CURRICULUM VITAE

January 01, 2014 *Mariam B. Sticklen* (Passport Name: Masomeh B. Sticklen) Professor

Website: http://www.msu.edu/~stickle1/ Department of Plant, Soil and Microbial Sciences Michigan State University East Lansing, MI 48824 Cell Phone: 517-230-2929 Office: (517) 355-0271 (ext. 1177) Lab: (517) 355-0271 (ext 1176) Secretary: (517) 355-0271 (ext: 1104) Fax: (517) 353-3955

TABLE OF CONTENTS FOR THE CV

Title Page1
Table of Contents
Education, Academic History & Research Interests
Present Editorial Boards & Advisory Board Roles4
Notable Elected Insitutional Governance & Council Contributions
Honors & Awards
Notable Counsulting Appointments
Summary Chart: Scholarly Research, Invited Speeches, Grants and Supervisory Roles7
Publications
Published Novelty Research (Patents)
Published Books
Recent Editorial Articles
Published Peer Reviewed Articles
Invited Book Chapers, Conference Proceedings, Published Exhibitions, etc20
Invited Speaking Engagements
Grants 47
Competitive
Non-Competitive
Supervisory (Former Advisees and Their Present Positions)
Service 54
MSU, National and International54
Some Conference Organizer, Panelist and Conference chairperson Role
Some other University Services
Examples of Peer Reviwer of Refereed Articles & Grant Proposals56
Outreach & Media Exposures Examples
Major International Development Activities
Diversity & Training of Underrepresented Minorty Students
Teaching 73

HIGHEST DEGREE:

Doctor of Philosophy (PhD) in Horticulture, Major: Biotechnology

EDUCATION

- B.S. in General Agriculture, College of Agric. (Instructions in English), Jundishapoor University. Ahwaz, Iran.
- M.S. in Horticulture, major in Plant Physiology, Pahlavi University, (instruction in English), Shiraz, Iran.
- Ph.D. in Horticulture, Major in Biotechnology (June 1981), College of Agriculture, The Ohio State University, Columbus, OH.

WORK EXPERIENCE

2000 to Present Tenured Professor, Department of Plant, Soil and Microbial Sciences (formerly known as Department of Crop and Soil Sciences), Michigan State University, East Lansing, Michigan.

1995 to 2000 Tenured Associate Professor, Department of Crop and Soil Sciences, Michigan State University, East Lansing, Michigan.

1991 to 1995 Principal Investigator and Research Director, ABSP (Initial funds: \$6 million United States Agency for International Development grant), Michigan State University, East Lansing, Michigan.

1987 to 1995 Assistant Professor, Michigan State University, East Lansing, Michigan.

1983 to 1987 Postdoctorate Associate and Instructor, Agronomy Department, the Ohio State University, Columbus, Ohio.

1981 to 1982 Assistant Professor (non-tenure stream), Clemson University, Clemson, South Carolina. 1979 to 1981 Research Assistant, Department of Horticulture, Biotechnology Program, the Ohio State University
1972 to 1979 Instructor, Herbicide Physiology, Horticulture Department, Ahwaz University, Iran
1970 to 1972 Herbicide Physiology Scientist, Iran
Department of Agriculture, Khuzestan, Iran

RESEARCH INTERESTS:

Recombinant crop cellulosic biofuels and recombinant crop bio-based industrial products. Also, my team is involved with production of Fussarium Head Blight (FHB) resistant wheat, Sudden Deth Syndrom (SDS) resistant soybean, and drought tolerance maize, wheat and soybean crops.

PRESENT EDITORIAL & ADVISORY BOARD ROLES:

- Editor-In-Chief. Intl. Journal of Crop Science. http://www.bioinfo.in/contents.php?id=65&page=aim
- Editor In-Chief. Intl. J. Life Sci. Biotechnol. & Pharma Res. (new; accepted on April 13, 2013). <u>http://ijlbpr.com/</u>
- 3. Executive Editor, Advances in Crop Science and Technology. The OMICS Publishing. http://www.esciencecentral.org/journals/advances-crop-science-and-technology.php
- Editorial Board Member, International Agronomy Journal. <u>http://www.hindawi.com/</u> journals/ija/
- Editorial Board member, Plant Genetics & Transgenics (PGT) & AgroCrops Sciences (ACS). <u>http://www.academyjournals.net/</u>
- Editorial Review Board, Journal of Plant Breeding and Genetics; ISSN: 2305-297X. <u>http://</u> eSciJournals.net/
- Editorial Board Member, Open Journal of Genomics.
 www.rossscience.org/ojgen
- Editorial Board Member, Bioinfo Publication Journals. <u>http://www.bioinfopublication.org</u>

9. Editorial Board member, J. Petroleum & Environmental Biotechnology. OMICS Publishing Group.

http://www.omicsonline.org/AboutJPEB.php

 Advisory Board Member. The Society of Chemical Industry (SCI)'s Sustainable Fuels, Chemicals and Energy.

Biofuel, Bioproducts and Biorefining (Biofpr)

ELECTED GOVERNANCE AND COUNCIL CONTRIBUTIONS

- Member of the Steering Committee At-Large Michigan State University, Formerly, Exeutive Committee of the Academic Governance (2013-2014).
- Member of the Executive Committee of the Academic Governance (2009-2010)
- Faculty Liaison to the MSU Board of Trustees (2009-2010 and 2013-2014).
- Member of MSU Executive Committee of the Academic Governance (2009-2010).
- Member of the MSU Athletic Council (2008-2009 and 2010-2011)).
- Memberof the MSU's University Committee for Faculty Affairs (2007-2008).
- Member of the MSU Student Judiciary Committee (1994-1995)
- Chairperson of the Nomination Committee and one of the four members of the Executive Committee of the Governing Board of ICRISAT (International Crop Research Institute for Semi-Arid Tropics) (two full terms; 1994-2000).
- Member of the Governing Board of CGIAR (Consultative Group on International Agricultural Research) in Washington, DC (1995-1996).

HONORS

- Honored at the 25th Anniversary Celebration of the Office of Gifted and
 Talented Program of the MSU Honors College for my 12 years of improving
 of the program though my serving on its Advisory Board and for teaching of
 the High Achievers and the Gifted and Talented Program courses. Sept 19,
 2011, The Founders Luncheon, University club, MSU.
- 2009. Michigan State University Outstanding Faculty Woman

- 2008 Scholar Seminar Speaker Award. University of Southern Mississippi and Hattiesburg Clinic--Note: The 2007 Scholar Seminar Speaker Award was presented to the Nobel Laureate, Richard Roberts.
- 2000 Ralph H. Smuckler Award for Advancing International Studies and Programs, Michigan State University

Nominated but not received

2009	The ENI Award given each year in Rome with a televised ceremony and
	\$ 300,000 cash

2007 Michigan State University Distinguished Professor

NOTABLE CONSULTING APPOINTMENTS

2010-2013	Consultant, Canadian Network of Centers of Excellence (NCE) in Biofuels and			
	Biobased Products			
	http://www.nce-rce.gc.ca/index_eng.asp			
2013	Patent Witness Expert, Biofuels and Bio-Based Products Case between two			
	major U.S. Biotech Companies, Kirkland and Ellis LLC, New Your, NY			
2010	The US National Academies NRC, State of Ohio Funds http://			
	thirdfrontier.com/Documents/WP_2010_Final_Report_050310.pdf			
2009	The National Academies Advisors to the Nation on Science, Engineering			
	and Medicine. National Research Council (NRC) on the 2009 Engineering			
	and Physical Research and Commercialization Program of Ohio Third			
	Frontiers Program (two trips, two panels) .: The Job Funds of State of Ohio			
	http://sites.nationalacademies.org/DEPS/ASEB/DEPS_046747			
2009	Scientific Advisor to the Oklahoma BioEnergy Center.			
2009	Expert Panel NSG: Networks of Centers of Excellence (NCE) of the Natural Sciences and Engineering Research Council of Canada (NSERC). The Canadian Institute of Health Research (CIHR) and Industry, Canada			
2009	Reviewer of one Nobel Foundation Associate Prof to Full Prof Individual. Bio-Based Chemical Value Chain Summit			
2008	The US National Academies NRC, State of Ohio Funds http://			
	sites.nationalacademies.org/DEPS/ASEB/DEPS_046747			
2008	U.S. Department of Energy- State of Oklahoma Funds <u>http://www.ok.gov/</u>			
	recovery/Funding_Categories/Energy_&_Environment/			

2007	American Association for Advancement in Science. Michigan 21st			
	Century Funds. http://www.senate.michigan.gov/sfa/publications/notes/			
	2008notes/notesmarapr08lpmt.pdf			
2007	AAAS (American Assoc. for Advancement of Science) Wible request for review of South Dakota's DOE EPSCoR State Implementation Award Proposals Grants of \$50 M.			
2007	Advisor to the North Carolina Biotechnology Center Science & Technology. Multidisciplinary Research Grant (MRG) Program,			
2007	Advisor to the Kentucky Science and Engineering Foundation (KSEF).			
2007	to the Natural Sciences and Engineering Research Council of Canada (NSERC) Strategic Plan Projected Competition.			
2007	Advisor to the U.S. State Department and CRDF Science Center Program of Former Soviet Union (FSU) via the Science Centers in Moscow (ISTC) and Kyiv (STCU).			
2007	Advisor to the Science and Engineering Research Council (SERC) in Singapore: Agency for Agency for Science, Research and Technology (STAR) R & D on Biofuel Biomass.			
2006	U.S. National Academies NRC on Genome-To-Life (GTL) http://			
	genomicscience.energy.gov/pubs/NASreport22206.pdf			
2002 to 2004	U.S. National Academies NRC on Biological Confinement of Genetically			
	Engineered Organisms (http://www.nap.edu/openbook.php?			
	<u>isbn=0309090857</u>)			

Summary of Scholarly Research, Grants and Supervisory Roles*

Patents	Books &	Other	Invited	Grants	Supervise
	NRC Book Reports	Publications	Speeches		d
	- T				for Research

14 U.S. & International paents	2 books (by Springer- Verlag & Ann Arbor Press) & 6 NRC Book Reports by the U.S. National Academies Press	Total: 265 (73 peer reviewed Editorial and reviewed journal articles and original research papers. 193 published exhibitions, book and proceedings chapters, etc.)	Over 111 invited speeches in 24 different countries (68 within the last 10 years)	Over \$18.7 M (\$9.94 M competitive + &8.78 M non- competitive)	59 long-term scientists , over 150 short term scientists & over 100 undergrads (half minorities)
--------------------------------------	--	--	---	---	---

*See the lists below for itemized details

PUBLICATIONS

Patents:

Issued U.S. Patents:

 Masomeh B. Sticklen. Interntional Patent # 8,350,123. TEC2008-0013. Transgenic cover plants containing hemicellulase and cellulase which degrade lignin and cellulose to fermentable sugars. Issued: Jan. 08, 2013.

http://www.archpatent.com/patents/8350123

 Masomeh B. Ssticklen. International Patent # 8,093,456. TEC2008-0013. Transgenic cover plants containing hemicellulase and cellulase which degrade lignin and cellulose to fermentable sugars. Issued: Jan. 12, 2012.

http://www.google.com/patents/US8093456

 Masomeh Sticklen. European Patent Publication (PCT) #: WO0234926: Transgenic Plants Containing Ligninase and Cellulase Which Degrade Lignin and Cellulose to Fermentable Sugars. Countries: European Pant-PCT (licensed to private sector for commercialization). issued, in early 2012. Masomeh B. Sticklen, Bruce Dale and Shahina Maqbool. U.S. Patent #7,696,411 issued: Transgenic plants containing ligninase and cellulose which degrade lignin an cellulose to fermentable sugars, Issued April 13, 2010.

http://image-server.ec2.patentlens.net:8080/images/patent/US/B2/7696411/ US 7696411 B2.pdf

- Masomeh B. Sticklen, Bruce E. Dale and Shahina B. Maqbool. U.S. Patent #7,569,745. Continuation-In-Part: Transgenic Plants Containing Ligninase & Cellulase, which degrade Lignin and Cellulose to Fermentable Sugars. August 4, 2009. (http:// www.freepatentsonline.com/7569745.html; licensed to private sector for commercialization).
- Masomeh B. Sticklen, Bruce E. Dale and Shahina B. Maqbool. U.S. Patent #7,371,926. Continuation-In-Part: Transgenic plants containing ligninase and cellulase which degrade lignin and cellulose to fermentable sugars for biofuel. May 13, 2008.

(http://www.wikipatents.com/US-Patent-7371926/transgenic-plants-containing-ligninaseand-cellulase-which-degrade/Page-1; licensed to private sector for commercialization).

 Masomeh B. Sticklen. U.S. Patent #20050198704. Chloroplast transgenesis of monocots: Bioconfined genetically engineered monocot crops that will eliminate transgene flow.

(<u>http://www.freepatentsonline.com/y2005/0198704.html;</u> Research Contract with private sector).

 Masomeh B. Sticklen, Bruce E. Dale and Shahina B. Maqbool. U. S. Patent #7,049,485. Transgenic plants containing ligninase and cellulase which degrade lignin and cellulose to fermentable sugars. Issues, June 1, 2006.

(<u>http://www.patentstorm.us/patents/7049485.html</u>; licensed to private sector for commercialization)._

9. Masomeh B. Sticklen. U.S. Patent # 6,100,456. Lepidopteran insect resistant transgenic potato plants. Issued August 2000.

(http://www.freepatentsonline.com/6100456.html).

- Heng Zhong and Masomeh B. Sticklen. U.S. Patent Number 5,767,368. Method for producing a cereal plant with foreign DNA. Issued June 16, 1998. (<u>http://pdf.usaid.gov/</u> <u>pdf_docs/PCAAB276.pdf</u>).
- Masomeh B. Sticklen. U.S. Patent Number 5,728,382. A supplement to item #3: A chitinase cDNA from a disease resistant American elm tree. Issued March 17, 1998. (<u>http://www.freepatentsonline.com/5728382.html</u>).
- Masomeh B. Sticklen. U.S. Patent Number 5,539,095. A chitinase cDNA clone from a disease resistant American elm. July 1996. <u>(http://www.freepatentsonline.com/5539095.html).</u>
- Heng Zhong and Masomeh Sticklen. U.S. Patent Number 5,281,529. Method for in vitro sexual reproduction of corn. Issued January 1994.

http://www.google.com/patents/US5281529

 Heng Zhong, C. Srinivasan and Masomeh B. Sticklen. U.S. Patent Number 5,320,961. Method for in vitro asexual reproduction of corn. Issued June 1994. (<u>http://www.freepatentsonline.com/5320961.html</u>).

Boo & NRC Report Books:

- The US National Academies NRC Report co-authored by Mariam Sticklen (2010) The Science Advisory Board Report on Careers in Life Science Industry. <u>http://</u> <u>thirdfrontier.com/Documents/WP_2010_Final_Report_050310.pdf</u>
- NRC Report co-authored by Mariam Sticklen (2009). *The Science Advisory Board Report* on Careers in Life Science Industry. <u>http://sites.nationalacademies.org/DEPS/ASEB/</u> <u>DEPS_046747</u>
- 3. NRC Report co-authored by Mariam Sticklen,.... (2008). *The Science Advisory Board Report on Careers in Life Science Industry*. The National Academies Advisors to the

Nation on Science, Engineering and Medicine. <u>http://sites.nationalacademies.org/DEPS/</u> <u>ASEB/DEPS_046747</u>

- American Association for Advancement in Science. Review of Michigan 21st Century Funds. <u>http://www.senate.michigan.gov/sfa/publications/notes/2008notes/</u> <u>notesmarapr08lpmt.pdf</u>
- NRC Report co-authored by Jennie Hunter-Severa,...., Mariam Sticklen and Larry Walker (2006) *Review of the Department of Energy's Genome-To-Life (GTL): The National Academies Advisors to the Nation on Science, Engineering and Medicine.* National Acad. Press, Washington, DC. ISBN-13: 978-0-309-10133-2.
- NRC Report co-authored by T. Kent Kirk, John E. Carlson., Mariam Sticklen., and Paul Turner. (2004). *Biological Confinement of Genetically Engineered Organisms*. NRC Report. The Natl. Acad. Press. Washington, DC. ISBN 0-309-09085-7. 255p.
- Book: Mariam B. Sticklen and M. Kenna (1998). *Cellular and Molecular Genetics* Approaches to Turfgrass Improvement. Ann Arbor Press. Ann Arbor, MI. 256 p.
- Book: Mariam B. Sticklen and James L. Sherald, eds. (1992). *Dutch elm disease: Cellular and Molecular Approaches*. Springer-Verlag Publs. New York, N.Y. ISBN-10:

Refereed Publications

Note: If she is not the sole author, Prof. Sticklen is shown herein as the last author meaning that she is the senior and the corresponding author.

- Mariam Sticklen (2013). Editorial Review: The Most Advanced Crop Science and Technology: Synthetic Biology. Advances in Crop Sci. & Technol. In press.
- Mariam Sticklen (2013). Inaugural Editorial Review: Co-Production of High-Value Recombinant Biobased Matter in Bioenergy Crops for Expediting the Cellulosic Biofuels Agenda. Advances in Crop Sci. and Technology. 1(1): 1-2.

 Mariam Sticklen (2013). Editorial Review: An Advanced Crop Science and Technology: Potentials for Producing the High-Value High-Calorie Triacyglycerols Commodity in Crop Vegetative Wastes. Adv Crop Sci Technol. 1(2): 1-3. ISSN: ACST, an open access journal.

http://www.esciencecentral.org/journals/ACST/ACST-1-e104.php?aid=14470

4.Thang Nguyen, Hussien Alameldin, Wayne Loescher and Mariam Sticklen (2013). Transgene Pyramiding of the *HVA1* and *mtlD* in T3 Maize (*Zea mays* L.) Plants Confers Drought and/or Salt Tolerance, along with an Increase in Crop Biomass. Intl. J. Agronomy. Intl. Journal of Agronomy, Article ID 598163, 10 pages (Online)

5.<u>http://dx.doi.org/10.1155/2013/598163</u>

- Jason D Matakas, Venkatesh Balan, William F Carson IV, Dahai Gao, Federica Brandizzi, Steven Kunkel and Mariam SticklenSticklen (2013). Plant-produced recombinant human interleukin-2 and its activity against splenic CD4+T-cells. Intl. J. Life Sci. Biotechnol. & Pharma Res. 2(2): 193-203 http://www.ijlbpr.com/jlbpradmin/upload/ijlbpr 518365103de86.pdf
- Thang Nguyen and Mariam Sticklen (2013). Barley HVA1 Gene Confers Drought and Salt Tolerance in Transgenic Maize (Zea Mays L.). Adv. Crop Sci. & Technol. 1(1), 8 pages (Online).

http://dx.doi.org/10.4172/acst.1000105

 Thang Nguyen, Hussien Alameldin, Benjamin Goheen and Mariam Sticklen (2013). Bacterial Mannitol-1-Phophate Dehydrogenase (*mtlD*) Transgene Confers Salt Tolerance in the Fourth Generation Transgenic Maize (*Zea Mays*. L) Plants. Adv Crop Sci Technl. 1(3): 5 pages (Online). http://dx.doi.org/10.4172/2329-8863.1000112

 Kingdom Kwapata, Thang Nguyen and Mariam Sticklen. (2012). Genetic Transformation of Common Bean (Phaseolus vulgaris L.) with the Gus Color Marker, the Bar Herbicide Resistance, and the Barley (Hordeum vulgare) HVA1 Drought Tolerance Genes. Inlt J. Agronomy. Online: Volume 2012 (2012), Article ID 198960, 8 pages. doi: 10.1155/2012/198960

http://www.hindawi.com/journals/ija/2012/198960/

 Park S-H, C. Mei, M. Pauly, R. Garlock, BE. Dale, R. Sabzikar, H. Fotoh, T. Nguyen and M. Sticklen (2012). Down-regulation of Maize Cinnamoyl-CoA Reductase via RNAi Technology Causes Brown Midrib and Improves AFEXTM-Pretreated Conversion into Fermentable Sugars for Biofuels. Crop Sci. 52(6):2687-2701.

https://www.crops.org/publications/cs/pdfs/52/6/2687

- Park S-H., C. Ransom., C. Mei, R. Sabzikar, C. Qi, S. Chundawat, B. Dale and M. Sticklen (2011). In the quest of alternatives to microbial cellulase mix production: Corn stover-produced heterologous multi-cellulases readily deconstruct lignocellulosic biomass to fermentable sugars. J Chem Technol Biotechnol. On line. <u>https://</u> www.msu.edu/~stickle1/Park%20et%20a1.%20In%20press%20in%20JCTB.pdf
- Mariam Sticklen (2010). *Is large-scale production of biofuels possible?* Action BioScience. Online

(http://www.actionbioscience.org/newfrontiers/sticklen.html).

- Mariam Sticklen (2009). Expediting biofuels agenda via genetic manipulations of BioEnergy crops. Biofuels, Bioprod. Bioref. (Biofpr). 3(4): 448-455 (<u>https://www.msu.edu/~stickle1/biofpr.pdf</u>).
- Mariam Sticklen (2009). *The biofuel agenda shall not wait for miracles: an innovative science and good policy to make a global change in the history of human kind*. Biofuels, Bioprod. Bioref (Biofpr) 3:419–421 (https://www.msu.edu/~stickle1/biofpr-editorial.pdf).
- Mariam Sticklen (2007). Feedstock genetic engineering for biofules. Crop Science. 47: 2238-2248

(https://www.msu.edu/~stickle1/cropscience.pdf).

Hesham Oraby, Balan Venkatesh, Bruce Dale, Rashid Ahmad, Callista Ransom, James Oehmke and Mariam Sticklen (2007). *Enhanced conversion of plant biomass into glucose using transgenic rice-produced endoglucanase for cellulosic ethanol.* Transgenic Research. 16(6): 739-749

(https://www.msu.edu/~stickle1/transgen-res.pdf).

- Mariam Sticklen (2006). *Plant genetic engineering to improve biomass characterization for biofuels*. Curr. Opin. Biotech. 17(3): 315-319 (<u>https://www.msu.edu/~stickle1/</u> <u>Sticklen Curr%20Opinion paper.pdf</u>).
- Chuansheng Mei, SangHyuck Park, Robab Sabzikar, Qi, Callista Ransom and Mariam B. Sticklen. 2008. Green *Tissue-Specific Production of a Microbial Endo-Cellulase in Maize (Zea mays L.) Endoplasmic-Reticulum and Mitochondria Converts Cellulose into Fermentable Sugars. Journal of Chemical Technology & Biotechnology (JCTB). Published On Line on Dec 30, 2008* (<u>https://www.msu.edu/user/stickle1/Mei%20et%20al</u> <u>%20MS-2009.pdf</u>).
- Callista Ransom, Balan Venkatesh, Bruce Dale, Gadab C. Ghosh Biswas and Mariam Sticklen (2007). *Heterologous Acidothermus cellulolyticus 1,4-β-endoglucanase E1 Produced within the Corn Biomass Converts Corn Stover into Glucose* Applied Biochem. Biotech. 140: 137-219 (https://www.msu.edu/~stickle1/ biochemµbio.pdf).
- Shahina B. Maqbool, Anwaar Ahmad and Seyad A. Hashsham (2007). *Real Time PCR assay for polyphosphate kinase genes in activated sludge*. Res. J. Environ. Sci. 1: 229-236.
- Shahina B. Maqbool, Anwaar Ahmad., A. Dhawan., S. J. Callister., T. Tsoi, Mariam B. Sticklen and Seyad A. Hashsham (2006). *Response of selected genes of Burkholderia xenovorans strain LB400 to onion extract using a DNA:RNA hybrid capture detection system*. *Research Journal of Microbiology*, 1(5): 378-391 (http://www.egr.msu.edu/ ~hashsham/publications/index.shtml).
- Hesham F. Oraby, Callista B. Ransom, Alexandra N. Kravchenko and Mariam B. Sticklen (2005). *Barley HVA1 Gene Confers Salt Tolerance in R3 Transgenic Oat*. Crop Science. 45(6): 2 2218-2227 (http://goliath.ecnext.com/coms2/gi_0199-4973214/Barley-HVA1gene-confers-salt.html <u>http://goliath.ecnext.com/coms2/gi_0199-4973214/Barley-HVA1gene-confers-salt.html</u>).

- Mariam B. Sticklen and Hesham F. Oraby (2005). Shoot apical meristem: A sustainable explant for genetic engineering of cereal crops. In Vitro Cellular & Developmental-PLANT. 41: 187-200 (http://www.jstor.org/pss/4293841).
- 24. Hassan Salehi, Callista C. Ransom, Hesham Oraby and Mariam B. Sticklen (2005). Delay in flowering and increase in biomass of plants expressing the Arabidopsis floral repressor gene FLC (FLOWERING LOCUS C). J. Plant Physiology. 162: 711-717

(http://www.sciencedirect.com/science?

_ob=ArticleURL&_udi=B7GJ7-4FPX2FM-2&_user=10&_coverDate=06%2F14%2F200 5&_rdoc=1&_fmt=high&_orig=search&_origin=search&_sort=d&_docanchor=&view= c&_searchStrId=1500854915&_rerunOrigin=scholar.google&_acct=C000050221&_vers ion=1&_urlVersion=0&_userid=10&md5=103f1dafd10ac9b23ff779cbfb74b7ae&searcht ype=a).

- 25. Heng Zhong, Farzaneh Teymouri, Brad Chapman, Shahina Maqbool, Robab Sabzikar, Yahia El-Maghraby, Bruce Dale, and Mariam B. Sticklen. (2003). *The dicot pea (Pisum sativum L.) rbcS transit peptide directs the Alcaligenes eutrophus polyhydroxybutyrate enzymes into the monocot maize (Zea mays L.) chloroplasts*. Plant Science 165: 455-462. <u>http://www.sciencedirect.com/science?</u> _ob=ArticleURL&_udi=B6TBH-487V320-1&_user=10&_coverDate=09%2F30%2F200 3&_rdoc=1&_fmt=high&_orig=search&_origin=search&_sort=d&_docanchor=&view= c&_searchStrId=1510559581&_rerunOrigin=google&_acct=C000050221&_version=1& _urlVersion=0&_userid=10&md5=d0ce87f4ee1bf6b1df98ef26a44a9b04&searchtype=a
- Farzaneh Najafi, F. Khavari-Nejad F., Rastgar-Jazi and Mariam B. Sticklen (2007). *Physiological Changes in Pisum sativum L. cv. Green Arrow under NaCl salinity*. Journal of Biological Sciences 10 (16): 2612-2621.
- Gadab C. Ghosh Biswas, Callista Ransom and Mariam B. Sticklen (2006). *Expression of biologically active Acidothermus cellulolyticus endoglucanase in transgenic maize*. Plant Science. 171: 617-623.

- Farzaneh Najafi, Rastgar F., Khavari-Nejad, R. A., and Mariam. B. Sticklen (2005). Salt tolerance in transgenic pea (Pisum sativum L.) plants by P5CS gene transfer. Journal of Plant Biotechnology. 7(4): 1-8.
- 29. Anwaar Ahmad, Shahina Maqbool, Sayes Hashsham and Mariam B. Sticklen (2005). Determination of cryIAb and cryIAc copy number in transgenic Basmati 370 Rice (Oryza sativa L.) plants using Real-time PCR and its comparison with Southern Blot. Journal of Biological Sciences 5:283-288, 2005.
- Hesham F. Oraby, Callista B. Ransom, Alexandra N. Kravchenko and Mariam B. Sticklen (2005). *Barley HVA1 Gene Confers Salt Tolerance in R3 Transgenic Oat*. Crop Science. 45(6): 2 2218-2227.
- 31. Hassan Salehi, Zahra. Seddighi, A.N. Kravchenko and Mariam B. Sticklen (2005). Expression of the cry1Ac in common bermudagrass (Cynodon dactylon [L.] Pers.
 'Arizona Common') via Agrobacterium-mediated transformation and control of black cutworm (Agrostis ipsilon Hufnagel). Journal of American Society of Horticultural Sciences. 130:619-623.
- Anwaar Ahmad, Shahina B. Maqbool, Sayed A. Hashsham, and Mariam B. Sticklen (2005). Determination of cryIAb and cryIAc copy number in transgenic Basmati 370 Rice (Oryza sativa L.) plants using Real-time PCR and its comparison with Southern Blot. J. Biological Sciences 5:283-288.
- Farzaneh Teymouri., Hassan Alizadeh, L. Laureano-Preze., Bruce Dale and Mariam Sticklen (2004). *Effects of Ammonia fiber explosion (AFEX) on the activity of heterologous cellulase enzyme of transgenic plants*. Applied Biochemistry & Biotechnology. 16: 1183-1191
- Shahina Maqbool and Mariam B. Sticklen (2004). *Genetically engineered turfgrasses for pest resistance*. Turfgrass and Environmental Research. 2(2): 1-13. 2004.
- **35.** Ahmad Anwaar, Shahina. Maqbool, Sayed Hashshsham, and Mariam B. Sticklen (2005). *Determining of cry1Ac copy number in transgenic Basmati 370 rice (Oryza sativa L.)*

plants and its comparison with Southern Blot. Journal of Biological Sciences 5: 283-288.

- 36. Prathibha Devi and Mariam Sticklen (2003). In vitro culture and genetic transformation of sorghum by microprojectile bombardment. **Plant Biosystems**. 137: (3) 249-254.
- Anwaar Ahmad, Heng Zhong, W. Wang and Mariam B. Sticklen. (2002). Shoot apical meristem: In vitro regeneration and morphogenesis in wheat (Triticum aestivum L.). In-Vitro Cellular and Developmental Biololgy (IVCDB)-PLANT. 38: 163-167.
- Pretibha Devi and Mariam B. Sticklen (2002). *Genetic engineering of pearl millet though meristem primordia system*. Euphytica. 125: 145-150.
- 39. Shahina B. Maqbool, Heng Zhong, Yaya El-Maghraby, Wang, Anwaar Ahmad, Benli Chai and Mariam B. Sticklen (2002). *Competence of oat (Avena sativa L.) shoot apical meristems for integrative transformation, inherited expression and osmatic tolerance of hva1 transgene.* Theoretical Applied Genetics 105:201-208.
- 40. Pretibha Devi and Mariam B. Sticklen (2001) *Culturing shoot-tip clumps of pearl millet* [*Pennisetum glaucum (L.) R. Br.] and optimal microprojectile bombardment parameters for transient expression*. **Euphytica** 125: 45-50.
- Pretibha Devi & Mariam B. Sticklen (2001) Culturing shoot-tip clumps of Sorghum bicolor (L.) Moench and optimal microprojectile bombardment parameters for transient expression. Journal of Cytology and Genetics 2 (NS): 89-96.
- 42. Shahina B. Maqbool, Pretibha Devi and Mariam B. Sticklen. (2001). *Biotechnology:* Advances for the Genetic improvement of sorghum (Sorghum bicolor (L.) Moench).
 Special Issue, In vitro Cell. Dev. Biol. PLANT. 37: 5-10.
- Pretibha Devi, Heng Zhong, Mariam B. Sticklen. (2000). In vitro morphogenesis of pearl millet [Pennisetum glaucum (L.) R. Br.]: Efficient production of multiple shoots and inflorescences from shoot apices. Plant Cell Report 19 (6): 546-550.

- Chen-An Liu, Heng Zhong, James Vargas, Donald Penner, and Mariam B. Sticklen (1998). Prevention of fungal diseases in transgenic bialaphos and glufosinate-resistant creeping bentgrass (Agrostis palustris). Weed Science 46: 139-146.
- Heng Zhong, W. Wang and M. B. Sticklen (1998). In vitro morphogenesis of Sorghum bicolor (L.) Moench: Efficient plant regeneration from shoot apices. J. Plant Physiol. 153: 719-726.
- Benli Chai and Mariam B. Sticklen (1998). *Application of biotechnology in turfgrass improvement*. A review paper in Crop Science 38: 1320-1338.
- Heng Zhong, Shibo Zhang, B. Sun, Donald Warkentin, and Mariam B. Sticklen (1996). The competence of maize shoots meristems for integrative transformation and inherited expression of transgenes. Plant Physiology 110: 1097-1107.
- Shibo Zhang, Heng Zhong, and Mariam B. Sticklen (1996). Production of multiple shoots from shoot apical meristems of oat (Avena sativa L.). Journal of Plant Physiolgy 148: 667-671.
- 49. Heng Zhong, Donald Warkentin, B. Sun, Shibo Zhang, Ray Wu., and Mariam B. Sticklen (1996). *Analysis of the functional activity of the 1.4 kb 5'-region of the rice actin 1 gene in stable transgenic plants of maize (Zea mays L.).* **Plant Science** 116: 73-84.
- 50. Shibo Zhang, Donald Warkentin, B. Sun, Heng Zhong, and Mariam B. Sticklen (1996). Variation in the inheritance of expression among subclones for unselected (uidA) and selected (bar) transgenes in maize (Zea mays L.). Theoretical and Applied Genetics. 92: 752-761.
- Neelam Yadav and Mariam B. Sticklen (1995). Direct and efficient regeneration of Solanum tuberosum cv. Bintje. Plant Cell Report 14: 645-647.
- Mariam B. Sticklen and Mark G. Bolyard (1994). *Refinement of physiological roles for cerato-ulmin by analogy with other hydrophobins*. Trends in Microbiology 2(6): 213-217 (Invited Review).

- 53. Luc Duchesne, Robert Jeng, MartinHubbes, and Mariam B. Sticklen (1994). *The accumulation of mansonones E and F in callus cultures of elms in response to inoculation with Ophiostoma ulmi*. Can. J. Plant Pathology 16: 118-121.
- James L. Sherald, Ravindra K. Hajela, and Mariam B. Sticklen (1994). A Dutch elm disease resistant triploid American elm. Canadian Journal of Forest Science. 24: 647-653.
- Reynaldo Ebora and Mariam B. Sticklen (1994). Resistance of several species of lepidopteran insects to transgenic potato plants. Journal of Economic Entomology. 77: 1114-1122.
- Larry S. Graham and M. B. Sticklen (1994). *Plant chitinases*. Can. J. Bot. 72:1057-1083.
- 57. Mariam B. Sticklen and Mark G. Bolyard (1993). *Cerato-ulmin: a hydrophobic fungal toxin associated with Dutch elm disease*. **Trends in Microbioly**. 2: 213-217.
- 58. Heng Zhong, Mark G. Bolyard, C. Srinivasan, and Mariam B. Sticklen (1993). Transgenic plants of creeping bentgrass (Agrostis palustris Huds.) obtained by microprojectile bombardment of embryogenic callus. Plant Cell Report. 13: 1-6.
- 59. Ravindra K. Hajela, Larry Graham and Mariam B. Sticklen (1993). Nucleotide sequences of a cDNA encoding a chitinase like polypeptide from American elm (Ulmus americana).
 Plant Molecular Biology. 23: 915.
- Ravindra Hajela, Mark G. Bolyard, Neerja Hajela, F. Santamour, and Mariam B. Sticklen (1992). A simple transformation system using adventitious shoot multiplication of Amelanchier laevis. Hort Science 28: 330-332.
- 61. Mark G. Bolyard and Mariam B. Sticklen (1992). *Expression of a recombinant Dutch elm disease toxin in Escherichia coli*. Molecular Plant-Microbe Interactions. 5: 478-482.
- 62. Heng Zhong, C. Srinivasan, and Mariam B. Sticklen (1992). *Morphogenesis of corn (Zea mays L.) in vitro II. Transdifferentiation of shoots, tassels, and ear primordial from corn shoot tips.* **Planta** 187: 483-489.

- 63. Jeng Cheng, Mark Bolyard, Ramesh Saxena, and Mariam B. Sticklen (1992). *Production of insect resistant potato by genetic transformation with a ∂-endotoxin gene from Bacillus thuringiensis var. kurstaki*. **Plant Science** 81: 83-91.
- 64. Heng Zhong, C. Srinivasan, and Mariam B. Sticklen (1992). *Morphogenesis of corn (Zea mays L.) in vitro I. Formation of multiple shoot clumps and somatic embryos from shoot tips.* **Planta** 187: 490-497.
- Heng Zhong, C. Srinivasan, and Mariam B. Sticklen (1991). Plant regeneration via somatic embryogenesis in bentgrass (Agrostis palustris Huds). Plant Cell Reprt 10: 453-456.
- Mariam B. Sticklen (1991). Direct somatic embryogenesis from rice mature root. J. Plant Physiology. 138: 577-580.
- Mark G. Bolyard, C. Srinivasan, Jeng Cheng, and Mariam B. Sticklen (1991). Shoot regeneration from leaf explants of American and Chinese elm. Hort Science. 26: 1554-1557.
- 68. Mariam B. Sticklen, Mark G. Bolyard, Ravindra K. Hajela, and Luc Duchesne (1990). *Molecular and cellular aspects of Dutch elm disease*. **Phytoprotection** 72: 1-13.
- 69. Mark G. Bolyard, Ravindra K. Hajela, and Mariam B. Sticklen (1990). *Microprojectile and Agrobacterium-mediated transformation of Pioneer elm*. J. Arboriculture 17: 34-37.
- 70. Luc. C. Duchesne, Robert S. Jeng. Martin Hubbes, and Mariam B. Sticklen (1990). Accumulation of mansonones E and F in seedlings of Ulmus americana in response to inoculation with Ophiostoma ulmi. Trees: Structure and Function 4: 187-190.
- Robert D. Lineberger, Mariam Behrouz Sticklen, Paula M. Pijut, M. A. Kroggell, C. V. M. Fink, and S. C. Domir (1990). Use of protoplast, cell and shoot tip culture in an elm germplasm improvement program. Acta Horticultute. 280: 247-253.
- 72. Mariam Behrouz Sticklen, S.C. Domir, and Robert D. Lineberger. (1986). *Shoot regeneration from protoplasts of Ulmus x Pioneer*. **Plant Science** 47: 29-34.

- V. M. Fink, Mariam Behrouz Sticklen, and Robert D. Lineberger. (1986). In vitro organogenesis from shoot tip, internode, and leaf explants of Ulmus x Pioneer. Plant Cell, Tissue, and Organ Culture 7: 237-245.
- 74. Mariam Behrouz Sticklen, Robert D. Lineberger and Subash C. Domir. (1985). *Isolation and culture of Ulmus x Homestead protoplasts*. **Plant Science** 41: 117-120.

Invited Book Chapters, Published Conference Proceedings, and Published Exhibition:

- Matakas Jason and M. Sticklen (2009). "Plants as factories for Industrial enzymes, Bioplastics and other Novel biomaterials" (chapter 35). In: Ed (Arie Altman and Mike Hasegawa).Plant biotechnology 2010: Basic aspects and agricultural implications. Elsevier Publ. Co. In progress.
- Callista B. Ransom and Mariam B. Sticklen (2009) PRODUCTION OF HETEROLOGOUS HYDROLYSIS ENZYMES WITHIN CROP BIOMASS FOR BIOFUEL ETHANOL. In Eds: Horst W. Doelle, Edgar J. DaSilva], Encyclopedia of Life Support Systems (EOLSS), Oxford, UK, [http://www.eolss.net] [Retrieved February 26, 2009].
- Shahina B. Maqbool, Heng Zhong Hesham F Oraby and Mariam B Sticklen (2009). Transformation of oats and its application to improving osmotic stress tolerance. In: ed. (Huw D. Jones and Peter R. Shewry), Transgenic Wheat, Barley and Oats: Production and Characterization Protocol Methods in Molecular Biology, Vol. 478, pp. 149-168, 2008. Publisher Humana Press. Book ISBN 978-1-58829-961-1 (Electronic: 978-1-59745-379-0)
- Jowkar M. and M. Sticklen book chapter on Jowkar M and M.B. Sticklen (2009).
 Biotechnological Applications to Narcissus Research Jaime A. Teixeira de Silva (Ed.). In: Floriculture, Ornamental and Plant Biotechnology (FOPB) Series. Vol. 5.
- Salehi, H., M.L. Chai and M.B. Sticklen (2009). Genetic Transformation of Turfgrass for Insect Resistance. Global Sci. Books Ltd. London, U.K.

- Ransom, CA. and Mariam B. Sticklen 2008. Production of Heterologous Hydrolysis Enzymes within Crop Biomass for Biofuel Ethanol. In: Agricultural Biotechnology: Biotechnology in the UNESCO Sponsored Encyclopedia for Life Support (EOLSS). Horst Dohle (Ed).
- Salehi H. and M.B. Sticklen. 2008. Turfgrass in-vitro culture and genetic engineering. 2007. Jaime A. Teixeira de Silva (ed.). In: Floriculture and Ornamental Biotechnology (FOB). Global Science Books. ISSN: 1749-0294.
- S. Maqbool, H. Zhong and M. B. Sticklen (2007). Genetic engineering of oat (*Avena sativa L*.) via the Biolistic bombardment of shoot apical meristems. Chapter 5. In K. Wang and B. Frame. Transgenic Crops. Ed. P. 63-77.
- M. Sticklen (2004). Chloroplast transgenesis. In: Bioconfinement of genetically engineered organisms. The U.S. National Academy of Sciences NRC Report. Natl. Acad. Sci. Press. Pages 79-81.
- M. Sticklen (2004). Bioconfinement of genetically engineered turfgrasses. The U.S. National Academy of Sciences NRC Report. Natl. Acad. Sci. Press. Pages 115-121.
- M. Sticklen (2004). Tissue and organ-specific gene expression for bioconfinement. The U.S. National Academy of Sciences NRC Report. Natl. Acad. Sci. Press. Pages 93-96.
- S. Maqbool., Zhong, H. and Sticklen, M.B. (2004). Genetic Engineering of Oat (*Avena sativa* L.): Shoot apical meristems for integrative transformation and sustainable expression. (2004). In: Ian Curtis (Ed.). TCOTW. Kluwer Press. In press.
- S. Maqbool and M. B. Sticklen (2004). Genetically engineered turfgrasses for pest resistance. USGA Turfgrass Research and Environmental On Line. In press.
- P. Devi, Heng Zhong and Mariam Sticklen (2003) Production of transgenic sorghum plants with the barley dehydrative stress-related HVA1 gene. In: N. Seetharama and Ian Godwin , eds. Sorghum Tissue Culture and Transformation. Science Publishers Inc., New Hampshire, USA.

- S. Maqbool, Zhong, H. and Stickelen, M.B. (2004). Genetic Engineering of Oat (*Avena sativa* L.): Shoot apical meristems for integrative transformation and sustainable expression. (2004). In: Ian Curis (Ed.). TCOTW. Kluwer Press.. In Press.
- D. E. Green, Vargas J. M., Chai B., Dykema N., and Sticklen M. B. (1999). The use of transgenic plants to confer resistance to brown patch caused by *Rhizoctonia solani* in *Agrostis palustris*. In: John Clark (ed.). Fate of turfgrass chemicals and pest management approaches. Am. Chem. Soc. Press. USA.
- R. Ebora and M. B. Sticklen (1999). Insect control via genetic engineering of plants with Bt genes. Proc. Intl. Workshop on *Bacillus thuringiensis*. Sergio Orduz-Peralta (ed.), Aug. 1996, Bogota, Columbia.
- M. Sticklen and H. Zhong (1999). Maize Meristem: A sustainable explant for transformation of maize. In: Y. P. S. Bajaj (ed.). Biotechnology in Agriculture and Forestry. Springer Verlag, Publs. Berlin, Germany.
- D. Warkentin, B. Chai, C.-A. Liu, R. K. Hajela, H. Zhong, and M. B. Sticklen (1998). Development of transgenic creeping bentgrass (*Agrostis palustris* Huds.) for fungal disease resistance. In: M. B. Sticklen and M. Kenna (eds). Turfgrass Biotechnology: Cellular and Molecular Genetic Approaches to Turfgrass Improvement. Ann Arbor Press. pp. 153-161.
- H. Zhong, C.-A. Liu, J. Vargas, D. Penner, and M. B. Sticklen (1998). Simultaneous control of weeds, dollar spot, and brown patch diseases in transgenic creeping bentgrass. In: M. B. Sticklen and M. Kenna (eds). Turfgrass Biotechnology: Cellular and Molecular Genetic Approaches to Turfgrass Improvement. Ann Arbor Press. pp. 203-210.
- M. B. Sticklen, D. Warkentin, C.-A. Liu, R. K. Hajela, L. Graham, H. Zhong, B. Peterson, J. Vargas, and B. Branham (1996). Genetic transformation in *Agrostis palustris* Huds. (creeping bentgrass). In: Y. P. S. Bajaj (ed.). Biotechnology in Agriculture and Forestry. Plant Protoplasts and Genetic Engineering of Plants. Springer Verlag, Publs. Berlin, Germany. Vol. 38. pp. 152-163.
- 22. M. B. Sticklen, R. K. Hajela, M. G. Bolyard, J. L. Sherald, and L. S. Graham (1994). Advances in gene cloning and genetic engineering of elms. In: Y. P. S. Bajaj (ed.).

Biotechnology in Agriculture and Forestry. Plant Protoplasts and Genetic Engineering of Plants. Vol. V. Springer Verlag, Publs. Berlin, Germany. pp. 397-406.

- R. V. Ebora and M. B. Sticklen (1993). Genetic transformation of potato for insect resistance. In: G. Zehnder, M. L. Powelson, R. K. Jansson, and R. V. Raman (eds.). Advances in Potato Pest Biology and Management. APS Publ., St. Paul, Minn. pp. 509-522.
- J. Cohen, J. Dodds, J. Chambers, M. Sticklen, M. Wilson, M. Sondhl, and B. Bedford (1993). Agricultural Biotechnology for Sustainable Productivity: A U.S. Agency for International Development initiative. Biotechnology R & D Trends. New York Acad Sci. 700: 102-111.
- R. K. Hajela and M. B. Sticklen (1993). Adaptation of plants to stressful environments while preserving productivity. In: Davenport T. and Harrington H. M. (eds.). Symposium on Plant Stress in Tropical Environment. Kona-Kailua, Univ. of Hawaii Press, Sept. 20-25, 1992.
- S. C. Domir, M. B. Sticklen, M. G. Bolyard, and L. D. Lineberger (1993). Micropropagation of DED-resistant elms using protoplast and tissue culture techniques. In: Sticklen M. B. and Sherald J. L. (eds.). Dutch Elm Disease Research: Cellular and Molecular Approaches. New York: Springer-Verlag. pp. 81-88.
- R. Hajela and M. B. Sticklen (1993). Cloning of pathogenesis-related genes from *Ulmus* americana. In: Sticklen M. B. and Sherald J. L. (eds.) Dutch Elm Disease Research: Cellular and Molecular Approaches. New York: Springer-Verlag. pp. 193-207.
- M. G. Bolyard and M. B. Sticklen (1993). Strategies for the production of disease-resistant elms. In: Sticklen M. B. and Sherald J. L. (eds.) Dutch Elm Disease Research: Cellular and Molecular Approaches. New York: Springer-Verlag. pp. 171-180.
- M. B. Sticklen, R. K. Hajela, N. Hajela, D. McElroy, J. Cao, and R. Wu (1991). Polygenic transformation of rice using a microprojectile delivery of DNA. In: G. Khush (ed.). Rice Genetics II. IRRI Publ. Manila, Philippines. pp. 625-635.

- M. B. Sticklen (1991). Genetic engineering of plants: An alternative to pesticides and a new component of integrated pest management. In: D. L. Weigmann (ed.). Pesticides for the Next Decades: The Challenges Ahead. VPI Publ. Blacksburg, VA. pp. 522-566.
- M. B. Sticklen (1990). Stable transformation of rice and regeneration of fertile plants. In: D. Schumacher (ed.). MidWest Plant Biotechnology Research. Purdue Univ. Publ. West Lafayette, IN. pp. 191-198.
- M. B. Sticklen, M. G. Bolyard, and J. Cheng (1990). Methods for *in vitro* selection of Dutch elm disease resistant American elms and expression of synthetic DNA encoding a Dutch elm disease toxin in *E. coli*. In: V. Steenackers and P. Smets (eds.). pp. 44-56.
- H. Zhong, M. Bolyard, C. Srinivasan, and M. B. Sticklen (1992). Analysis of activity of rice actin 1 5' sequences in greenhouse grown transgenic creeping bentgrass. In: C. You and Z. Chen (eds.). Asia-Pacific Conference on Agricultural Biotechnology (APAB). Aug. 20-24, 1992. Beijing, China.
- M. B. Sticklen, W. Zhang, D. McElroy, H. Zhong, C. Srinivasan, and R. Wu (1992). Transformation of rice followed by confirmation of stability of gene integration and expression in plant progenies. In: D. Schumacher (ed.). Proc. MidWest Plant Biotechnology Consortium, Indianapolis, IN. Nov. 12-14, 1991.
- M. B. Sticklen, J. Chambers, A. Jelen, P. Gilbert, C. Jany, T. Johnson, J. Cheng, M. G. Bolyard, R. Saxena, R. Ebora, and C. Gawron-Burke (1992). A new single gene outside of crop species and transfer of single genes into crop species for insect resistance. In: E. E. Ortman (ed.). The Eighth Biennial Workshop on Plant Resistance to Insects. Indianapolis, IN. Feb. 23-27, 1992. Purdue Univ. Publ. 18: 11-12
- M. Sticklen, R. K. Hajela, M. G. Bolyard, L. Graham (1993). Advances in gene cloning and genetic engineering of elms. In: Plant Protoplasts and Genetic Engineering of Plants. Bajaj (ed.) Vol. V. Springer Verlag Publs. Berlin, Germany.
- R. V. Ebora and M. B. Sticklen (1993). Genetic transformation of potato for insect resistance. In: G. Zehnder, M. L. Powelson, R. K. Jansson, and K. V. Raman (eds.). Advances in Potato Pest Biology and Management. APS Publ., St. Paul, Minn.

- M. B. Sticklen, R. K. Hajela, N. Hajela, D. McElroy, J. Cao, and R. Wu. (1991). Polygenic transformation of rice using a microprojectile delivery of DNA. In: G. Khush (ed.). Rice Genetics II. International Rice Research Institute Publ. Manila, Philippines. pp. 625-635.
- Shahina B. Maqbool, Anwaar Ahmad, and Mariam B. Sticklen (2002). *Past, present, and future of turfgrass biotechnology*. Proceeding of the 72nd annual Michigan Turfgrass Conference Jan 21-24, 2002.
- 40. Pretibha Devi and Mariam Sticklen (Jan. 1999). Production of transgenic sorghum plants with chitinase gene. In: Ed. C. Manoharachary. Proceedings of International Conference on Frontiers in Fungal Biotechnology and Plant Pathogen Relations..
- 41. Donald Warkentin, B. Chai, A. C. Liu, R. K. Hajela, H. Zhong, and M. B. Sticklen (1998). *Development of transgenic creeping bentgrass (Agrostis palustris Huds.) for fungal disease resistance*. International Conference in Turfgrass Biotechnology Aug. 1995. East Lansing, MI. In: M. B. Sticklen and M. Kenna (eds). Turfgrass Biotechnology: Cellular and Molecular Genetics Approaches to Turfgrass Improvement. Ann Arbor Press. pp. 153-161.
- 42. Heng Zhong, Chen-An Liu, James Vargas, Donald Penner, and Mariam B. Sticklen (1998). *Simultaneous control of weeds, dollar spot, and brown patch diseases in transgenic creeping bentg*rass. International Conference in Turfgrass Biotechnology Aug. 1995. East Lansing, MI. In: M. B. Sticklen and M. Kenna (eds.). Turfgrass Biotechnology: Cellular and molecular genetics approaches to turfgrass improvement. Ann Arbor Press. pp. 203-210.
- 43. Reynaldo V. Ebora and Mariam B. Sticklen (1998). *Insect control via genetic engineering* of plants with Bt genes. Proc. Intl. Workshop on *Bacillus thuringiensis*. Sergio Orduz-Peralta (ed.), Aug. 1996, Bogota, Columbia.
- 44. Reynaldo V. Ebora and Mariam B. Sticklen (1993). *Genetic transformation of potato for insect resistance*. In: G. Zehnder, M. L. Powelson, R. K. Jansson, and K. V. Raman (eds.). International Conference in Advances in Potato Pest Biology and Management. Jacksonville, Co. APS Publ., St. Paul, Minn. pp. 509-522.

- 45. Ravindra K. Hajela and Mariam B. Sticklen (1993). Adaptation of plants to stressful environments while preserving productivity. In: Davenport T. and Harrington H. M. (eds.). Symposium on Plant Stress in Tropical Environment. Kona-Kailua, Univ. of Hawaii Press, Sept. 20-25, 1992.
- 46. S. C. Domir, Mariam B. Sticklen, Mark G. Bolyard, and Danniel Lineberger (1993). *Micropropagation of DED-resistant elms using protoplast and tissue culture techniques*. International Conference on Dutch Elm Disease. East Lansing, Mi. Aug. 1993. In: Sticklen M. B. and Sherald J. L. (eds.). Dutch Elm Disease Research: Cellular and Molecular Approaches. New York: Springer-Verlag. pp. 81-88.
- 47. Ravindra Hajela and Mariam B. Sticklen (1993). Cloning of pathogenesis-related genes from Ulmus americana. International Conference on Dutch Elm Disease. East Lansing, Mi. Aug. 1993. In: Sticklen M. B. and Sherald J. L. (eds.) Dutch Elm Disease Research: Cellular and Molecular Approaches. New York: Springer-Verlag. pp. 193-207.
- 48. Mark G. Bolyard and Mariam B. Sticklen (1993). Strategies for the production of disease-resistant elms. International Conference on Dutch Elm Disease. East Lansing, Mi. Aug. 1993. In: Sticklen M. B. and Sherald J. L. (eds.) Dutch Elm Disease Research: Cellular and Molecular Approaches. New York: Springer-Verlag. pp. 171-180.
- 49. Heng Zhong, Mark Bolyard, C. Srinivasan, and Mariam B. Sticklen (1992). *Analysis of activity of rice actin 1 5' sequences in greenhouse grown transgenic creeping bentgrass*. In: C. You and Z. Chen (eds.). Asia-Pacific Conference on Agricultural Biotechnology (APAB). Aug. 20-24, 1992. Beijing, China.
- Mariam B. Sticklen, W. Zhang, Dan McElroy, Heng Zhong, C. Srinivasan, and Ray Wu. (1992). *Transformation of rice followed by confirmation of stability of gene integration and expression in plant progenies*. In: D. Schumacher (ed.). Proc. MidWest Plant Biotechnology Consortium, Indianapolis, IN. Nov. 12-14, 1991
- Mariam B. Sticklen (1992). New approaches for transferring biotechnology to third world countries. Agricultural Biotechnology Showcase and Life Science Symposium. Iowa State University, Ames, Iowa. March 4-6, 1992.

- Mariam. B. Sticklen (1992). *Genetic engineering of African crops for pest resistance*.
 African Regional Biotechnology Symposium, Nairobi, Kenya. Feb. 17-21, 1992.
- 53. Mariam B. Sticklen, J. Chambers, A. Jelen, P. Gilbert, C. Jany, T. Johnson, J. Chang, M. Bolyard, R. Saxena, R. Ebora, and C. Gawron-Burke (1992). *A new single gene outside of crop species and transfer of single genes into crop for insect resistance*. In: E. E. Ortman (ed.). Ann. Plant Resistance to Insects. The Eight Biennial Workshop on Plant Resistance to Insects. Indianapolis, IN. Feb. 23-27, 1992. Purdue Univ./USDA-ARS Publ. Vol. 18: 11-12.
- 54. Mariam B. Sticklen, Heng Zhong (1991). Genetic engineering of rice for stem borer resistance. Proceedings of the Fifth Annual Meeting of the International Program on Rice Biotechnology. Oct. 2-5, 1991. Tucson, AZ.
- 55. Mariam B. Sticklen, Sandra Meiners, Ramesh Saxena, and Ravindra Hajela (1991). Potential for transforming a chitinase gene from Azadirachta indica to economically important crops. In: S. Ahmed (ed.). Proc. Pacific XVII Science Congress. East West Center, Honolulu, Hawaii. May 25 - June 2, 1991.
- 56. Robert D. Lineberger, Mariam B. Sticklen, P. M. Pijut, M. A. Kroggel, C. V. M. Fink, and S. C. Domir (1989). Use of protoplast, cell, and shoot tip culture in an elm germplasm improvement program. In: S. Sansavini (ed). Proc. Intl. Plant Biotech. Conf. Bologna, Italy. Oct. 1989.
- 57. Jason Matakas, Thang Nguyen, Sang-Hyuck Park and Mariam Sticklen. Expediting the Cellulosic Biofuels Agenda: A Petro-Industry Model. 15th Eurropean Biotechnology Symposium. Grand Cavalier Convention Centre, Istanbul, Turkey. Sept 22-27, 2012.
- Mariam Sticklen and Jason Matakas (2012) Using the Petro-Industry Model: Recombinant Co-Products to Increase Cellulosic Biofuels Revenues. Proceedings of the CPBR Symposium. Feb 5-7, 2012. Washington DC
- 59. System Development for Genotype-Independent Genetic Transformation of Soybean
 Followed by Development of Soybean Cyst Nematode & Sudden Death Syndrome Resistant
 Plants. Proceedings of the CPBR Symposium. Feb 5-7, 2012. Washington DC

- 60. Mariam Sticklen (2011). Corn Gene Therapy Used for Low-Cost Ethanol Production. <u>http://www.micorn.org/downloads/News_Releases/Aug_19_2011%20Gene_Therapy.pdf</u>
- Mariam Behrouz. Sticklen. (1989). Somatic hybridization and evaluation of RFLP and dimer isozyme molecular markers for confirmation of hybridity of elm fusion products. Proc. International Union for Forestry Research Organization. Iowa State University, Ames Iowa. Nov. 1988.
- 62. Mariam Sticklen. 2006. Brochure. *Biomass Ethanol. How, Why and When*. Prepared and presented at Ag Expo. East Lansing, MI.
- 63. M. Sticklen. 2006. H. Oraby, et al. 2006. Large-*scale production of human anti-HIV in plants for clinical testing*. ASA-CSSA-SSSA International Meeting Indianapolis, IN.
- 64. M. Sticklen. 2006. Production of human secretory protease inhibitor in plants. Washington, DC.
- M. Sticklen et al.. 2006. Converting rice straw into fermentable sugars for alcohol fuels.
 28th Symp. on Biofuels & Chemicals. 28th Symp in Biofuels & Chemicals. Nashville, Tennesse.
- M. Sticklen et al. 2006. Heterologous Acidothermus cellulolyticus 1,4-β-endoglucanase
 E1 Produced within the Corn Biomass Converts Corn Stover into Glucose. 28th Symp. on
 Biofuels & Chemicals. Nashville, TN
- 67. M. Sticklen et al.. 2006. Biofuel for Bioeconomy. MAP Program. MSU, East Lansing, MI
- 68. Mariam B. Sticklen (2006). *Biomass Ethanol. How, Why and When*. Prepared, displayed and presented at Ag Expo.
- 69. M. Sticklen et al. 2006. *Biologically-active E1 in corn apoplast converts cellulose to glucose*. ASA-CSSA-SSSA International Meeting Indianapolis, IN.
- M. Sticklen. 2006. Production of Acidothermus cellulolyticus endoglucanase (E1) enzyme in transgenic rice. The 28th Symp on Biofuels & Chemicals. Tennessee.

- M. Sticklen et al., 2006. Efficient Production of Microbial Cellulase Within Recombinant Maize Biomass Converts AFEX-Pretreated Corn Stover into Fermentable Sugars for Alcohol Fuels. ASA-CSSA-SSSA International Meeting Indianapolis, IN.
- M. Sticklen et al. 2006. Efficient Production of Microbial Cellulase Within Recombinant Maize Biomass Converts AFEX-Pretreated Corn Stover into Fermentable Sugars for Alcohol Fuels. PBG Symp. Et ansing, MI.
- M. Sticklen. 2006. *Cheap production of human wound healing protein in plants*. Capital Hill, Washington, DC
- 74. M. Sticklen et al. 2005. *Producing the Microbial Hydrolysis Enzymes within the Biomass Crops via Genetic Engineering*. For invited speech of March 10, 2005.
- 75. M. Sticklen et al. 2005. Convergence of Goals: Increasing the Plant Biomass for Biofuels and Bioremediation while Producing Hydrolysis Enzymes within the Biomass Plants. Conference on World Congress on Industrial Biotechnology and Bioprocessing.
- 76. M. Sticklen (2005). Biotechnology Display at the MST at MSU,
- 77. M. Sticklen (2004). Congressional display in DC: *Production of ethanol from corn leaves via genetic engineering* (Feb. 2004)
- M. Sticklen et al. Feb 2004. *Chloroplast transgenesis to avoid GMO problems*. CPBR Annual Symposium.
- M. Sticklen et al. 2004. Delopment of Transgenic Non-Food Biomass Crops for Renewable Energy and Cleaner Environment. 27th Symposium on Biotechnology for Fuels and Chemicals.
- M. Sticklen. 2004. *Transgenic Corn Free From the GMO Risks*. CPBR Congressional Reception. Capitol Hill, Washington, DC.
- M. Sticklen, F. Teymouri, S. Maqbool and B. Dale. 2004. CPBR Annual Conference. Washington, DC.

- F. Teymouri, L. Laureano-Perez, H. Alizadeh, M. B. Sticklen and B. Dale (2003). *Effects* of pretreatment on activity of plant-produced cellulases and xylonase enzymes. Proc. Of Symposium on Biotechnology for fuels and chemicals. Breckenridge, Colorado. May 4-7, 2003. Prepared by National Renewable Energy Laboratory, Golden CO. P. 172.
- M. B. Sticklen, H. Zhong, F. Teymouri, B. Dale, R. Sabzikar, and H. Oraby (2003). *Transfer of microbial polyhydroxybutyrate (PHB) and cellulose genes to maize for production of biodegradable plastic, fermentable sugars and other chemicals*. Proc. Of Symposium on Biotechnology for fuels and chemicals. Breckenridge, Colorado. May 4-7, 2003. Prepared by National Renewable Energy Laboratory, Golden CO. P. 22.
- 84. M. B. Sticklen, F. Teymouri, H. Zhong, R. Sabzikar, B. Dale, and R. Sanzikar (2003). Production of microbial cellulases in maize (Zea mays L.) chloroplast and apoplast or cytosol for biofuel. Consortium for Plant Biotechnology Research Annual Conference. Washington, DC.
- 85. H. Zhong, F. Teymouri, D. Dale, B. Chapman, R. Sabzikar and M. B. Sticklen (2003). *Genetically engineered corn leaves for production of biodegradable plastic*. Consortium for Plant Biotechnology Research Annual Conference. Washington, DC.
- 86. B. Chapman, Zhong H, Chai B., Sabzikar R., Warkentin D., and Sticklen (1999). A monocot pea rbcS signal peptide functions in directing PHB genes into a dicot (Maize) chloroplasts. Genetics Program Symposium on Transcription Regulation. May 22, 1999. Michigan State University. East Lansing. MI.
- M. Sticklen and B. Dale (1998). *Producing biodegradable plastic in corn plants*. Exhibition at the Capitol Hill: A presentation to the Senators of Midwest States. Washington, DC.
- M. Sticklen and B. E. Dale (1998). Completion of feasibility studies on production of biodegradable plastic in corn. Consortium for Plant Biotechnology Research. Washington, DC.
- 89. M. Sticklen, R. C. Dale, and R. Wu (1998). *Production of fungal lignin-degrading enzymes in maize*. Consortium for Plant Biotechnology Research. Washington, DC.

- 90. M. Sticklen, B. Chai, H. Zhong, and J. Vargas (1998). *Production of disease resistant creeping bentgrass via genetic engineering*. ASA Ann. Conf. Anaheim, CA.
- 91. M. Sticklen, H. Zhong, J. Vargas, and D. Penner (1998). Simultaneous control of weeds and pathogen in transgenic herbicide resistant creeping bentgrass. ASA Ann. Conf. Anaheim, CA.
- 92. M. Sticklen and H. Zhong (1998). Corn shoot meristem: A sustainable explant for integrative transformation and inherited expression of transgenes. ASA Ann. Conf. Anaheim, CA.
- 93. S. Zhang, H. Zhong, and M. B. Sticklen (1997). Production of multiple shoots from shoot apical meristems of oat (Avena sativa L.). The Rockefeller Foundation Annual Biotechnology Conf. Koala Lumpur, Malaysia.
- 94. H. Zhong, D. Warkentin, B. Sun, S. Zhang, Wu T., Wu R., and M. B. Sticklen (1997). Analysis of the functional activity of the 1.4 kb 5'-region of the rice actin 1 gene in stable transgenic plants of maize (Zea mays L.). The Rockefeller Foundation Annual Biotechnology Conf. Koala Lumpur, Malaysia.
- R. Ebora and M. B. Sticklen (1995). Development of insect resistant potato via genetic engineering. International Biotechnology Conference on Bacillus thuringiensis. Aug. 1996, Bogota, Columbia.
- 96. H. Zhong, M. G. Bolyard, C. Srinivasan, and M. B. Sticklen (1996). System development for transgenic plants of creeping bentgrass. International Conference on Turfgrass Biotechnology. East Lansing, MI.
- 97. D. Warkentin, B. Chai, C.-A. Liu, R. K. Hajela, H. Zhong, and M. B. Sticklen (1996). Development of transgenic creeping bentgrass for fungal disease resistance. International Conference on Turfgrass Biotechnology: Cellular and Molecular Genetic Approaches to Turfgrass Improvement. East Lansing, MI.
- 98. H. Zhong, C.-A. Liu, J. Vargas, D. Penner, and M. B. Sticklen (1998). Simultaneous control of weeds, dollar spot, and brown patch diseases in transgenic creeping bentgrass.

International Conference on Turfgrass Biotechnology: Cellular and Molecular Genetic Approaches to Turfgrass Improvement. East Lansing, MI.

- 99. R. V. Ebora and M. B. Sticklen (1993). *Genetic transformation of potato for insect resistance*. Ann. Conf. on Potato Biotechnology. International Potato Center, Lima, Peru.
- 100. Cohen, J. Dodds, J. Chambers, M. Sticklen, M. Wilson, M. Sondhl, and B. Bedford (1993). Agricultural Biotechnology for Sustainable Productivity: A U.S. Agency for International Development initiative. ASA Ann. Conference. Iowa State University.
- 101. R. K. Hajela and M. B. Sticklen (1993). Adaptation of plants to stressful environments while preserving productivity. Ann. Conference on Plant Stress Factors. Honolulu, Hawaii.
- 102. R. Hajela and M. B. Sticklen (1993). *Cloning of pathogenesis-related genes from Ulmus americana*. International Conference on Dutch Elm Disease, East Lansing, MI.
- 103. M. G. Bolyard and M. B. Sticklen (1993). *Strategies for the production of diseaseresistant elms*. International Conference on Dutch Elm Disease, East Lansing, MI.
- 104. H. Zhong, M. G. Bolyard, C. Srinivasan, and M. B. Sticklen (1992). Stable expression of b-glucuronidase in bentgrass (Agrostis palustris Huds.) controlled by rice Act1 5' sequences. Pacific Rim Food and Agricultural Biotechnology Conference: Molecular Crop Agriculture for the Pacific Rim. University of California-Davis. June 20-24, 1992. p. 46.
- 105. R. Ebora, J. Cheng, M. G. Bolyard, Ramesh Saxena, D. L. Miller, M. Ebora, and M. B. Sticklen (1992). Pacific Rim Food and Agricultural Biotechnology Conference: Molecular Crop Agriculture for the Pacific Rim. University of California-Davis. June 20-24, 1992. p. 74.
- 106. Zhong, R. Ebora, J. Cheng, M. Ebora, R, Saxena, C. Srinivasan, and M. Sticklen (1992). Stable expression of foreign genes in mature monocot and dicot plants. International Crop Science Congress. Iowa State University, Ames, Iowa. July 14-22, 1992

- 107. J. Cohen, J. Chambers, J. Dodds, M. Sticklen, R. Wu, R. Smith, R. Grumet, M. Sandahl, and J. Barton (1992). A US-AID supported "Agricultural Biotechnology for Sustainable Productivity (ABSP) Project to aid developing nations. International Crop Science Congress. Iowa State University, Ames, Iowa. July 14-22, 1992.
- 108. R. Hajela and M. Sticklen (1992). Adaptation of plants to stressful environments while preserving productivity. Symposium on Plant Stress in Tropical Environments. Kona, Hawaii, Sept. 20-25, 1992.
- 109. H. Zhong, R. Ebora, J. Cheng, M. Bolyard, R. Saxena, C. Srinivasan, D. Miller, and M. Sticklen (1992). *Stable expression of foreign genes in greenhouse grown monocot and dicot plants*. Asia Pacific Conference on Agricultural Biotechnology (APAB). China National Center for Biotechnology Development. Beijing, China. Aug. 20-24, 1992.
- 110. S. Domir, M. B. Sticklen, M. G. Bolyard, and L. D. Lineberger (1992). *Micropropagation of DED-resistant elms using protoplast and tissue culture techniques*. International Dutch Elm Disease Workshop: Recent Approaches to the Dutch Elm Disease Problem. Michigan State University, East Lansing, MI. Aug 1-4, 1992. p. 14.
- 111. R. Hajela and M. B. Sticklen (1992). *Cloning of pathogen-related genes from Ulmus americana*. International Dutch Elm Disease Workshop: Recent Approaches to the Dutch Elm Disease Problem. Michigan State University, East Lansing, MI. Aug 1-4, 1992. p. 21.
- 112. M. Bolyard and M. B. Sticklen (1992). Strategies for production of DED-resistant American elms. International Dutch Elm Disease Workshop: Recent Approaches to the Dutch Elm Disease Problem. Michigan State University, East Lansing, MI. Aug 1-4, 1992. p. 15.
- 113. J. Chambers, M. Sticklen, R. Horsch, and J. Cohen (1992). U.S. Agency for International Development Initiatives in Crop Biotechnology for the Developing World. UCLA Symposium, Keystone, UT, April 10-16, 1992. p. 236.
- 114. M. Sticklen, H. Zhong, W. Barnes, D. McElroy, and R. Wu (1991). Genetic engineering of rice using the microprojectile bombardment system. Fifth Ann. Intl. Program on Rice Biotech. Tucson, AZ. October 2-5, 1991. p. 81.
- 115. H. Zhong, C. Srinivasan, and M. Sticklen (1991). Improvement of plant regeneration efficiency from rice explants for transformation. Fifth Ann. Intl. Program on Rice biotech. Tucson, AZ. October 2-5, 1991. p. 182.
- 116. H. Zhong, C. Srinivasan, and M. B. Sticklen (1991). In vitro manipulation of corn morphogenesis for transformation. Third Intl. Congress of Plant Molecular Biology: Molecular Biology of Plant Growth and Development. Tucson, AZ. October 6-11, 1991. p. 591.
- 117. H. Zhong, M. G. Bolyard, C. Srinivasan, and M. B. Sticklen (1991). Efficient plant regeneration and transformation of creeping bentgrass (Agrostis palustris Huds). Third Intl. Congress of Plant Molecular Biology: Molecular Biology of Plant Growth and Development. Tucson, AZ. October 6-11, 1991. p. 620.
- 118. H. Zhong, C. Srinivasan, and M. B. Sticklen (1991). Improvement of in vitro plant regeneration efficiency from rice explants for transformation. Third Intl. Congress of Plant Molecular Biology: Molecular Biology of Plant Growth and Development. Tucson, AZ. October 6-11, 1991. p. 882.
- 119. M. B. Sticklen (1991). Pitfalls and drawbacks to the utilization of genetically engineered crops and potential strategies to diminish them. Fourth Conf. Intl. Plant Biotech. Network (IPBNet). January 14-18, 1991. San Jose, Costa Rica. p. 34.
- 120. R. Hajela, H. Zhong, N. Hajela, W. Barnes, and M. B. Sticklen (1991). Transformation of rice with a Bacillus thuringiensis toxin gene using the tungsten mediated microprojectile method. Fourth Conf. Intl. Plant Biotech. Network (IPBNet). January 14-18, 1991. San Jose, Costa Rica. p. 23.
- 121. H. Zhong, C. Srinivasan, and M. B. Sticklen (1991). Transformation of corn via Biolistic[™] microprojectile device. Fourth Conf. Intl. Plant Biotech. Network (IPBNet). January 14-18, 1991. San Jose, Costa Rica. p. 23.

- 122. J. Cheng, M. G. Bolyard, and M. B. Sticklen (1991). Integration of a herbicide resistance gene into potato via a protoplast transformation method. Fourth Conf. Intl. Plant Biotech. Network (IPBNet). January 14-18, 1991. San Jose, Costa Rica. p. 34.
- 123. M. G. Bolyard, C. Srinivasan, and M. B. Sticklen (1990). Shoot regeneration system for DED susceptible and putatively resistant American elms. J. Cellular Biochem. Wiley-Liss, Inc., New York. Suppl. 15A. A202.
- 124. R. Hajela, N. Hajela, D. McElroy, and M. B. Sticklen (1990). Transformation of rice using a tungsten mediated microprojectile method. J. Cellular Biochem. Wiley-Liss, Inc., New York. Suppl. 15A:A21
- 125. M. G. Bolyard and M. B. Sticklen (1990). Strategies for producing non-toxic variants of cerato-ulmin, a Dutch elm disease toxin, using synthetic DNA. J. Cellular Biochem. Suppl. 13E. R204
- 126. M. G. Bolyard, C. Srinivasan, and M. B. Sticklen (1990). *Expression of b-glucuronidase from Amelanchier laevis*. HortSci. 2: 130.
- 127. M. B. Sticklen. (1989). *Restriction fragment length polymorphism for conformation of hybridity of elm fusion partners*. 86th Annual Meeting of ASHS, Tulsa, OK. Suppl.
- 128. M. Bolyard and M. B. Sticklen (1989). *Expression of cerato-ulmin from synthetic DNA as a glutathione-S-transferase fusion*. J. Cellular Biochem. Suppl. 14A.
- 129. S. C. Domir, M. B. Sticklen, R. D. Lineberger, L. R. Schreiber, P. Pigut, J. Ichida, and C. Krause (1988). *Approaches to elm germplasm improvement*. Proc. of International Union of Forestry Organization (IUFRO). Iowa State University. Oct. 1988.
- 130. Alani, M. B. Sticklen, M. E. Rumpho, and R. A. Kennedy (1987). Survivability, ADH activity, and isozyme pattern during rice somatic embryogenesis. Am. Assoc. Plant Physiol. 83: 75
- 131. M. B. Sticklen, R. D. Lineberger, and S. C. Domir (1986). Isolation, culture, and fusion of elm protoplasts. Intl Biotech. Symp. in Plant Science: Relevance to Agriculture in the Eighties. Cornell University, Ithaca, N. Y. June, 1986.

132. M. B. Sticklen (1985). *Protoplast isolation and culture of hybrid elm*. HortSci. Suppl. 20: 57-60.

Other Journal Articles:

- 133. Mariam Sticklen (2005). "What Limits Plants Ability to Thrive." Futures: Michigan Agricultural Experiment Station. Spring 2005. Vol. 23, No. 1: 26-27.
- Mariam Sticklen (2005). Dollars and Cents. Research at Michigan State University. 2005 Colander. September page.
- Biofuel production from genetically engineered corn stocks (Dec. 2, 2003). By Allison Lucy. The MSU State News. Front page and Page 2A.
- 136. Biofuel from corn stocks (Dec. 3, 2003). Miami Herald Newspaper.
- Search for cheaper ethanol (Dec. 3, 2003). Associated Press Release.General News and Business Report.
- 138. Maqbool, S. B. Ahmad, A. and Sticklen, M. B. DNA microarrays: discovery of functionally important genes in turfgrass. *MTF News Notes*, Jan 2002.A value-added niche: herbicide resistant bentgrass on the horizon. By Natalie S. Knudson. Seeds and Crops. The Business Digest for Agriculture. Nov. 1996. pp.17-19
- Ebora R. and Sticklen M. B. (1995). Transgenic insect resistant plants: The modern biocontrol and an integral part of pest management. Biocontrol 1: 45-50.
- 140. Good news for American elms (1993). by Dan Hager. Michigan Out-of-Doors Magazine.47: 46-48.
- 141. ABC/US-AID Joint International Project (1992). Details: News of Interest to Members of the Association of the Biotechnology Companies. 9: 9-11
- 142. A new single gene outside of crop species and transfer of single genes into crop species for insect resistance. (1992). Annual Plant Resistance Newsletter, Frank Davis (ed.). 18: 11-12.
- 143. Global partnership promotes sustainable agriculture (1992). Diversity 8: 10-11.

- 144. Genetic engineering of potato for insect resistance (1992). Michigan Potato Industry Commission Reports.
- 145. M. B. Sticklen. (1992). The ABSP project research approach. (1992). BioLink 1: 4-5.
- 146. Mariam Sticklen. A diagnostic kit for Dutch elm disease (1991). Reminder and Hassing.Sept 17 and 18 issues.
- 147. M. B. Sticklen, R. E. Rumpho, and R. A. Kennedy (1989). Conversion of nonembryogenic to embryogenic calli in rice. Int. Rice Res. News 14: 8-10
- 148. M. B. Sticklen (1989). Somatic hybridization: Dutch elm disease. The Voice of Michigan Association of Nurserymen (M.A.N.) 32: 50-51
- 149. M. B. Sticklen (1989). Hope for developing trees resistant to Dutch elm disease. Genetic Techology 9: 5.

INVITED SPEAKING ENGAGEMENTS

Mariam Sticklen has accepted 111 invitations to address her research in 24 different countries, including the United Kingdom, France, Canada, Switzerland, Belgium, Holland, Japan, China, Ukraine, Cuba, Thailand, Indonesia, Malaysia, Philippines, Columbia, Mexico, Bangladesh, Syria, Egypt, Turkey, Pakistan, Kenya, India and throughout the United States.

- March 11, 2013 Production of high-value biobased industrial materials via crop genetic engineering, National Center for Physics and Engineering, Islamabad, Pakistan
- April 2013 Advance biofuels, National Center for Physics and Engineering, Islamabad, Pakistan
- Sept. 2012 Expediting the Cellulosic Biofuels Agenda: A Petro-Industry Model. 15th European Biotechnology Symposium. Sept 22-27, 2012. Grand Cavalier Convention Centre, Istanbul, Turkey
- Nov. 19, 2012 Key Note Speaker: Mariam Sticklen. Expediting the biofuels and bioproducts agenda: A petro-industry model. "Global Biofuels & Bioproducts

Summit" (Bioproducts-2012) on November 19-21, 2012, OMICS: Bioproducts 2012 Symposium; Sponsored by Journal of Petroleum & Environmental. San Antonio, TX

(http://www.omicsonline.org/bioproduct-2012-past/)

- Nov. 20, 2012 Plenary Speaker: Mariam Sticklen, Jason Matakas and Thang Nguyen Biomass crop-produced recombinant human interleukin-2 and its activity against splenic cd4 + t-cells. Bioproducts 2012. Symposium San Antonio, TX
- Oct 23, 2012 Speaker on behalf of the Gifted and Talented Program of MSU Honors College. Bessy Hall. 5:30-6:30 pm. The Gifted and Talented Education (GATE) of Michigan.
- Dec 5, 2012 Presenter for grant report. Down Regulation of Corn Lignin Biosynthesis to Reduce or Eliminate the Needs for Expensive Lignocellulosic Biomass Pretreatment Processes. Corn Marketing Program of Michigan. Dewitt, MI
- Dec 5, 2012 Presenter for grant report. Field Performance, Carbohydrate Composition and AFEX Pretreatment Evaluation of Lignin Down-Regulated Corn Stover. Corn Marketing Program of Michigan.
- 9. July 9, 2012 Speaker of the High Achievers of the MSU Honors College Opening Day. Broad Building of College of Business.
- 10.June 15, 2012 MST at MSU Opening N100 Broad Business Complex, MSU Campus.
- 11.April 23, 2012 Speaker of the Parents of potential High Achievers of the MSU Honors College.Snyder-Phillips Hall
- 12. Feb. 9, 212 Michigan Soybean Promotion Committee (Feb. 9, 2012). Genotypeindependent Genetic Transformation of Soybean for Development of SCN, SDS, and Liberty Herbicide Resistance. CSS Research farm, MSU Campus.

- Jan 20, 2012 Speaker: MBI De-risking. Production of human anti-melanoma and anti-renal cancer drug in tobacco leaves, its extraction and purification, and testing against human T-calls.
- 14. Jan 19, 2012 Speaker for grant report (Jan. 19, 2012). Transferring a Sorghum Drought Tolerance Master Switch Gene into Corn. Corn Marketing Program of Michigan.
- 15. March, 2011 CPBR Symposium. Production of Beta-Glucosidase and Exo-cellulase in E1 Transgenic Maize Plants, Washington, DC
- 16. April 2011 Los Alamos National Laboratory. *Towards Cellulosic Biofuels Evolution: Using the Petro-Industry Model.* Los Alamos, New Mexico
- 17. June 2011 Keynote Speaker. Pennsylvania State University Biotechnology Program,.
 Sustainable Biofuels Evolution: Using the Petro-Industry Model. Hattiesburg, Pennsylvania
- Nov., 2011 MichBio: Driving Biosciences Industry Growth. Food Biotechnology: Pros and Cons. Grand Rapids, Michigan
- 19. Nov., 2011 MichBio: Driving Biosciences Industry Growth. *Bio-based Technology: Using the Petro-Industry Model.*
- 20. Dec., 2011 CMPM. Down Regulation of Corn Lignin Biosynthesis to Reduce or Eliminate the Needs for Expensive Lignocellulosic Biomass Pretreatment Processes. Dewitt, MI
- 21. October 2009 *Expediting biofuels agenda via crop genetic engineering*, Nobel Foundation, Ardmore, Oklahoma
- 22. October 2009 *Expediting biofuels agenda via crop genetic engineering*, University of Massachusetts, Amherst, Massachusetts
- 23. April 2009 Spartan Corn Series for Cellulosic Biofuels, University of Hawaii, Honolulu, Hawaii

24. April 2009 Spartan Corn Series for Cellulosic Biofuels, Iowa State University, Ames, Iowa.

- 25. March 2009 Cellulosic ethanol: Molecular breeding for biomass and biofuels. Cutting
 Edge Session: Agri-Energy Conference, Radisson Plaza Hotel, Kalamazoo,
 MI.
- 26. March 2009 Co-production of biophartmaceutics and cellulases in tobacco Leaf. Hosted by Universal Leaf Tobacco Company, Inc and Wind River Tobacco Company. East Lansing, MI
- 27. March 2009 A novel brown mid-rib corn for biofuels and animal feed. Board of Directors, Corn Marketing Program of Michigan, Dewitt, MI
- 28. February 2009 Reducing the costs of biofuels and biotech drugs through crop genetic engineering. Presented to parents and students of the MSU Honors College High Achievers of Gifted and Talented Program, MSU Campus, East Lansing, MI.
- 29. June 2008 *Modifying the corn genome for cellulosic ethanol land biopharmaceuticals*, Argonne National Laboratory, Argonne, Illinois.
- June 2008 Modifying the corn genome for biofuels, Corn Utilization and Technology Conference of National Corn Marketing Association, Kansas City, Missouri.
- 31. June 2008Modifying the corn genome to increase its biomass biofuel production,International Society of In Vitro Biology Conf. Tucson, Arizona
- 32. April 2008Modifying the corn genome to meet the US biofuel agenda, AmericanChemical Society, 235th National Meeting, New Orleans, Louisiana
- 33. April 2008 Production of a natural human saliva anti-HIV in plants, Southern Mississippi University, Spring Speaker Scholar Series, Hattiesburg, Mississippi.

- 34. February 2008 Forum Panelist, DOE-Development of Renewable Energy Projects at DOE, 2008, Washington, D.C.
- February 2008 Proposal Writing Workshop Panelist. CPBR Annual Conference, Washington D.C.
- 36. February 2008 Spartan Corn Series. The CPBR Congressional Reception, Feb 12th Evening, Capital Hill, Washington, D.C.
- 37. December 2007 Spartan Corn Series, MSU Crop and Soil Sciences and Horticulture Departments, Michigan State University, East Lansing, Michigan.
- 38. November 2007 New possibilities for improving the yield of fermentable sugars from corn leaves and stalk for alcohol fuels, American Sugar Association: Sugar/ Ethanol Conference, Miami, Florida
- 39. July 2007Spartan Corn for affordable bioethanol: From Waste to fuels, Greater
Lansing Clean Cities Coalition, East Lansing, Michigan.
- 40. May 2007 Production of valuable molecules in corn leaves and stalks for biofuels and biopharma. Michigan State University Bioeconomy Seminar Series, Michigan State University, East Lansing, Michigan
- 41. May 2007 Spartan Corn, Plenary Speaker and Panel Co-Chairperson. International Biotechnology Industry Organization (BIO). Boston: Food and Agriculture Track of the Energy Crops for Biofuel, Boston, Massachusetts.
- 42. May 2007 *Environmental and energy benefits of Spartan Corn*, Panelist and Chairperson at BIO Boston; Industrial and Environmental Track: Energy Crops for Biofuel, Boston, Massachusetts.
- 43. April 2007 *Plant genetic engineering for biofuels*, National Renewable Energy Laboratory (NREL), Golden, Colorado
- 44. January 2007 Corn Marketing program of Michigan. Reducing the costs of biomass pretreatment via lignin down-regulation; an RNAi technology.

- 45. January 2007 *Maize chloroplast transgenesis*, Annual Conference. Consortium for Plant Biotechnology research, Washington, D.C.
- 46. December 2006 Efficient production of microbial cellulase within recombinant maize biomass converts AFEX-pretreated corn stover, Genetic Engineering Center (BIOTECH), Bangkok, Thailand
- 47. August 2006 *Feedstock crop genetic engineering for biofuels*, Oak Ridge National Research Laboratory, Oak Ridge, Tennessee.
- 48. May 2006 Converting rice straw into fermentable sugars for alcohol fuels, 28th
 Symposium. on Biofuels & Chemicals, Tennessee
- 49. November 2006 *Production of cellulases within crop biomass for biofuels*, Bioeconomy Program. Michigan State University, East Lansing, Michigan
- 50. May 2006Production of <u>Acidothermus cellulolyticus endoglucanase (E1)</u> enzyme in
transgenic rice, 28th Symposium on Biofuels & Chem., Tennessee
- 51. April, 2007 New possibilities for improving the yield of fermentable sugars from corn leaves and stalk for alcohol fuels, American Sugar Association: Sugar/
 Ethanol Conference, Miami, Florida
- 52. February 2006Cheap production of human wound healing protein in plants,
Consortium for Plant Biotechnology Research Conference, Washington, D.C.
- 53. February 2006 *Production of Human Saliva Anti-HIV in Plants*. Center for BioDesign at the University of Arizona, Tucson, Arizona.
- 54. January 2006 *Reducing the costs of biomass pretreatment via lignin down-regulation; an RNAi technology*, Corn Marketing Program of Michigan.
- 55. January 2006 *Maize chloroplast transgenesis for energy and environment*, Annual Conference, CPBR, Washington, D.C.
- 56. December 2005Producing the <u>Acidothermus cellulolyticus endoglucanase</u>
enzyme within the corn biomass and conversion of crop biomass into

fermentable sugars, Corn Marketing Program of Michigan, Charlotte, Michigan

- 57. November 2005 Producing an anti-HIV drug, Human Secretory Leukocyte Protease Inhibitor in plants., HIV Research Center, Mayo Clinic, Rochester Minnesota
- 58. August 2005 Biomass, Biofuel, and Biopharma: Using biomass crops as biofactories for production of biomass conversion hydrolysis enzymes and an anti-HIV protein, Genetics Program, Michigan State University, East Lansing, Michigan.
- 59. May 2005 Convergence of goals: Genetically engineering of biomass crops for biofuels and for phytoremediation, Genetics Program Forum, Michigan State University, East Lansing, MI.
- 60. May 2005 The Development of Transgenic Non-Food Biomass Crops for Renewable Energy and Cleaner Environment," 27th Symposium on Biotechnology for Fuels and Chemicals. Denver, Colorado.
- 61. May 2005 Production of third generation salt tolerance oat via Biolistic gun transfer of a barley Hval transgene, Chloroplast Symposium, Champaign, Illinois.
- 62. April, 2005 Producing the biofuel-related industrial enzymes within the corn biomass, Second Annual World Congress on Industrial Biotechnology and Misprocessing. Orlando, Florida
- 63. March, 2005 *Producing the Microbial Hydrolysis Enzymes within the Biomass Crops via Genetic Engineering*, Department of Plant Sciences, Oxford University, and Oxford, U.K.
- 64. March, 2005 Production of biofuel hydrolysis enzymes within the crop biomass, Department of Agronomy, North Carolina State University, Raleigh, North Carolina.
- 65. March 3, 2005 increasing the crop

of the Consortium for Plant Biotechnology Research (CPBR), Washington D.C.

- 66. February 2005 *Bioconfinement of genetically engineered plants*,' Michigan State University Undergraduate Bioethics Club, Michigan State University, East Lansing, MI.
- 67. October 2004 *Opportunities to Improve Food Security and Human Nutrition: Coping with Challenges of Human Health in Developing Nations*, The United States National Academies Workshop on Global Challenges for Guiding and Managing Biological Technologies, "." The U.S. National Academies Building, Washington, D.C.
- 68. September 2004Production of Biofuel Ethanol and PHB Biodegradable Plastic from Transgenic Biomass Crops, The 2nd Ukrainian Workshop on Biofuels and Biobased Industrial Material. The Ukrainian National Academies, Kiev, Ukraine.
- 69. August 2004 *Cell and Molecular Genetics Improvement of Cereal Crops*, Michigan State University Genetics Program Student Orientation, Michigan State University, East Lansing, Michigan.
- 70. July 2004 Evolution in development of safe GM crops: New molecular tools for biological confinements to protect human health and environmental integrity. United States Department of Agriculture/Agricultural Research Center, Albany, California.
- 71. February2004Production of valuable proteins from transgenic maize, Consortium for Plant

Biotechnology Research Annual Conference, Washington, D.C.

72. May 2003 Production of PHB biodegradable plastic enzymes and cellulase enzymes in maize, The Proceedings of 25th biotechnology for fuels and chemicals. Colorado.

- 73. February 2003 Development of Polyhydroxybutyrate and cellulase in maize. Department of Chemical Engineering, University of Ankara, Ankara, Turkey.
- 74. Feb. 2003 "Genetic engineering of maize for production of biofuel ethanol." Consortium for Plant Biotechnology Research, Washington, DC. U.S.A.
- 75. Dec. 2002 "Genetic and chemical engineering for production of polyhydroxybutyrate and cellulase in maize. Department of Chemical Engineering, University of Ankara, Turkey.
- 76. May 2001 "Genetic engineering of corn with microbial genes for production of PHB biodegradable plastic." University of Hawaii.
- 77. April 2001 "Needs for improving crops of developing versus developed countries." ICARDA, Damascus, Syria.
- 78. April 1999 "Role of biotechnology in feeding the world population." Ministry of Agriculture, New Delhi, India.
- 79. March 1999 "A transgene from DED resistant elm tree has induced disease resistance in turfgrass." University of Toronto, Canada.
- 80. Feb. 1999 "Role of biotechnology in sustainable agriculture." Sustainable Agriculture Program, Michigan State University, East Lansing, MI. USA.
- Feb. 1999 "Meristem: A sustainable explant for genetic engineering of cereals." Swiss Federal Institute of Technology (ETH), Zurich, Switzerland.
- 82. Sept. 1998 "Novel system for genetic engineering of crops of Africa and India." ICRISAT, Hyderabad, India.
- 83. July 1998 "Genetic improvement of turfgrass via genetic engineering." INRA (similar to USDA), University of Caen, Normandy, France.

- 84. July 1998 "Meristem: A sustainable explant for genetic engineering of maize, oat, sorghum and wheat. John Innes Instit. Norwich, England.
- 85. Oct. 1997 "Herbicide and disease resistant creeping bentgrass via genetic engineering." ASA, Anaheim, CA.
- 86. Sept. 1997 "Genetic engineering of cereal crops." Hyderabad, India.
- 87. Sept. 1997 "Meristem: A sustainable explant for genetic engineering of maize." The Rockefeller Foundation Annual Conference in biotechnology. Koala Lumpur, Malaysia.
- **88.** Feb. 1996 "Genetic engineering of ICRISAT crops." Hyderabad, India.
- 89. Feb. 1996 "Improving sorghum via genetic engineering." National Center for Sorghum Research. Rajendranagar, India.
- 90. April 1996 "Production of insect resistant transgenic plants and their use in integrated pest management: Present status and future challenges." National Soc. of Plant Sciences. Haryana Agric. Univ. Hisar, India.
- 91. May 1996 "A simple technique for genetic engineering of rice plants." 3rd. Asia
 Pacific Biotechnology Congress and the Philippines Soc. for Microbial.
 Manila, The Philippines.
- 92. Sept. 1995 "Present and future of development on transgenic plants with *Bacillus thuringiensis* genes." **Bogota, Columbia.**
- 93. June 1994 "Introduction of proteinase inhibitor II gene in Basmati rice via microprojectile bombardment. Congress on Cell and Tissue Culture.
 Research Triangle, NC.
- 94. May 1994 "Transformation studies on rice (Oryza sativa L.) with potato proteinase inhibitor gene for insect resistance." Seventh Meeting of International Program on Rice Biotechnology. Rockefeller Foundation Sponsored Conference. Bali, Indonesia.

- 95. May 1994 "Genetic transformation of rice (Oryza sativa L.) using a modified Bacillus thuringiensis Cry1A(b) gene for insect resistance. Seventh Meeting of International Program on Rice Biotechnology." Rockefeller Foundation Sponsored Conference. Bali, Indonesia
- **96.** Feb. 1994 "Genetic engineering of corn via a novel genotype-independent system." International Center for Genetic Engineering, **Bangkok**, **Thailand**.
- **97.** Jan. 1994 "The ABSP research on maize with AGERI." Agricultural Genetic Engineering Research Institute. **Giza, Egypt.**
- 98. Oct. 1993 "Vegetative and reproductive plasticity of corn in vitro." International Course in Plant Biotechnology. Havana, Cuba.
- 99. Aug. 1993 "The ABSP research." University of Costa Rica. Costa Rica.
- 100. Feb. 1993 "Cloning of PR genes and genetic engineering of rice." Thailand Agricultural Research Center. Chiang Mai. Thailand.
- 101. Feb. 1993 "Genetic engineering of monocot and dicot plants for crop improvement."University of Dhaka, Bangladesh.
- 102. Jan. 1993 "Genetic engineering of creeping bentgrass." National Agricultural Genetic Engineering Laboratory, Cairo, Egypt.
- 103. Dec. 1993 "In vitro plasticity and genetic engineering in corn." CIMMYT, MexicAug. 1992
 "Stable expression of foreign genes in greenhouse grown monocot and dicot plants." University of Heibi, China.
- 104. Aug. 1992 "Genetic engineering of monocot and dicot plants." Central Research Institute for Food Crops (CRIFC), Bogor, Indonesia.
- 105. Sept. 1992 "Adaptation of plants to stressful environments while preserving productivity."Symposium on Plant Stress in Tropical Environment. Kona, Hawaii, U.S.A.
- 106. May 1992 "New approaches for transferring biotechnology to third world countries." ISU Showcase and Life Science Grand Opening, Ames, IA, U.S.A.
- 107. Feb. 1992 "Genetic engineering of cereal crops for pest resistance." University of Cairo,Egypt

108. Feb. 1992 "Mini-gene construction and genetic engineering of crops for pest resistance."

ILRAD, Kenya

- 109. Oct. 1991 "Genetic engineering of rice using the microprojectile bombardment system." Fifth Ann. Intl. Program on Rice Biotech. Tucson, AZ. U.S.
- 110. April 1990 "Transformation of rice using a microprojectile Biolistic™ device."
 Biotechnology Section of Advanced Research Laboratory, Hitachi Ltd.
 Hatoyama Sitama, Japa
- 111. Sept. 1990 "Genetic engineering of rice and corn using protoplast electroporation and the Biolistic[™] tissue bombardment systems." Plant Genetic Systems. Gent, Belgium
- 112. April 1990 "State of the art in gene transfer to cereal crops." Plant Breeding and Genetics Seminar Series, International Rice Research Institute, Los Banos,
 Philippines
- 113. July 1989 "Screening and identification of American elm cell lines resistant to Dutch elm disease." National Park Services of the Department of the Interior, Washington, DC. U.S.
- 114. Nov. 1989 "Cellular and molecular aspects to crop improvement for food and enery"Dow /Elanco.Midland, MI.
- 115. March 2009A novel brown mid-rib corn for biofuels and animal feed. Board of Directors,
Corn Marketing Program of Michigan, Dewitt, MI
- 116. February 2009 Reducing the costs of biofuels and biotech drugs through crop genetic engineering. Presented to parents and students of the MSU Honors College High Achievers of Gifted and Talented Program, MSU Campus, East Lansing, MI.

GRANTS

Grant Awards: Mariam Sticklen's total grants are over \$18.7 million. In addition, there were over \$10 million more grants brought to her ABSP, but she was not directly the PI. The PIs were her two consecutive program administrators, Drs. John Dodds and Kathy Ives.

Mariam Sticklen's (the PI) funds were obtained from USDA (United States Department of Agriculture), HIH (National Institute of Health), US-AID (United States Agency for International Development), DOE (Department of Energy), The Army, CPBR (Consortium for Plant Biotechnology Research/DOE), USDI (United States Department of Interior), NSF (National Science Foundation), MPBC (Midwest Plant Biotechnology Consortium), Gloeckner. Found. (Gloeckener Foundation), ISA (International Shade Tree Association), MAN (Michigan Nurserymen Association), MSU-REF (Michigan Research Excellence Funds), PRC Enh. (MSU Pesticide Research Center Enhancement Funds), MSU Foundation, Corn Marketing Program of Michigan, National Corn Growers Association, Michigan Soybean Promotion Committee, Michigan Potato Industry Commission, Practor and Gamble Co. (P&G), Monsanto Co, Dow Co, Edenspace Systems Corp, and MSU's international matching funds towards some of the awards (See below).

Source	PIs	Date	Amount	Focus of the Grant	Grant Type
Michigan Soybean Promotion Committee	M. Sticklen	2012	\$33,765	SDS Resistant Soybean	Peer Reviewed by Consultant
Corn Marketing Program of Michigan	M. Sticklen	2012	\$21,000	Bifuel	Peer Reviewd by Consultant
CPBR/DOE	M. Sticklen	2011-2012	\$50,000	Biofuel	Peer Reviewed Competitive
Michigan Corn Marketing Program	M. Sticklen	2010-2011	\$43,000	Biofuel	Peer Reviewed by Consultant
Michigan Corn Marketing Progr	M. Sticklen	2010	\$41,000	Biofuel	Peer Reviewed by Consultant

COMPETITIVE GRANTS

Corn Marketing Program of Michigan	M. Sticklen	2007-2008	\$90,000	Biofuels	Peer Reviewed By Consultant
Phase I & II of DOE/SBIR via Edenspace	M. Sticklen	2004-2005	\$300,000	Biofuels	Peer Reviewed Competitive
NIH/STTR via Edenspace	M. Sticklen	2007	\$45,000	Biopharma/ Anti-HIV	Peer Reviewed Competitive
Army/ Edenspace	M. Sticklen	2006	\$50,000	Biopharma/ Anti-HIV	Peer Reviewed Competitive
CPBR/DOE	M. Sticklen & B. Dale	2001-2002	\$370,000 (\$17,775 to B. Dale)	Biofuels	Peer Reviewed Competitive
MI & Natl Corn Growers Assoc.	M. Sticklen	\$2001-200 2	\$10,000	Biofuels	Peer Reviewed Competitive
CPBR/DOE	M. Sticklen	2002-2004	\$172,000	Biofuels	Peer Reviewed Competitive
MSU Res Excel Funds	M. Sticklen	2004	\$40,000	Biofuels	Peer Reviewed Competitive
Monsanto	M. Sticklen	2004-2005	\$20,000	Corn Chloroplast Transgenesis	Peer Reviewed Competitive
MSU/GREEEN	M. Sticklen		\$20,216	Increase biofuel Crop Biomass	Peer Reviewed Competitive
CPBR/DOE	M. Sticklen	2001-2002	\$330,000	Production of Biodegradable Plastic in Corn Leaves	Peer Reviewed Competitive
Proctor & Gamble Co.	M. Sticklen	2001-2002	\$100,000	Production of biodegradable plastic in Corn Leaves	Matching Funds to the Above Competitive Funds

USGA	M. Sticklen	2001-2002	\$120,000	Turfgrass Genomics Equipment	Peer Reviewed Competitive
CPBR/DOE	M. Sticklen	1999-2000	\$270,000	Ethanol from transgenic corn and rice	Peer Reviewed Competitive
USGA	M. Sticklen J. Vargus, J. Bird	1998	\$20,000	Turfgrass genetic engineering for disease resistance	Peer Reviewed Competitive
USGA	M. Sticklen J. Vargas Branham	1994	\$10,000	Turfgrass disease resistance	Peer Reviewed Competitive
USDA Int'l.	M. Sticklen	1993	\$50,000	Production of Bioplastic in Plants	Peer Reviewed Competitive
US-AID	M. Sticklen Z. Seraj	1991-1993	\$15,000	Rice genetic engineering	Peer Reviewed Competitive
USDA	Ling Sticklen	1993-1995	\$130,000	Elm chitinase gene expression in E. coli	Peer Reviewed Competitive
US-AID	M. Sticklen, MSU- Cornel- Texas A&M	1991-1996	\$6,000,650	ABSP	Peer Reviewed Competitive
CPBR	M. Sticklen	1990-1991	\$350,000	Rice Genetic Engineering	Peer Reviewed Competitive
North Central Biotech Program (NCBP)	M. Sticklen	1989-1990	\$370,000	System Dev: Plant Genetic Engineering	Peer Reviewed Competitive
MPBC/USDA	Sticklen & R. Wu	1989-1990	\$350,000	Rice Biotechnology for Insect Resistance	Peer Reviewed Competitive
USDA	Sticklen Muniappan	1992	\$75,000	Plant Genetic Engineering	Peer Reviewed Competitive
NSF	M. Sticklen	January 1989	\$75,000	Chloroplast Genome Studies	Peer Reviewed Competitive

Gloeck Found.	Sticklen/ Smitley	1989	\$7,500	Insect Resistant Potato	Peer Reviewed Competitive
USDA	Muniappan M. Sticklen	July 1992	\$30,000	Plant genetic engineering	Peer Reviewed Competitive

Total Competitive Awards

\$9,941,310

NON-COMPETITIVE GRANTS

Agency	PIs	Amount	Focus	Grant Type
Gov. of Egypt	M. Sticklen	2003-2006	\$80,000	Train Res. Scholar
Gov. of Pakistan	M. Sticklen	2004	\$52,500	Train Sabbatical Prof.
Gov. of Iran	M. Sticklen	2004	\$14,000	Train Res. Scholar
Gov. of Turkey	M. Sticklen	2005	\$1,500	Train Res. Scholar
USGA	M. Sticklen	1995	\$10,000	Turfgrass conference
MTF	M. Sticklen	1995	\$5,000	Turfgrass conference
Golf Assoc. America	M. Sticklen	1995		Turfgrass conference
USDI	M. Sticklen	1993	\$350,000	Gene characterization
MSU Provost Match to ABSP	M. Sticklen	1991	\$2,000,000	Matching funds to initial ABSP
MSU	M. Sticklen	1989-2008	\$240,000	Required match to different CPBR grants
US-AID in Egypt	M. Sticklen,	1993	\$1,500,000	Add-on to ABSP
US-AID in Indonesia	M. Sticklen	1993	\$1,500,000	Add-on to ABSP
R o c k e f e l l e r Foundation	Sticklen	1989-1994	\$300,000	Postdoc & Student Salaries, Plus Bench fees
Rice Tech. Inc.	Sticklen	1991	\$10,000	Equipment
Dow/Elanco	Sticklen	1990	\$10,000	Corn Genetic Engineering
USDI	M. Sticklen	1989	\$30,000	Dutch Elm Disease Workshop
ISA	M. Sticklen	1988	\$7,000	Cloning of Dutch Elm Disease resistance gene
MAN	M. Sticklen	1988	\$5,000	Cloning of resistant elm trees

Total Non-Competitive Funds

Total Competitive & Non-Competitive Grants: Over \$18.7 M

ADVISORY & SUPERVISORY ROLES

(PhD, MS, Postdocs, Sabbatical Professors and Research Scholars & their present status)

NOTE: Prof. Sticklen is proud of her former Graduate Students, Postdoctoral Associates, Sabbatical Professors and More. Please let her know about your current job status changes. Go Green-Go White!

ADVISING

1. Prof. Mariam Sticklen has trained over 160 scientists, among them were 66 long-term scientists and one Administrative Assistant (paid through her grants). The trained scientists include 14 PhD students, 4 MS students, 20 Sabbatical Professors/Research Scholars, 20 postdoctoral Associates, 8 technicians and 1 administrative assistant paid via grants. Prof. Sticklen also trained over 115 short-term visitors and over 100 undergraduate students, at least half being minorities coming to her lab through the MAP of the CANR.

A few examples of her trainees who are major authorities in other institutionsor other countries are Dr. Luc C. Duchesne, Chief Executive Officer of NSU Resources, Inc., (formerly Bio-Carbon Solutions International, Inc) and former Chief Technology Officer of Grid Cloud Solutions, Inc. in Canada (http://investing.businessweek.com/research/stocks/people/person.asp? personId=10331778&ticker=NOST); Dr. Mark Bolyard who is a Professor and Chairman of the Department of Biology at the Union University (http://www.uu.edu/dept/biology/ MarkBolyard.cfm), Dr. Reynaldo Ebora who is the Executive Director of the Philippine Council for Science and Technology Research and Development (reporting to the Minister of Science and Education; http://pbs.ifpri.info/pbs-staff/reynaldo-v-ebora/); Dr. Villalobos has been appointed two times by the Mexican President as Undersecretary in the Federal Government, and was formerly the Biotechnology Senior Advisor to the FAO in Rome (http://www.iica.int/Esp/dg/DocumentosVV/ semblanzaENG.pdf) and Dr. Ramesh Saxena (Retired) who was the Head, International Center for Insect Physiology and Ecology ICIPE), Nairobi, Kenya.

Detail List of Sticklen's Trainees and their Present Positions:

Name	Present position	
A. PhD Students:		
1. Dr. SangYoung Park	Postdoc on biofuels	
2. Dr. Kingdom Kwapata	Assistant Prof at U. Malawi	
3. Dr. N. X. Thang	Senior Sci, Vietnam Maize Res C	
4. Dr. Hussien Alameldin	Postdoc at MSU	

5. Dr. Reynaldo Ebora	Executive Council, the Philippine Council for Science and Technol. Res. & Development
6. Dr. Chien-An Liu	Senior Scientist, AVRDC in Taiwan
7. Dr. Hesham Oraby	Senio Sci in Canada
8. Dr. Anwaar Ahmad	Senior Sci. in Philladelphia
9. Dr. Barbara Peterson	Businesswoman
10. Dr. BenliChai	Scientist, Mouse Genome Program Bar Harbor, MA
11. Dr. Donald Warkentin	Assistant Professor, University of Riverside, CA
12. Dr. Larry Graham	Patent attorney
13. Dr. Farzaneh Taymouri (Co-adivised by B. Dale)) Head of Biofuel at Michigan Biotech Institute (MBI)
14. Dr. Jarswan Warakanont	Scientist in Thailand
(did half of her PhD under Sticklen supervision)	
MS Students:	
15. Jason Matakas	Medical student, New Jersy
16. Mrs. Zakkir Ullah	Associate Prof, Egypt
17. Dr. Terry Gillespie	Do not know
18. Dr. Callista Ransom	Assistant Prof., MSU

B. Sabbatical Professors and Research Scholars (6 months to a year):

19. Dr. Gul Ebru Orhun from Turkey	Still in Sticklen laboratory	
20. Eylen Turgay	Prof in Turkey	
21. Ta Thi Thuy Dund	Scientist in Vietnam	
22. Dr. Rashid Ahmad from PakistanProfessor in Pakistan		

23. Nguyen Van Trung	Scientist at Vietnam Maize Res Intit
24. Dr. Ramesh Saxena	Head, Rice Research, ICIPE, Kenya
25. Hasan Salehi	Prof., University of Shiraz, Iran
26. Dr. Victor Villalobas	Undersecretary in the Federal Government of Mexico and former Advisor to FAO, Rome
27. Dr. Miguel Jordan	Prof. Catholic Univ., Santiago, Chile
28. Dr. Ralph Gorton	Teaching Prof., Lansing Comm. College, MI
29. Dr. Ahmed M. Moneim	Professor, Univ. Cairo, Egypt
30. Dr. Mohammad Soliman	Professor, Univ. of Cairo & AGERI, Egypt
31. Hassan Salehinajafabadi	Professor, University of Shiraz, Iran
32. Dr. Iraqi	Professor, Morocco
33. Dr. Yahia El-Maghraby	Scientist in Canada
34. Dr. Alex Christov	Scientist in Canada
35. Dr. Shariffudin Ahmed Res. Scho	olar Scientist in Egypt
36. Dr. Salah El-Miniawy	Prof., Ain-Shams Univ., Egypt
37. Dr. Xiolin Wu	Researcher at Medical School, MSU
38. Dr. Shobha Devi	Professor in India

C. Postdoctoral Associates (1 to 4 years)

40. Hussien Aladeldin

41. Dr. C. Mei	Assistant Prof. Virginia Polytechnic Institute.
42. Dr. Mark Bolyard.	Prof. And Chairman, Union Univrsity
43. Dr. Luc Duchesne	Chief Executive Officer of NSU Resources, Inc., (formerly Bio-Carbon Solutions International, Inc), Canada
44. Dr. C. Srinivasan	Senior Scientist, USDA Lab, West Virginia
45. Dr. Heng Zhong, Postdoc.	Research Leader, Novartis, Res. Triangle, NC
46. Dr. Jianping Chen, Postdoc.	Senior Scientist, USDA Lab, Beltsville, MD
47. Dr. Lan-Ying Wen, Postdoc.	Senior Scientist, USDA Lab, Gainsville, FL
48. Dr. Shibo Zhang, Postdoc.	Assistant Prof. Univ. of California, Berkeley, CA (Deceased)

49. 27. Dr. Godab Biswas	Working in Canada	
50. Hasan Alizadeh (Chem Engineering u	nder my suprvision)	Retired
51. Dr. Ravindra Hajela	Research Facullty., Neuroscie	ence Dept., MSU
52. Dr. Mohammad Herman	Senior Scientist, CRIFC, Indonesia	Ministry of Agric.,
53. Dr. L. LiswidowatiSenior SScientist, Cl	RIFC, Ministry of Agric., Indo	nesia
54. Dr. Jeffery Lowe	Senior Scientist, Agric. Cambridge, U.K.	Genetics Co.,
55. Dr. Sally Miner	Senior Sci in a Private Compa	any in New Jersey
56. Dr. Neelam Yadav	Prof. Haryana Agric. Univ., H	Haryana, India
57. Dr. Prathibha Devi	Prof., Hyderabad, India	
58. Kamel Tartoura	Moved back to India	

E. Technicians (1 to 6 years):

59. Mrs. Robab Sabzikar	Retired
60. Mrs. Chunfang QiTechnician, Hort Dep	t. MSU
61. Mrs. Wenling Wang	Senior Technician, Navartis Co., Res. Triangle, NC
62. Mrs. Johan Liu	Instructor, Instit. Genetics, Acad. Senica, China
63. Mrs. Li Xuan	Moved with her husband to China
64. Mrs. Neerja Hajela	Senior Technician, CME Lab MSU
65. Mr. Baolin Sun	Was Postdoc at CMB, MSU
66. Mrs. Nasim A. Rahmani	Pharmacist in Richmond, FL

F. Administrative Assistant to Dr. Sticklen through grants (3 years):

67. Dean Norton, Admin. Assistant Paid Through Grants

SERVICE

MSU, National & International Governing Boards Appointments

- 2013-2014 Faculty Laiasons to the MSU Board of Trustees
- 2013-2014 Member, Executive Committee on MSU At Large Governance
- 2013-2014 Member, MSU Faculty Senate Committee
- 2013-2014 Member, MSU Steering Committee
- 2008-2011 Member, Faculty Council of the MSU Governing Board
- 2006-2008 Member, MSU Athletic Council of the MSU Governing Board
- 2005-2006 Member, University Committee on Faculty Affairs
- 1999 to 2000 Chairperson, Nomination Committee, Governing Board of International Crops Research Institute for the Semi-Arid Tropics (ICRISAT). ICRISAT is one of the CGIAR-funded (\$35 million) international research centers.
- 1999 to 2000 Member, Nomination Committee and Executive Committee, Governing Board of International Crops Research Institute for the Semi-Arid Tropics (ICRISAT).
- 1994 to 2000 Member, Governing Board International Crops Research Institute for the Semi-Arid Tropics (ICRISAT) in India and Africa (two terms).
- 1994 to 1996 Member, Board of Trustees of Consultative Group on International Agricultural Research (CGIAR) in Washington, DC.
- 1993-1994 Women Advisory Board to the Provost
- 1999 Appointed by the Board of Trustees of Consultative Group on International Agricultural Research (CGIAR; Washington, DC) to serve as Member of the Search Committee for new Director General of International Crops Research Institute for the Semi-Arid Tropics (ICRISAT). Search completed in 2000 and DG William Dar appointed.
- 2008 Member of the 21st Century Multimillion Dollar Grant Proposal Panel
- 2008 Member of the NRC of the U.S. National Academies on Review of Energy Research of State of Ohio
- 2007 Member of the Reviewers of the Oak Ridge National Laboratory on Genome-To-Life Program
- 2006 Member of NRC Review of the U.S. National Academies on Genome-To-Life
- 2003-2004 Member of the NRC Review of the U.S. National Academies on Bioconfinement of Genetically Engineered Organisms
- 2006-2008 Science Advisor to Edenspace Systems Corp

Recent Conference Organizer, Panelist & Chairperson

Mariam Sticklen has organized and co-organized, and chaired sessions of several international conferences, and has published two of the proceedings as the first author. An example is her chairing the Industrial Biotechnology session of BIO (biotechnology Industry Organizations) in

Chicago, where speakers were President and CEOs of top biotechnology industries in the US, and where both the MSU President Lou Anna Simon and Michigan Governor Jennifer Granholm participated. A few other examples are listed below.

- Oakridge Research National Laboratory Directors Research and Development (LDRD). Two days panel in Tennessee in 2006.
- NSF SBIR/STTR Bioprocessing/Fermentation Panel in Arlington, VA in 2006
- EPA Small Business Innovation Research (SBIR) on Environmental Problems in America's Heartland agriculture and Rural Community and Management of Animal Feedstock in Washington, DC in 2006.
- International Biotechnology Industry Organization (BIO) conference panelist and co-chair for Food and Agriculture session, 2006
- International Biotechnology Industry Organization (BIO) conference panelist and co-chair for Industrial Agriculture Session, 2006
- The State of Ohio Bioeconomy development panel arranged by the NRC of the US National Academies, Washington/DC and Columbus/Ohio in May 2008.
- Michigan 21st Century Grant panelist for distribution of \$50 million to Michigan industries fir biofuels and Bioproducts research and commercialization, August 2008
- Second Annual World Congress on Industrial Biotechnology and Bioprocessing (BIO). Orlando, Fl
- Panel on Genetically Modified Organisms Debate. MSU Honors College & Undergraduate Ethics Society

Other MSU/University Services

- Athletic Council member
- ALL University Award Committee member
- Member of the CANR Office of Diversity and Pluralism Focus Group
- Member of the MST at MSU Gifted and Talented Program Committee of the MSU Honors College.
- Member of the President Simon's Bioeconomy Advisory Board, headed by Mr. R. Christopher Schroeder of CENTREC Consulting Group, LLC.
- Member of the Advisor Board of the CANR Plant Breeding and Genetics Program.
- Member of the MSU Genetics Program.

- Member of the Great Lakes Biotechnology Research Program
- Member of the MSU Bioeconomy Program headed by Dr. Steve Pueppke
- Served on the Board of Woman Advisory Team to the Provost Scott as related to Women/Minority issues
- Served on Food Toxicology Center planning meetings in 1995.
- Served as Chairman of CSS Seminar Committee in 1994 and 1995
- Served as a member of Plant Genetics Program (PBG) from 1990 to present.
- Served as a member of the CSS/Hort Seminar Series coordinating committee from 1993 to 1996.
- Served as an advisor to the Agronomy Club, CSS Department (Sept. 1990 to June 1991).
- Served as a member of Entomology Women Assoc., ENT Department (Sept. 1990 to 1991).
- Served as a member of the CSS/PRC Fall 1991 Seminar Series coordinating committee.
- Served as seminar co-organizer, Crop and Soil Sciences Department Seminar Series, Fall 1991-present.
- Served as a member of Colorado Potato Beetle Research Group, since March 1989-2000.
- Served on the Neogen Co. /MSU-AES Biotech. Workshop organized by Dr. Robert Gast.
- Served on the ABSP Management Committee (1991-2001).
- Served on National Biotechnology Conference organized in 1993 by Dr. Bob Gast of CANR at MSU.

OUTREACH: SOME OF THE NOTABLE PRESS RELEASES AROUND THE GLOBE

Prof. Sticklen's contributions to non-conventional and renewable biofuels have resulted in numerous media reports including national and international radio, TV, and other such exposure. Some of the major international/national radio and TV stations include: the NPR Science Friday, the BBC London, the BBC Persia, the WDAM TV of Hattiesburg, German Public Radio, the BBC Spain, Ecuador Radio Station, Radiocity.com, and the Fox News Fare and Balance. Doctor Sticklen was interviewed or otherwise coded for Spartan Tri-enzyme Corn by over 100 newspapers and other media, including the Associated Press, German Technology News, EarthLink, New Scientist, Polish Daily Newspaper, Nature Publishing Company Press Release , Spanish News, Cambridge News, Science Environment Policy Report, Iranian Student Newspaper, CGIAR International Week Report, Science Magazine of Nationwide German, BBC Persia Newspaper, Science Europe,

Biomass Magazine, Canadian News, Swedish Newspaper, Danish Newspaper, Indian Daily Newspaper, National Geographic News, Digest Magazine, Technology Review News, Green Car Congress, Michigan State University Homepage and several other national and international newspapers.

NPR Science Friday: April 11, 2008



Mariam B. Sticklen

Biofuels Research Roundup

Head quartered in London/UK, Ira talks with several researchers looking at innovative ways to harvest energy from plant materials, including gasoline-like chemicals, ethanol, and hydrogen production.

See: http://sciencefriday.com/guests/mariam-b-sticklen.html#page/full-width-list/1

Genetic News (BioValley Portal)

Mariam Sticklen urges governments around the world to acknowledge the

pressing need to develop these technologies - without such action biofuels will remain ...

www.checkbiotech.org/green_News_Genetics.aspx?infoId=17935 - 89k -

EUSEM: resources: films, images, faq's, news headlines ...

Mariam Sticklen urges governments around the world to acknowledge the pressing need to develop ... Health care reform, one fainting spell at a time

[Sciam ...

www.eusem.com/main/resources - 16k -

EUSEM: "Science in Europe" package light eve retina disease ...

<u>Global Villages Information Portal » Community Forums » Katrina ...</u>

Sep 9, 2005 ... 16 May 2008 14:16:00 GMT: Mariam Sticklen urges governments around the world to acknowledge the pressing need to develop these ...

www.global-villages.info/Forums/viewforum/f=3.html - 67k -

Food Law Prof Blog: Biotech

But many consumer and environmental groups and governments around the world ... used," said genetic engineer Mariam Sticklen of Michigan State University. ...

lawprofessors.typepad.com/foodlaw/biotech/index.html - 199k -

International Centers Week Research Impact: Yesterday's ...

File Format: PDF/Adobe Acrobat - View as HTML

I will only flag these questions now and **urge** generates knowledge at centers **around the world**. **..... Mariam Sticklen**. Board Member. CGIAR ICW97 **...**

wbln0018.worldbank.org/.../F5E43DDD5673A7DB8525679F006C37FE/\$FILE/ csop1197.pdf

Republican National Convention Blog NYC 2004: May 2007

Because of their sacrifice, millions here and **around the world** enjoy the (Editor's note: **Mariam Sticklen** can be reached May 6-9 at BIO2007 on her ... rncnyc2004.blogspot.com/2007_05_01_archive.html - 830k -

FBAE Blog: News Archives

"Farmers **around the world** have recognized the significant value of Now **Mariam Sticklen**, professor of crop and soil science at Michigan State ... www.fbaeblog.org/news/ -

Peak Energy: April 2008

It also means a change in mindset or interpretations of the **world around** us. **..... Mariam Sticklen**, professor of crop and soil science at Michigan State ... peakenergy.blogspot.com/2008_04_01_archive.html - 877k -

Persian University Student Newspaper (http://www.isna.ir/ISNA/NewsView.aspx? ID=News-1141493&Lang=P

> سرويس: پڑو هشي 1387/03/12 06-01-2008 14:00:14 کد خبر :06407-8703

•News in Persian: See: <u>http://www.isna.ir/ISNA/NewsView.aspx?</u>
ID=News-1141493&Lang=P

ACHIC - Asociación Chilena de la Carnes

Pero además, y según indica la investigadora **Mariam Sticklen**, la técnica puede LA **REVOLUCIÓN** SILENCIOSA DE BRASIL En 10 años ha pasado de ser un país ...

www.achic.cl/noticias.php?id=556 - 627k-

GenCiencia | Salud, Dietas y Belleza

Nuestro estudio muestra que se trataba de un universo más que **nada** similar al nuestro. ... dijo **Mariam Sticklen**, profesora de la Universidad de Michigan

www.medicinanaturalperuana.com/salud/aggregator/sources/2?page=2 - 74k - Cached - Similar pages

Huay! mi MAMA! 2.0: abril 2008

- [<u>Translate this page</u>]

"Había perdido energía y conciencia **revolucionaria**," dijo el ex presidente Según **Mariam** Sticklen, quien lideró el proyecto, la técnica puede ser ...

www.huaymimama.net/2008 04 01 archive.html - 977k

Tampico (c) 2007

Las aftas bucales son un problema para **nada** agradable que **todos** debemos soportar Kelly Davis, que la Sony HDR-TG1 va a suponer una **revolución** similar. ... *itampico.blogspot.com/2008 04 01 archive.html - 963k -*

TodoCountries .:. Comunidad

Según **Mariam Sticklen**, quien lideró el proyecto, la técnica puede ser **.....** La **revolución** que surgió a partir del descubrimiento del viagra ha sido **...**

www.todocountries.com/spanish/argentina/gba/countries/latecnologia2.htm -

Las Guerras Mesianicas: marzo 2008

Según **Mariam Sticklen**, quien lideró el proyecto, la técnica puede ser aplicada conocerá la guerra, el hambre y la **revolución** que llegará muy lejos, ...

lasguerrasmesianicas.blogspot.com/2008_03_01_archive.html - 797k -

Sustainable Affairs: 1/05/07

Now Mariam Sticklen, professor of crop and soil science at Michigan State University, Todo para subvertir el Estado de Derecho en América Latina, ... sustainable.bajaenergy.com/2007 05 01 archive.htm

"...dentro de la revolución, todo; contra la revolución, nada ...

- [<u>Translate this page</u>]

Según Mariam Sticklen, quien lideró el proyecto, la técnica puede ser ... http:// noticias.prodigy.msn.com/bbc.aspx?cp-documentid=6736943&wa=wsignin1.0 ... s p a c e s . l i v e . c o m / a p i . a s p x ? wx_action=IdentityRedir&wxp_targetsite=PersonalSpace&wxp_type=default... - 252k –

• Peak Energy:

- The BBC reports on US efforts to oppose action on global warming at the G8 summit Now Mariam Sticklen, professor of crop and soil science at Michigan ... peakenergy.blogspot.com/2007_05_01_archive.html 977k <u>Cached Similar pages</u>
- Cover page: CSA News (Crops, Soil, Agronomy) of the American Society of Agronomy/ Crop Science Society of America/Soil Science Society of America. October 2007, Vol52, N10.
- Press release displayed at the MSU Homepage in May, 2007.
- Press release announced at the BIO 2007 in Boston, May 4, 2007
- Biomass Magazine: Spartans Tailor Corn for Cellulosic ethanol. Page 11, July 2007.
- MSU Alumni Magazine, page 22
- MSU State News. Growing a new economy for Michigan: Biobased Technologies, page 17 & page 24
- Daily Bioland and Biofuel Magazine on "Spartan Corn" by Harvey Forsat
- Livestock Producers Magazine on Spartan Corn by Nadu Marley

- NPR Radio interview
- MSU News Bulletin, May 17, 2007
- Investors Business Daily, May 12, 2007. Spartan Corn
- Land Views Magazine in Florida, Nov 2007
- Corn Genetic Engineering from Iowa, Adam Bossard
- TV Interview by Detroit Radio/TV channel/Spped Channel on Biofuel from Cellulosic Biomass Feedstock and Logistics for Ethanol Production.
- Amazon.com: Corn leaves and stalks to fuel cars. May, 7, 2007
- Innovations Report: Germany: Creating corn for cars, May 7, 2007
- <u>huliq.com</u>; HOLIC, NC-May 7, 2007: creating corn for cars.
- English people.com.cn. People's Daily Online, China-May 6, 2007: US Scientist Develop "ethanol Corn."
- English.people.com.cn, May 5, 07, People Daily Online, US Scientists develop "ethanol corn." China
- <u>hindu.com/thehindu/holnus;</u> Hindu, **India-**May 6, 2007: *Creating Corn for Cars*.
- The Money Times, India-May 5, 2007: New Corn Variety Turns Stalks into Ethanol.
- <u>Earthtimes.org</u>-May 4, 2007: New Corn Variety Turns Stalks into Ethanol.
- <u>imedianews.ge/en/news read;</u> ImediNews, Georgia-May 4, 2007: *New Corn Variety Turns Stalks into Ethanol.*
- <u>SlipkaFinancial.com</u>, May 2007, Corn Future to Go Big.
- <u>MapleWoodsHeating.com</u>, May 2007, *Reduce Your Heating Bill*.
- <u>investmentu.com/Ethanol_Rpt</u>, New Ethanol Report
- <u>tkfutures.com</u>, May 2007, Corn Futures-Corn Options.
- <u>huliq.com/20930/Huliq: Breaking News</u>, Creating Corn for Cars.
- <u>Earthtimes.org</u>, Science and Technology Category, *New corn variety turns stalks into ethanol*, May 5, 2007.
- <u>LiveScience.com</u>, May 7, 2008, Corn whose leaves and stalks carry an enzyme that breaks down cellulose for ethanol production.
- <u>sciencedaily.com/upi/index.php?feed=science</u>. Science Daily. *New corn variety turns stalks into ethanol*.
- <u>www1.eere.energy.gov/biomass/news.html</u>. Biomass News. With the Spartan Corn.

- newsbulletin.msu.edu. may1707/bio2007.html. MSU News Bulletin. Two generations of Spartan Corn
- <u>www.gate2biotech.com</u>. Spartan Corn.
- <u>www.isa.org/.../ContentManagement/ContentDisplay.cfm&ContentID=61618</u>. *ISA\Corn Plant Could Fuel Cheaper Ethanol Production*.
- <u>www.theengineer.co.uk/liChannelID/128/Articles/299682/Ethanol+stalks.html</u>: The Engineer News-[Production Engineering, maintenance...
- <u>www.blogtoplist.com/politics/blogdetails-610.html</u>. Blog details Republican National Convention Blog-Blog Toplist
- <u>www.isaaa.org/rss/biofuels/default.asp</u>. biofuel Supplement. Spartan Corn.
- www.biotechknowledge.com/BIOTECH/knowcenter.nsf/ID/
 <u>57BCC08124EFAD986257EA8?OpenDocument</u>. Crop Biotech Update 11 May-2007 International Service: *Spartan Corn for Cars*
- www.cedab.it/cgi-bin/newsletter/cbu-2007-05-11.pdf. ISAAA.org/KC-CropBiotech Update (11 May 2007)
- CEDAB Cenro Documentazione Agrobiotecnologie. <u>www.cedab.it/</u> <u>newsletter_ISAAA.asp?\Dnews=178</u>. Spartan Corn
- Scientific Blogging-Biology. <u>www.scientificblogging.com/biology/feed</u>: Spartan Corn
- *Plant Breeding and Genetics: Harvesting the Power of DNA*. <u>www.maes.msu.edu/</u> <u>publications/futures/spring2005/futures_spring</u> 2005 Golden Spartan
- Zelfvenietigende mais-Chemisch 2 Weekblad. <u>www.c2w.ni/</u>
 4489 Zelfvernietigende mais .lynkx: Spartan Corn
- Emerging Current: <u>www.energycurrent.corn/index.php?id-3&storyid=2388</u>: Spartan Corn. Turning corn wastes into ethanol feedstocks.
- IndiaBlitz.com. <u>www.indiablitz.com/147971/</u>: New variety of corn makes ethanol production for
- *What Michigan needs to compete*. <u>www.msu.edu/vpga/urc.swf</u>. The Spartan Advantage Encourage lifelong learning
- Experts' database Office of Biobased Technology, Michigan State University.
 <u>Bioeconomy.msu.edu/experts.aspx: Spartan Corn...</u>

- <u>Ethanol Producer Magazine</u>. Spartan corn germplasm has been genetically engineered to express cellulase and hemicellulase in the plant's leaves and stover. www.ethanolproducer.com/article.jsp?article_id=3160
- Office of Biobased Technology. Spartan corn has enzymes included. Mariam Sticklen Breaking down cellulose and hemicellulose into simple sugars that can be fermented into ethanol has been ...

www.bioeconomy.msu.edu/achievements/spartancorn.aspx

 <u>Bioenergy pact between Europe and Africa</u>. May 7, 2007 ... "We've developed two generations of Spartan Corn," said Mariam Sticklen, MSU professor of crop and soil sciences. "Both corn varieties

biopact.com/2007/05/third-generation-biofuels-scientists.html

 <u>NewsDaily: Science -- New corn variety turns stalks into ethanol</u>. Mariam Sticklen, Michigan State University professor of crop and soil, says two generations of Spartan Corn contain enzymes necessary to break down ...

www.newsdaily.com/Science/UPI-1-20070308-10022500-bc-us-ethanol.xml

Biofuels News (Green Portal). May 7, 2007 ... But with the Spartan corn it is possible to turn corn leaves and stalks into ... efficient production of ethanol," said Mariam Sticklen, ...

www.checkbiotech.org/green_News_Biofuels.aspx?infoId=14602

- <u>New variety of corn makes ethanol production for cars more cost</u>...But with the Spartan corn it is possible to turn corn leaves and stalks into ... of ethanol," said Mariam Sticklen, MSU professor of crop and soil sciences. ...
 <u>in.news.yahoo.com/070505/139/6fdhd.html</u>
- <u>AgBioView Newsletter on Agricultural Biotechnology</u>. Aug 3, 2007 ... Spartan-carrying corn stover would be pulped, and the liquid containing the enzymes would be extracted, says researcher Mariam Sticklen. ...

www.agbioworld.org/newsletter_wm/index.php?caseid=archive&newsid=2754

 Cropbiotech Update 11 May 2007 11-May-2007 International Service ... May 11, 2007 ... SPARTAN CORN FOR CARS. The leaves and stalks of a new corn variety ... Mariam Sticklen, an MSU professor of crop and soil sciences, ... www.biotechknowledge.com/BIOTECH/knowcenter.nsf/ID/ 57BCC081240EFAD9862572D800495EA8?OpenDocument

- <u>Plant Life</u>. Mariam Sticklen developed a series of corn genetic lines that grow the enzymes ... The Spartan Corn series promises to make a waste product commercially . <u>www.msu.edu/~rohler/f07report/may.htm</u>
- First American cellulosic ethanol plant now in production ... He criticizes corn ethanol (and more recently cellulosic ethanol) as requiring more fossil and Mariam Sticklen, professor of crop and soil sciences,

www.gminsidenews.com/forums/showthread.php?t=60232

- <u>GRASSOLINE</u>. Mariam Sticklen, professor of crop and soil sciences, have found a way to make a corn ... on the first and second generations of this Spartan Corn, and ... <u>www.bioeconomy.msu.edu/news/dale_msualumnimag_winter08.pdf</u>
- SeedQuest. "We've developed two generations of Spartan Corn," said Mariam Sticklen, MSU professor of crop and soil sciences. "Both corn varieties contain the enzymes ... www.seedquest.com/News/releases/2007/may/19171.htm
- ISA | Corn plant could fuel cheaper ethanol production. "We've developed two generations of Spartan Corn," said Mariam Sticklen, MSU professor of crop and soil sciences. "Both corn varieties contain the enzymes ...

www.isa.org/.../ContentManagement/ContentDisplay.cfm&ContentID=61618

• <u>Creating corn for cars : International</u>. We've developed two generations of Spartan Corn, said Mariam Sticklen, MSU professor of crop and soil sciences. Both corn varieties contain the enzymes ...

www.nerve.in/news:25350047278

- New variety of corn makes ethanol production for cars more cost ... But with the Spartan corn it is possible to turn corn leaves and stalks into ... efficient production of ethanol,†said Mariam Sticklen, MSU professor of ...
- www.ebiologynews.com/1853.html
- ZAMP Bionews » Blog Archive » New variety of corn makes ethanol ... But with the Spartan corn it is possible to turn corn leaves and stalks into ... of ethanol," said Mariam Sticklen, MSU professor of crop and soil sciences. ... www.zampbioworld.org/bionews/index.php/2007/05/05/77
- <u>AgBioView Newsletter on Agricultural Biotechnology</u>. Michigan State University scientist Mariam Sticklen developed a genetically modified corn line called Spartan that
produces its own natural cellulase enzyme ...

www.agbioworld.org/newsletter_wm/index.php?caseid=archive&newsid=2796

- East North Central US Biotechnology & GMOs News Agriculture ... Production Frontiers: Spartan Corn 6 Feb 2008 20:52 GMT ... EAST LANSING, Mich. ... Michigan State University scientist Mariam Sticklen developed a
- agriculture.einnews.com/news/east-north-central-us-biotechnology-gmos?offset=50
- <u>Ethanol stalks The Engineer Online [Production Engineering ...</u> 'We've developed two generations of Spartan Corn,' said Mariam Sticklen, MSU professor of crop and soil sciences. 'Both corn varieties contain the enzymes ...

secure.theengineer.co.uk/Articles/299682/Ethanol+stalks.htm

• <u>CEDAB Centro Documentazione Agrobiotecnologie</u>. Spartan Corn for CarsThe leaves and stalks of a new corn variety developed by Michigan ... Mariam Sticklen, an MSU professor of crop and soil sciences, ...

www.cedab.it/newsletter_ISAAA.asp?IDnews=178

 <u>Plant Breeding and Genetics: Harvesting the Power of DNA</u>. ...said Mariam Sticklen, professor of crop and soil sciences, who has been. Filling Up Spartan 162. 1958. Golden Spartan. 1974. Corn (Open-pollinated) ...

www.maes.msu.edu/publications/futures/spring2005/futures_spring2005.pdf

 ISAAA.org/KC - CropBiotech Update (11 May 2007). SPARTAN CORN FOR CARS. The leaves and stalks of a new corn variety developed by Michigan ... Mariam Sticklen, an MSU professor of crop and soil sciences, ...

www.isaaa.org/Kc/cropbiotechupdate/2007/05/11.html

• <u>Wade Clisby Page 1 of 1 Untitled Page 24/05/2007</u>. Mariam Sticklen, MSU Professor of Crop and Soil Sciences, announced that she and her colleagues have developed two generations of Spartan Corn. ...

claria12.securesites.net/hosting/seedworld/seedweek/pdf/8May07.pdf

- <u>MSU Today</u>. "...generations of Spartan Corn," said Mariam Sticklen, MSU professor of crop and soil sciences. "Both corn varieties contain the enzymes necessary <u>www.msutoday.com/search/?page=1&perPage=10&search=crop&sort=title</u>
- <u>ISAAA.org/KC CropBiotech Update (11 May 2007)</u>. SPARTAN CORN FOR CARS. The leaves and stalks of a new corn variety developed ... Mariam Sticklen, an MSU

professor of crop and soil sciences, said that not ...

•

٠

- www.cedab.it/cgi-bin/newsletter/cbu-2007-05-11.pdf
- East North Central US Wheat News Agriculture Industry Today. Production Frontiers: Spartan Corn 6 Feb 2008 20:52 GMT ... Michigan State University scientist Mariam Sticklen developed a genetically

 $\underline{agriculture.einnews.com/news/east-north-central-us-wheat?offset=50}$

First American cellulosic ethanol plant now in production [Archive ... If more ethanol comes from sources such as this rather than corn, I think people will warm and Mariam Sticklen, professor of crop and soil sciences, ...

www.gminsidenews.com/forums/archive/index.php?t-60232.html Detail List of Sticklen's Trainees and their Present Postitions:

MAJOR INTERNATIONAL DEVELOPMENT ACTIVITIES

Establishment of the 10 year ABSP at MSU

In 1991, Dr. Sticklen established a six-year consortium project entitled "Agricultural Biotechnology for Sustainable Productivity (ABSP)". Total funds granted by the United States Agency for International Development (US-AID) to Michigan State University was \$20 million from 1991-2001 (PI: M. B. Sticklen).

At the national level, members of the consortium included four universities (Michigan State University, Cornell University, Texas A&M University, Stanford University) two biotechnology companies (ICI Seeds Inc., DNA Plant Technologies Inc.), and Scripps Research Institute.

The goal of the consortium was to transfer technology from these top U.S. institutions to developing countries. The \$20 million dollar ABSP Project, which this candidate established, included several developing countries including Indonesia, Kenya, Costa Rica, and Egypt.

The U.S. Institutions listed above had responsibilities to train scientists (mainly young professors) from these developing countries in the area of genetic engineering of plants for insect and disease resistance.

US Companies were Monsanto, Pioneer HiBred, DNA Plant Biotechnoly Corp. Over 50 PhD scientists were trained through the ABSP are presently research and administrative leaders of biotechnology programs around the globe. Since 1994, these ABSP trainees have trained over 1000 young scientists in their own countries.

Mariam Sticklen, with the help of the Administrator that she employed to run the program, established the ABSP Newsletter, BioLink (<u>http://www.bioline.org.br/request?nl93019</u>) at Michigan State University. This newsletter was distributed around the globe among biotechnologists for 10 years.

DIVERSITY & TRAINING OF UNDERREPRESENTED MINORITY STUDENTS

Prof. Sticklen's laboratory research teams are probably most diverse than any other laboratories at MSU. Among her 66 graduate students, postdocs, sabbatical professors, research scholars and technicians, 55 have come from outside of the United States for training. Since her switch from the Ohio State University to Michigan State University, she has trained over 100 underrepresented minority high school students during summers via CANR MAP, and those trained under MSU-ZJU. The names of those trained during summers of 2010-2013 are listed below.

2013

- alyson linton
- annie moore
- denisha jones
- kris powell
- jalen vann scott
- lizbeth diaz
- alondra alvizo

2012

- Mingzhang Ma, MSU-ZJU Program (6 weeks; June 26-August 2)
- Yuxuan Ye, MSU-ZJU Program (6 weeks; June 26-August 2)
- Panglu Pan, MSU-ZJU Program (6 weeks; June 26-August 2)
- Kamari Delfine, MAP summer student
- Kameron Delfine, MAP summer student
- Alaliayhia Cepheus, MAP summer student
- Harmoni Florence, MAP summer student

2011

- Ischmael Ommett
- Elizabeth Weber
- Cassandra Mac

2010

- Ozema Braddock
- Dorsey Hill
- Dana Ahasson
- Jannah Cumming

TEACHING:

With 15% teaching appointment, Mariam Sticklen teaching a two-credit hor course entitled "New Horizins in Biotechnology." typically she must teach one courses each year. She also teaches two other cources. One being a for credit (CSS491; 3 credit) course entitled "Biotechnology, Demystyfying the Concepts, a 30 hour intensive two-week two section non-credit Biotechnology course i.e. under the MSU Honors College.

Previousely, she has taught the following courses:

- The Ohio State University Agron200 entitled "General Sciences in Agronomy, Horticulture and Foestry"
- The MSU CSS 823 entitled "Laboratory Methods in Genetic Engineering," developped by M. Sticklen
- CSS 491 entitled "Biotechnology: Demystifying the Concepts" taught to Honors College High Achievers.
- CSS 222 entitled "New Horizons in Biotechnology, developped as a coursepack by M. Sticklen.

Mariam Sticklen has a strong passion for teaching. She has received extremely positive notes, and her Chairperson, Dr. Jim Kells, has made notes under some of the students' comments as "Wow!" "Very impressive," "Excellent!", "Comments don'ot get betteretter", "You recruted another Spartan", "It doesn't get any better" "Impressive", Very nice", "Very nice comment", etc. Some of the students' comments are listed below.

- Best professor ever, seriousely. Very Caring!
- Dr. Sticklen is an amazing professor that cares about her students....She is probably my favorate professor so far.
- Treats students as they were her family. Geninely wants us to learn and succeed-Makes State really really nice as a university.
- Most knowledgable and sincerely caring teacher I have had so far in collge. I would recommend the course solely because of Professor Sticklen.
- The instructor is great, she takes time and ask her students if they need help. She always tries to make herself available even over the phone. She has been great in helping me this semester.
- Great teacher, attentive, informative, frindly and knowledgable ③.
- Dr. Sticklen is an amazing teacher that cares about her students more than any professor in the university.

Dr. Sticklen was a great professor and I really enjoyed her enthusiasm in the class. I also liiked the smile on her face everyday when I came to the class.

- It would be a chame if Dr. Sticklen was in the job all day and not teaching. She gave life to the material with a great enthusiasm. She is the reason why MSU is known as an institution of high quality processors faculty. Pleasure to learn with her.
- Dr. Sticklen does a wonderful job with the how the class is structured and tought.
- A great class, You are a cool Dude!!!!
- You are the best teacher on Earth!
- I learned a lot in this class because of Dr. Sticklen's joy of teaching... She takes pride in making sure her students succeed
- Dr. Sticklen taught extremely well. She definitely wants everyone to pass with a 100% and she shows it.
- Dr. Sticklen is a wonderful teacher. She goes out of her way to make us understand the course material. She is one of the best teachers that I have had, she is enthusiastic about our learning and her teaching"

- I never had an instructor who took so much care to make sure I did well
- Dr. Sticklen makes <u>sure</u> you understand and takes as much time necessary to teach you everything you need to know
- Dr. Sticklen was a great teacher!....I would definitely recommend Dr. Sticklen as a teacher, and ... I would love to take one of her classes again
- Professor Sticklen was very good in presenting the material... Most of all, she cared how we did overall in the course and how much we learned
- Dr. Sticklen really cares for her students
- Dr. Sticklen did a great job making sure that everyone understood the material. I really enjoyed the activity where we isolated DNA from our saliva.... Thank you Dr. Sticklen!"