–NASS (U.S. Department of Agriculture– National Agricultural Statistics Service)	2009	Hawaii Papayas	Available at http://www.nass.usda.gov/Statistics_by_State/Hawaii/Publications/Archive/xpap0809.pdf . Accessed April 17, 2016	USDA–NASS (U.S. Department of Agriculture– National Agricultural Statistics Service)		N/A	

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USDA–NASS (U.S. Department of Agriculture–National Agricultural Statistics Service)	2013	NASS Highlights: 2012 Agricultural Chemical Use Survey–Soybean	Available at http://www.nass.usda.gov/Surveys/Guide_to_NASS_Surveys/Chemical_Use/2012_Soybeans_Highlights/ChemUseHighlights-Soybeans-2012.pdf . Accessed November 22, 2015	U.S. Department of Agriculture–NASS (U.S. Department of Agriculture–National Agricultural Statistics Service)		N/A	
USDA–NASS (U.S. Department of Agriculture–National Agricultural Statistics Service)	2015	NASS Highlights: 2014 Agricultural Chemical Use Survey–Corn	Available at http://www.nass.usda.gov/Surveys/Guide_to_NASS_Surveys/Chemical_Use/2014_Corn_Highlights/ChemUseHighlights_Corn_2014.pdf . Accessed November 22, 2015	U.S. Department of Agriculture–NASS (U.S. Department of Agriculture–National Agricultural Statistics Service)		N/A	
van de Wouw, M., T. et al.	2010	Genetic diversity in twentieth century crop cultivars: A meta analysis	Theoretical & Applied Genetics 120:1241–1252	Van de Wouw, M., T.	Wageningen University & Research Center	Government (Non-U.S.)	Dutch Ministry of Agriculture, Nature and Food Quality
VanGessel M.J.	2001	Glyphosate-resistant horseweed from Delaware	Weed Science 49:703–705	VanGessel M.J.	University of Delaware	Not Reported	

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van Ittersum and Rabbinge	1997	Concepts in production ecology for analysis and quantification of agricultural input—output combinations	Field Crops Research 52:197–208	van Ittersum, M.K.	Wageningen University & Research Center	Not Reported	
van Ittersum, M.K. et al.	2013	Yield gap analysis with local to global relevance—a review	Field Crops Research 143:4–17	van Ittersum, M.K.	Wageningen University & Research Center	Not Reported	
Vera-Diaz, M.C.,R.K et al.	2009	The Environmental Impacts of Soybean Expansion and Infrastructure Development in Brazil’s Amazon Basin	Medford, MA: Tufts University	Vera-Diaz, M.C.,R.K		Not Reported	
Vitale, J.	2010	The commercial application of GMO crops in Africa: Burkina Faso’s decade of experience with Bt cotton	AgBioForum 137:3205–4332	Vitale, J.	Oklahoma State University	Not Reported	
Wallander, S.	2013	Soil tillage and crop rotation	Available at http://www.ers.usda.gov/topics/farm-practices-management/crop-livestock-practices/soil-tillage-and-crop-rotation.aspx . Accessed August 11, 2015	Wallander, S.		Not Reported	
Wangila, D.S. et al.	2015	Susceptibility of Nebraska western corn rootworm	Journal of Economic	Wangila, D.S.	University of Nebraska Lincoln	Government (U.S.)	U.S. Department of Agriculture

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		(Coleoptera: Chrysomelidae) populations to Bt corn events	Entomology 108:742–751			Academia	Nebraska Agricultural Experiment Station-Enhanced Hatch-Multi State Project
Ward, S.M. et al.	2013	Palmer amaranth (<i>Amaranthus palmeri</i>): a review	Weed Technology 12;12–27	Ward, S.M.	Colorado State University	Not Reported	
Warwick, S.I. et al.	2003	Hybridization between transgenic <i>Brassica napus</i> L. and its wild relatives: <i>Brassica rapa</i> L., <i>Raphanus raphanistrum</i> L., <i>Sinapis arvensis</i> L., and <i>Erucastrum gallicum</i> (Willd.) OE Schulz	Theoretical and Applied Genetics 107:528–539	Warwick, S.I.	Agriculture & Agri Food Canada	Government (Non-U.S.)	Canadian Biotechnology Strategy fund, Government of Canada Agriculture and Agri-Food Canada Westco Ltd
						Industry	Monsanto Company
Warwick, S.I. et al.	2008	Do escaped transgenes persist in nature? The case of an herbicide resistance transgene in a weedy <i>Brassica rapa</i> population	Molecular Ecology 17:1387–1395.	Warwick, S.I.	Agriculture & Agri Food Canada	Not Reported	
Webster, T.M. and H.D. Coble	1997	Changes in the weed species composition of the southern United States: 1974 to 1995	Weed Technology 11:308–217	Webster, T.M.	U.S. Department of Agriculture - Agricultural Research Service	Not Reported	
Webster, T.M. and T.L. Nichols	2012	Changes in the prevalence of weed species in the major agronomic crops of the southern United States: 1994/1995 to 2008/2009	Weed Science 60:145–157.	Webster, T.M.	U.S. Department of Agriculture - Agricultural Research Service	Not Reported	
Wendt, J.W. and S. Hauser	2013	An equivalent soil mass procedure for monitoring soil organic carbon in multiple soil layers	European Journal of Soil Science 64:58–65	Wendt, J.W.	International Fertilizer Development Center (Kenya)	Nonprofit	Institute for Tropical Agriculture, Ibadan, Nigeria

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WI Department of Agriculture	2014	Wisconsin Pest Bulletin 59	November 13. Available at https://datcp.services.wisconsin.gov/pb/pdf/11-13-14.pdf . Accessed March 24, 2016	WI Department of Agriculture		N/A	
Wiggins, M.S. et al.	2015	Integrating cover crops and POST herbicides for glyphosate-resistant Palmer amaranth (<i>Amaranthus palmeri</i>) control in corn	Weed Technology 29:412–418	Wiggins, M.S.	University of Tennessee	Not Reported	
Wilson, L. et al.	2013	IPM in the transgenic era: a review of the challenges from emerging pests in Australian cotton systems	Crop and Pasture Science 64, 737–749	Wilson, L.	Commonwealth Scientific & Industrial Research Organisation (CSIRO)	Industry	Cotton Research and Development Corporation
Wilson, R.G. et al.	2002	Influence of glyphosate and glufosinate on weed control and sugarbeet (<i>Beta vulgaris</i>) yield in herbicide-tolerant sugarbeet	Weed Technology 16:66–73	Wilson, R.G.	University of Nebraska	Not Reported	
Witjaksono, J. et al.	2014	Yield and economic performance of the use of GM cotton worldwide over time: A review and meta-analysis	China Agricultural Economic Review 6:616–643	Witjaksono, J.	Chinese Academy of Agricultural Sciences	Nonprofit	China Scholarship Council
Wolfenbarger and Phifer	2000	The ecological risks and benefits of genetically engineered plants	Science 290:2088–2093	Wolfenbarger, L.L.	U.S. Environmental Protection Agency	Not Reported	
Wolfenbarger, L.L. et al.	2008	Bt crop effects on functional guilds of non-target arthropods: A meta-analysis	PLoS ONE 3:e2118	Wolfenbarger, L.L.	University of Nebraska	Government (U.S.)	U.S. Environmental Protection Agency

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Wortmann C.S. et al.	2010	One-time tillage of no-till crop land five years post- tillage	Agronomy Journal 102:1302– 1307	Wortmann C.S.	University of Nebraska	Government (U.S.)	Hatch Act U.S. Agency for International Development
Wright, C.K. and M.C. Wimberly	2013	Recent land use change in the Western Corn Belt threatens grasslands and wetlands	Proceedings of the National Academy of Sciences of the United States 110:4134– 4139.	Wright, C.K.	South Dakota State University	Government (U.S.)	U.S. Department of Energy National Science Foundation Macrosystems Biology Program
Wright, T.R. et al.	2010	Robust crop resistance to broadleaf and grass herbicides provided by aryloxyalkanoate dioxygenase transgenes	Proceedings of the National Academy of Sciences of the United States 107:20240– 20245	Wright, T.R.	Dow Chemical Company	Not Reported	
Wu, K.-M. et al.	2008	Suppression of cotton bollworm in multiple crops in China in areas with Bt toxin-containing cotton	Science 321:1676– 1678	Wu, K.-M.	Chinese Academy of Agricultural Sciences	Government (Non-U.S.)	973 Projects Grant Ministry of Science and Technology of China
						Foundation	National Natural Science Foundation of China
Yang, F. et al.	2014	A challenge for the seed mixture refuge strategy in Bt maize: Impact of cross- pollination on an ear- feeding pest, corn earworm	PLoS One 9:e112962	Yang, F.	Louisiana State University	Industry	Monsanto Company Louisiana Soybean and Feed Grain Promotion Board

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						Government (U.S.)	U.S. Department of Agriculture National Institute of Food and Agriculture
Young B.G. et al.	2013	Agricultural weeds in glyphosate-resistant cropping systems in the United States	Weed Science 61:85–97	Young B.G.	Southern Illinois University	Industry	Monsanto Company
Yucatan Times	2015	Monarch butterfly population expected to quadruple in Mexico	Available at http://www.theyucatantimes.com/2015/11/monarch-butterfly-population-expected-to-quadruple-in-mexico/ . Accessed November 24, 2015	Yucatan Times		N/A	
Zangerl, A.R. et al.	2001	Effects of exposure to event 176 <i>Bacillus thuringiensis</i> corn pollen on monarch and black swallowtail caterpillars under field conditions	Proceedings of the National Academy of Sciences of the United States of America 98:11908–11912	Zangerl, A.R.	University of Illinois Urbana-Champaign	Foundation	The University of Illinois Foundation
						Academia	The University of Illinois at Urbana-Champaign Center for Advanced Study
Zapiola M.L. and C.A. Mallory-Smith	2012	Crossing the divide: Gene flow produces intergeneric hybrid in feral transgenic creeping bentgrass population	Molecular Ecology 21:4672–4680	Zapiola M.L.	Pontifical Catholic University of Argentina	Government (U.S.)	U.S. Department of Agriculture
						Industry	Scotts Company

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Zapiola, M.L. et al.	2008	Escape and establishment of transgenic glyphosate-resistant creeping bentgrass (<i>Agrostis stolonifera</i>) in Oregon, USDA: A 4-year study	Journal of Applied Ecology 45:486–494.	Zapiola, M.L.	Oregon State University	Not Reported	
Zeilinger, A.R. et al.	2011	Competition between stink bug and heliothine caterpillar pests on cotton at within-plant spatial scales	Entomologia Experimentalis et Applicata 141:59–70	Zeilinger, A.R.	University of Minnesota Twin Cities	Government (U.S.)	U.S. Department of Agriculture National Science Foundation
						Academia	Bell Museum of Natural History University of Minnesota