WILLIAM EDWARD DYER
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EDUCATION

Ph.D. 1988 Purdue Univ., Horticulture and Biochemistry
Dissertation: The cDNA encoding the first enzyme of the shikimate pathway in *Solanum tuberosum* L.
M.S. 1983 Montana State Univ., Agronomy
Thesis: Soil movement and residual aspects of chlorsulfuron and its control of Canada thistle.
B.S. 1981 Montana State Univ., Agronomy, summa cum laude

PROFESSIONAL EXPERIENCE

2000 - Present Professor, Department of Plant Sciences, Montana State Univ.
1994 - 1999 Assoc. Prof., Molecular Cellular Biol Grad Faculty, Montana State Univ.
1988 - 1994 Asst. Prof. of Weed Physiology and Molecular Biology, Department of Plant, Soil and Environmental Sciences, Montana State Univ.
1984 - 1988 Graduate School Dissertation Fellow, Departments of Horticulture and Biochemistry, Purdue Univ.
1981 - 1983 Graduate Research Assistant, Department of Plant and Soil Science, Montana State Univ.

TEACHING EXPERIENCE

Plant Molecular Biology 545 (enrollment ~10), 1992-1997
Intro to Biotechnology 102 (~80), 1997-1999
CLS 101 Freshman Seminar (~16), 2002-2006
Plant Science, Resources & Environment 102 (~175), 2002-present
Herbicide Physiology 546 (Distance; ~12), 2005-present

MAJOR ADMINSTRATIVE RESPONSIBILITIES

National Science Foundation/EPSCoR Plant Biology Cluster Administrator, MSU-Bozeman, Administrative and fiscal responsibility for five-year, $1,400,000 grant for infrastructure and research development, 1993-1999

HONORS AND AWARDS

Honorable Mention, “Wild Oats”, Chlorofilms Plant Video Contest, American Society of Plant Biologists 2009
International Who's Who of Professionals 1998-present
MSU College of Agriculture 1993 Team Recognition Award 1993
Nominated for Outstanding Young Weed Scientist, Weed Science Society of America 1992
Nominated for National Science Foundation Young Investigator Award 1992
Graduate School Dissertation Fellow, Purdue Univ. 1985-1987
First Place Graduate Student Paper Contests

North Central Weed Control Conference	1985
American Society of Plant Physiologists	1985

RECENT PUBLICATIONS

Goss, G.A. and W.E. Dyer. 2003. Physiological characterization of auxinic herbicide-resistant biotypes of *Kochia scoparia*. Weed Sci. 51:839-844.

Kern, A.J. and W.E. Dyer. 2003. Glycine betaine biosynthesis is induced by salt stress but repressed by auxinic herbicides in *Kochia scoparia*. J. Plant Gr. Regul. 23:9-19.

Mickelson, J.A., A.J. Bussan, E.S. Davis, A.G. Hulting, and W.E. Dyer. 2004. Postharvest kochia (*Kochia scoparia*) management with herbicides in small grains. Weed Technol. 18:426-431.

Bahieldin, A., H.T. Mahfouz, H.F. Eissa, O.M. Saleh, A.M. Ramadan, I.A. Ahmed, W.E. Dyer, H.A. El-Itriby and M.A. Madkour. 2005. Field evaluation of transgenic wheat plants stably expressing the *HVA1* gene for drought tolerance. Physiol. Plant. 123:421-427.

Bahieldin, A., H. F. Eissa, H.T. Mahfouz, W.E. Dyer, M.A. Madkour, and R. Qu. 2005. Evidence for non-proteinaceous inhibitor(s) of β-glucuronidase in wheat (*Triticum aestivum* L.) leaf and root tissues. Plant Cell Tiss. Org. Cult. 82:11-17.

Kern, A.J., M.E. Chaverra, H.J. Cranston, and W.E. Dyer. 2005. Dicamba responsive genes in herbicide-resistant and susceptible biotypes of *Kochia scoparia*. Weed Sci. 53:139-145.

Dyer, W.E. and S.C. Weller. 2005. Plant Response to Herbicides. p. 171-214 *In* M. Jenks and P. Hasegawa, eds., Plant Abiotic Stress. Blackwell Scientific.

Dyer, W.E. 2008. Inhibitors of fatty acid synthesis and elongation. Journal of Natural Resources and Life Sciences Education 37:132. Featured article, American Society of Agronomy, August, 2008 web page (https://www.agronomy.org/).

Dyer, W.E. 2008. Herbicide discovery and screening. Journal of Natural Resources and Life Sciences Education. 37:132.

RECENT SUPPORT

2003-2005	$60,000	"Genomic characterization of stress-related genes from wild barley." US-Egypt Joint Science and Technology Board with A. Bahieldin.
2005-2008	$136,938	"Mechanism of dicamba resistance in *Kochia scoparia*" USDA/NRICGP.
2005-2007	$26,890	"Kochia management with Spartan herbicide." MT Noxious Weed Trust Fund with F. Menalled.
2007-2008	$16,500	"Alternative strategies for controlling herbicide-resistant wild oats." Montana Wheat and Barley Committee with F. Menalled and S. King.
2008-2009	$29,983	"Sustainable Food & Bioenergy Systems Internships Development Project." Western Sustainable Agriculture Research and Education with A. Harmon.

2008-2011	$475,888	Development, Integration and Assessment of Food and Agricultural Systems Education. USDA/CSREES Higher Education Challenge Grant Program with A. Harmon.
2008-2009	$18,000	Managing current and future herbicide-resistant weeds. Montana Wheat and Barley Committee with F. Menalled and S. King.

RECENT PROFESSIONAL AND PUBLIC SERVICE ACTIVITIES

Invited Speaker, Property and Environment Research Center National Conference for Journalists, Big Sky, MT, "Genetically Modified Crops on the Farm", September 2006.

Panel member, USDA CSREES Special Research Grants Program for Tropical and Subtropical Agricultural Research (TSTAR), Honolulu, HI, March, 2004.

Center for Invasive Plant Management Workshop, Bozeman, MT, "Characterizing the Population Genetics of Plant Invasiveness", July, 2003.

Invited External Reviewer, Insect Genetics and Plant Science Research Units, USDA/ARS Biosciences Research Laboratory, Fargo, ND, October 14-17, 2003.

Invited Participant, Agricultural Biotechnology Communications Workshop, sponsored by the Council for Agricultural Science and Technology, New Orleans, LA, September, 2000.

Panel Manager, USDA/CSRS NRICGP, Program 51.9 Biology of Weedy and Invasive Plants, March, 2000.

USDA/CSRS NRICGP National Review Panel, Program 51.4 Plant Pathology/ Weed Science, April 1993, May 1994, May 1995, and March, 1999.