

Bruce P. Bordelon

2007

I. General Information:

1. Academic Record:

<u>Degrees Received</u>	<u>Institution</u>	<u>Dates</u>
Ph.D. Plant Sciences	University of Arkansas	1991
M.S. Plant Pathology	Montana State University	1981
B.S. Plant Pathology	Oklahoma State University	1978

2. Membership in Scientific, Professional and Honorary Organizations:

American Society for Enology and Viticulture
 ASEV-Eastern Section
 Chair – 2005-2006
 Chair Elect, Technical Program and Symposium Chair – 2004-05
 Board of Directors – 2000-02, 2004-07
 Student paper award judge 2002-04
 American Society for Horticultural Science
 Outstanding Extension Educator Award Committee - Chair 2006
 Viticulture and Small Fruits Working Group - Chair 1996-97
 American Pomological Society
 Sigma Xi
 Phi Kappa Phi
 Gamma Sigma Delta

3. Awards and Honors:

Purdue Agriculture Dean's Team Award, 1997 as a member of the Purdue Wine Grape Program
 Purdue University Cooperative Extension Specialist Association Senior Award, 2003 for outstanding service over 10 years.

Program Description:

Dr. Bordelon's appointment is 60% Extension, 30% Research, and 10% Teaching. The main emphasis of his program is on applied research and extension activities in wine grape production. His main research areas are cultivar evaluation and vineyard management for improved fruit and wine quality. Bordelon also serves as the Extension specialist for small fruit (berry) crops, and teaches a 1-credit course in Small Fruit Production (HORT 414) as part of the Horticulture Production and Marketing curriculum.

II. Extension Effectiveness:

Goal:

The primary goal of the Purdue Wine Grape Program is to improve the competitiveness of the Indiana grape and wine industry, guide the industry towards development of a strong regional recognition, and promote expansion of grape production in the state and region.

Needs:

In order to be nationally competitive, regional wine industries must develop a reputation of excellence. This regional recognition is best achieved through the use of well-adapted cultivars that make excellent quality wines when grown under the climatic conditions of the region. Often referred to as "*terroir*", properly matching cultivars to different regions of the state is the primary need.

Response:

In response to the needs of the grape and small fruit industries, Bordelon has established a proactive Extension program that includes symposia, workshops, publications, website, newsletters, field days, and personal consultation. Applied research is conducted to identify promising new cultivars and develop management techniques that lead to sustainable production of high quality fruit. Bordelon is one of the key members of the Purdue Wine Grape Program, which is a team effort between Bordelon, Dr. Christian Butzke, associate professor of enology, and administrative professionals Ellen Butz, Jill Blume and Jeanette Merritt in the Food Science Department

Impact:

The Purdue Wine Grape Program has had a significant impact on the grape and wine industry in Indiana and surrounding states. Wine grape production in Indiana is expanding rapidly with an 8 fold increase since 1991 and more acres planted each year. The wine industry has grown from 11 wineries in 1991 to 34 wineries in 2006 with several more in the planning stages. Wine production has increased from 39,000 gallons in 1991 to over 710,000 gallons in 2006, which has created a strong demand for grapes in the state. The Indiana wine industry is seen as one of the most dynamic both regionally and nationally, and the Purdue Wine Grape Program has become a model that other states are emulating.

Bulletins, etc. published:

- Purdue Publications:

1. 2006 Midwest Commercial Small Fruit and Grape Spray Guide. Bordelon, B.P., M. A. Ellis, and R. Foster (eds.). ID-169. 75 pgs. Revised annually.
2. Managing Pests in the Home Fruit Planting. Foster, R.E., P. Pecknold, B. Bordelon, P. Hirst. Purdue University Cooperative Extension Service Pub. ID-146, Revised 2003.
3. Dami, I. J. Masiunas, and B. Bordelon. 2002. Herbicide Drift and Injury to Grapes. Southern Illinois University publication with support from the Illinois Grape & Wine Council.
4. Growing Grapes in Indiana. 2001. Bordelon, B.P. HO-45. 8 pgs.
5. Grape Varieties for Indiana. 2001. Bordelon, B.P. HO-221. 10 pgs.
6. Growing Pawpaws. 2001. Bordelon, B.P. HO-220. 4 pgs.
7. Raspberries. Bordelon, B.P. HO-044 Revised 2001

8. Growing Strawberries. Bordelon, B.P. HO-64 Revised 2001
9. Fertilizing Small Fruits Bordelon, B.P. HO-121 Revised 2001
10. Pest Control in Grapes. Bordelon, B.P., F. Whitford, and C. Jansen. PP-102. 1999.

- Purdue Fruit and Vegetable Connection Website: <http://www.hort.purdue.edu/fruitveg/>
Bordelon has developed pages for four small fruit crops: grapes, strawberries, blueberries, and brambles as part of this web site that contains over 1,000 pages of information on fruit and vegetable crops. The site receive an average of 50 requests for pages each day.
- Regional Publications:
Bordelon has been a leader in the effort to develop regional publications.

Midwest Grape Production Guide. 2005. Dami, I., B. Bordelon, D. Ferree, M. Brown, M. Ellis, R. Williams, and D. Doohan. Ohio State University Bulletin 919. This publication was awarded the American Society for Horticultural Science 2006 Extension Publications Award in the “book” category. Over 1800 copies have been sold.

Midwest Small Fruit Pest Management Handbook. 2004. M.A. Ellis Funt, R.C., C. Welty, R. N. Williams, D. Doohan, M. Brown, and B. Bordelon. Ohio State University Extension Bulletin 861. This publication was originally published in 1997 and won the 1998 ASHS Extension Division Materials Award for Commercial Fruit, Vegetable and Herb Production. The 2nd edition, released in 2004.

Midwest Commercial Small Fruit and Grape Spray Guide. Bordelon, B.P., M.A. Ellis and R. Foster (Eds.) Revised annually. Bordelon serves as the primary editor and coordinator of the spray guide, facilitating yearly updates and revisions. He also coordinates printing and distribution to cooperator states. The states involved are: Arkansas, Kansas, Kentucky, Illinois, Iowa, Indiana, Missouri, Nebraska, Ohio, Oklahoma, and West Virginia.

Newsletters or other regular publications sent out:

- Facts for Fancy Fruit: This newsletter is published by the Department of Horticulture for commercial and advanced amateur fruit growers by the “Purdue Fruit Team” (Bordelon and Hirst (Horticulture), Beckerman (Botany and Plant Pathology), and Foster (Entomology).
- News Notes: This newsletter is published by the Purdue Wine Grape Team for the Indiana wine industry. Two to four issues are published each year.

Conferences, schools, workshops, etc. and degree of participation:

Bordelon has participated in over 50 conferences, schools, workshops, and meetings over the past five years. See appendix I.

- Purdue Grape and Wine Workshops: Workshops are held each year that focus on important topics in viticulture, enology, and marketing. The workshops are advertised throughout the region and participants include growers and winemakers from Indiana and at least eight other states throughout the Midwest and East.
- Indiana Horticultural Congress and Grape Wine Symposium: This annual meeting is co-sponsored by Purdue, Indiana Horticultural Society, Indiana Vegetable Growers Association,

Indiana Farm Market Association, Indiana Raw Products Conference, Indiana Organic Farming Workshop, Indiana Winegrower's Guild, and the Purdue Center for New Crops and Plant Products. Bordelon coordinates the Wine Grape Symposium and the small fruit sessions at the Congress, participates in the overall planning and implementation, and makes presentations.

- Heartland Grape and Wine Coalition: The Heartland Grape and Wine Coalition is a collaborative program between Purdue, Michigan State and Ohio State universities.

Regional or national recognition in Extension:

Bordelon is widely recognized as one of the leaders in viticulture in the eastern US. He is frequently invited to speak at conferences across the region. See appendix II.

- Invited presentations at out-of-state meetings: Presentations on a wide range of viticultural topics have been given at 12 meetings over the past five years.
- American Society of Enology and Viticulture – Eastern Section: Chair 2005-06. Chair elect, technical programs chair 2004-05, Board of Directors in 2000-02. Trade Show Chair, 2002. Student paper competition judge, 2002.
- American Society for Horticultural Science: Bordelon served as Chair of the Outstanding Extension Educator Award Committee, 2006, and Chair of the Viticulture and Small Fruit Working Group in 1997.
- National Grape and Wine Initiative (NGWI): Bordelon has been invited to participate in the planning activities of this national group of academicians, industry and government personnel. www.ngwi.org
- National Extension Viticulture Leadership Development Conference: This project was formed in response to efforts by the NGWI. San Antonio, Texas, 2006
- North Central Region Grape Pest Management Strategic Planning Committee: Ohio River Valley and Ozarks Region in 2003, Great Lakes Region, 2007.

Collaborative efforts in extension:

- **At Purdue**
 - Grape and Wine Workshop Series: This workshop series is a collaborative effort between Bordelon, Christian Butzke, Ellen Butz, Jeanette Merritt and Jill Blume; the Purdue Wine Grape Team.
 - Indiana Horticultural Congress is a collaborative effort with Bordelon, Peter Hirst, Liz Maynard, Chris Gunter, and the horticultural associations within the state.
 - Purdue Fruit & Vegetable Connection Web Site is a collaborative effort with Bordelon, Peter Hirst, Liz Maynard, and Chris Gunter. This website was recently established and is available at www.hort.purdue.edu/fruitveg/

Facts for Fancy Fruit Newsletter is a collaborative effort with Bordelon, Peter Hirst (Horticulture), Rick Foster (Entomology), and Janna Beckerman (Botany and Plant Pathology).

Plant and Pest Diagnostic Lab: Bordelon is the resource person for small fruit and grape problems.

- **Nationally**

Regional Publications: In cooperation with Ohio State University: Midwest Commercial Small Fruit and Grape Spray Guide, Midwest Grape Production Guide, Midwest Strawberry Production Guide, Midwest Small Fruit and Grape Pest Management Handbook.

Heartland Grape and Wine Coalition

2004 and 2006 Regional Winegrape Price Survey

2006 Purdue/Michigan State Blueberry IPM Scout Training Workshop

III. Research, Scholarly Activity, and Creative Endeavor Effectiveness:

Program Description

Bordelon directs an applied research program in viticulture to meet the immediate needs of the grape industry. Research goals are to identify grape cultivars well-adapted to Indiana soils and climatic conditions, and to develop methods to maximize wine quality through vineyard management technology. Bordelon is considered the leading authority on cultivar performance in the Midwest and is frequently asked to speak on the topic.

1. Research in Progress

1. Cultivar and advanced selection trials

Replicated trials of cultivars of wine and table grapes and the latest releases and advanced selections from breeding programs are established at locations representing the range of climates and soils in the state.

Impact

Results of our research have had a major impact on the wine industry of Indiana and the region. Almost all new plantings are of cultivars identified by our research as superior. Traminette is now the 3rd most commonly planted cultivar in the state, and Chardonnay is the 4th.

2. Vineyard Management Studies

a. Training Systems for Improved Quality of Traminette.. A study to evaluate various training systems to improve fruit exposure and increase fruit quality. Results show the improved wine quality from mid-wire cordon systems with vertical shoot positioning. A secondary project by Ph.D. student Patty Skinkis on the evaluation of the effects of sunlight exposure on terpene levels in fruit, and on sensory characteristics of wines has shown an overall increase in monoterpene content with slight changes in the relative amounts of different monoterpenes and norisoprenoids. The study has helped identify some important vineyard management and winemaking considerations for the industry.

b. Reducing the potential for multicolored Asian lady beetle taint in wine. A project was conducted to address one of the biggest threats to the Midwest wine industry; the problem of lady bug taint in wines. Trials showed that acceptable control can be obtained with well-timed applications of registered insecticides. The project also showed that dead beetles lose their ability to taint wine after they are dead for 48 hours, giving growers answers to important questions.

2. Publications:

A. Refereed Papers:

1. Muñoz-Espada A.C., K.V. Wood, **B. Bordelon**, and B.A. Watkins. 2004. Anthocyanin Quantification and Radical Scavenging Capacity of Concord, Norton, and Marechal Foch Grapes and Wines. *J. Agric. Food Chem.* 52:6779-6786
2. Hancock, P. Callow, R. Kessler, D. Prince, and **B. Bordelon**. 2000 A crop estimation technique for blueberries. *J. Amer. Pom. Soc.* 54(3):123-129
3. Mondragon, C., N. Doudareva, and **B. Bordelon**. 2000. DNA Extraction from Several Cacti. *HortScience* 35(4): 1124-1126.
4. Salzman, R., I. Tikhonova, **B. P. Bordelon**, P. M. Hasegawa and R. A. Bressan. 1998. Coordinate accumulation of antifungal proteins and hexoses constitutes a developmentally controlled defense response during fruit ripening in grape. *Plant Physiol.* 117:465-472.
5. **Bordelon, B.P.** and S.C. Weller. 1997. Pre-plant cover crops affect weed and vine growth in first-year vineyards. *HortScience* 32: 1040-1043
6. **Bordelon, B.P.**, D.C. Ferree, and T.J. Zabadal. 1997. Grape bud survival in the Midwest following the winter of 1993-1994. *Fruit Varieties Journal* 51:53-59.
7. Simon, J.E., A. Hetzroni, **B. Bordelon**, G.E. Miles, and D.J. Charles. 1996. Electronic Sensing of Aromatic Volatiles for Quality Sorting of Blueberry Fruit. *Journal of Food Science* 61(5):967-972.
8. Salzman, R., R.A. Bressan, P.M. Hasegawa, E.N. Ashworth, and **B.P. Bordelon**. 1996. Programmed accumulation of LEA-like proteins during desiccation and cold acclimation of overwintering grape buds. *Plant, Cell & Environment* 19:713-720.

B. Non-Refereed Papers in Magazines, etc

Station bulletins

- Reisch, B.I., R.S. Luce, B. Bordelon, and T. Henick-Kling. 2006. 'Corot noir' Grape. *New York's Food and Life Sciences Bulletin*. No. 159. ISSN 0362-0069
- Reisch, B.I., R.S. Luce, B. Bordelon, and T. Henick-Kling. 2006. 'Noiret' Grape. *New York's Food and Life Sciences Bulletin*. No. 160. ISSN 0362-0069
- Reisch, B.I., R.S. Luce, B. Bordelon, and T. Henick-Kling. 2006. 'Valvin Muscat' Grape. *New York's Food and Life Sciences Bulletin*. No. 161. ISSN 0362-0069

Papers in proceedings from international, national, and regional meetings:

- Bordelon, B.P. 2006. Viticultural Issues in the Lower Midwest. *Minnesota Cold Hardy Cultivars Workshop*
- Bordelon, B.P. 2006. Planning Before Planting and Pruning and Training French Hybrids Wineries Unlimited Seminar. Lancaster, PA.
- Bordelon, B.P. 2003. Trellis and Training Systems for Midwest Cultivars. *Proceedings of the 18th Midwest Regional Grape and Wine Conference*. Pgs. 59-68

- Bordelon, B.P. 2001. Factors to Consider for Successful Vineyard Establishment. Proceedings of the 20th Annual Oklahoma and Arkansas Horticultural Industries Show. pgs. 161-166
- Bordelon, B.P. 2001. IPM for Brambles and Blueberries in the Midwest. Proceedings of the 20th Annual Oklahoma and Arkansas Horticultural Industries Show. pgs. 38-40.
- Bordelon, B.P. 2001. Cultural Practices for Newly-Planted Vines . Proceedings of Heartland Grape and Wine Coalition Vineyard and Winery Establishment in the Midwest.
- Bordelon, B.P. 2001. Emerging/Experimental Wines in the Midwest. Proceedings of Heartland Grape and Wine Coalition Vineyard and Winery Establishment in the Midwest.
- Bordelon, B.P. 2001. Crop Adjustment on Young Vines. Proceedings of Heartland Grape and Wine Coalition Vineyard and Winery Establishment in the Midwest.
- Bordelon, B.P. 1998. Economics of Midwestern Grape Production. Ohio Grape - Wine Shortcourse 1998 Proceedings. pgs. 42-59 Ohio State University Horticulture Dept. Series 641.
- Bordelon, B.P. 1998. Trellis and Training Systems for Midwest Cultivars. Ohio Grape - Wine Shortcourse 1998 Proceedings. pgs. 101-105 Ohio State University Horticulture Dept. Series 641.
- Bordelon, B.P. 1998. ABCs of Grape Production. Proceedings 1998 Illinois Small Fruit and Strawberry School. pgs. 1-11. Univ. of Illinois Horticulture Series 102.
- Bordelon, B.P. 1998. Winegrape Varieties for the Midwest. Proceedings 1998 Illinois Small Fruit and Strawberry School. pgs. 21-31. Univ. of Illinois Horticulture Series 102.
- Bordelon, B.P. 1996. Winter Protection of Cold-tender Grapevines with Insulating Materials. Proceedings of the 4th International Symposium on Cool Climate Viticulture and Enology. I-32 to I-35.
- Salzman, R.A., R.A. Bressan, P.M. Hasegawa, E.N. Ashworth, and B.P. Bordelon. 1996. Expression of LEA-like Proteins Under Endodormancy Versus Cold Acclimation Programming in Overwintering Grape Buds. Proceedings of the 4th International Symposium on Cool Climate Viticulture and Enology. I-64 to I-68.

Articles in trade magazines:

- Bordelon, B.P. 2006. Indiana Vineyard Review: 2005. Wines & Vines Vol. 87 (1) January, 2006
- Bordelon, B.P. 2005. Indiana Vineyard Review: 2004. Wines & Vines Vol. 86 (1) 89 January, 2005
- Bordelon, B.P. 2004. Indiana Vineyard Review: 2003. Wines & Vines Vol. 85 (2) 45 February, 2004
- Bordelon, B.P. 2003. Indiana Vineyard Review: 2002. Wines & Vines Vol. 84 (2):46. February, 2003.
- Bordelon, B.P. 2002. Indiana Vineyard Review: 2001. Wines & Vines Vol. 83 (2):32-33. February, 2002.

3. Contributed papers or abstracts presented at meetings:

- Skinkis, P.A. and **B.P. Bordelon**. Volatile headspace analysis of Traminette Grapes and Wine from Various Cluster Shade Regimes. American Society for Enology and Viticulture-Eastern Section annual meeting. Rochester, NY Abstract in the American Journal of Enology and Viticulture 2006(4).

- Skinkis, P.A. and **B.P. Bordelon**. Effect of Cluster Exposure on Monoterpene Levels in Traminette. American Society for Enology and Viticulture-Eastern Section annual meeting. St. Louis, MO Abstract published in the American Journal of Enology and Viticulture 2005(4).
- Sobieck, P.A. and **B.P. Bordelon**. Effects of Sunlight Exposure on Cluster Monoterpene Levels of “Traminette” Grape. American Society for Horticultural Science 101st Annual Meeting. Austin, TX 2004. Abstr. 412.
- **Bordelon, B.P.** and Jill Hubertz. Growth of Grapevines With and Without Grow Tubes. American Society for Horticultural Science 97th Annual Meeting. 2000. Abstr. 196
- **Bordelon, B.P.** and Jill Hubertz. Growth of First-year Grapevines in Desiccated Rye Residues With and Without Follow-up Weed Control. American Society for Horticultural Science 96th Annual Meeting Minneapolis, MN. 1999. Abstr. 182

4. Graduate students advised, thesis title and date:

A. Major professor for:

- Dena Fiacchino. Utilizing Geographic Information Systems to identify premium vineyard sites in the Midwest and to match variety to site. Started June, 2006.
- Patricia Skinkis. The effects of shading on monoterpene accumulation in 'Traminette' grape berries and the identification and quantitative analysis of monoterpene constituents. Completed Ph.D. December, 2006. Currently Extension Viticulture Specialist, Oregon State University
- Candelario Mondragon Jacobo. Evaluating Germplasm Variability of Cactus Pear (*Opuntia* spp.) as the Basis for an Effective Breeding Program. Completed Ph.D. July, 1999
- Ron Salzman. Identification and Characterization of Three Heat Stable Proteins from Grape (*Vitis* spp.). Completed M.S. October, 1994.
- Constance Rowinski. Induction and Detection of Resveratrol in Grape (*Vitis* spp.) Completed M.S. June, 1995.

B. Committee member for:

- Kate Girsch. Management of multicolored Asian lady beetles in Indiana wine grapes. Dept of Entomology Completed M.S. May, 2006
- Ana Cecilia Munoz-Espada. Anthocyanins in grapes and wine and its nutraceutical aspect. Dept. of Food Science. Completed Ph.D. August, 2004
- Ron Salzman, Dept. of Horticulture. Completed Ph.D. 1999

5. Research grants and scholarly awards received:

2006

Viticulture Consortium - East (USDA) Effects of Training System on Vine Growth and Fruit Quality in Traminette. Total amount of award: \$9,619 Role: PI

Viticulture Consortium - East (USDA) Wine Grape Cultivar Evaluation for Soils and Climates of the Midwest. Total amount of award: \$10,639 Role: PI

Viticulture Consortium – East (USDA) Speaker Travel Subsidy for American Society for Enology and Viticulture – Eastern Section meeting. Total amount of award: \$4,361 Role: PI

- Viticulture Consortium – East (USDA) A Spatial Decision Support System for Expanding Viticulture in Southern Indiana, North-Central Kentucky, and Southern Ohio. Total amount of award: \$10,000 Role: CO-PI directly responsible for: \$4,100
- 2005
- Viticulture Consortium - East (USDA) Effects of Training System on Vine Growth and Fruit Quality in Traminette. Total amount of award: \$7,616 Role: PI
- Viticulture Consortium - East (USDA) Wine Grape Cultivar Evaluation for Soils and Climates of the Midwest. Total amount of award: \$9,916 Role: PI
- Viticulture Consortium – East (USDA) Speaker Travel Subsidy for American Society for Enology and Viticulture – Eastern Section meeting. Total amount of award: \$5,000 Role: PI
- Indiana Commissioner of Agriculture Value-Added Grant Program. Survey of the Indiana Fruit Industry. Total amount of award: \$5,000 Role: Co-PI directly responsible for: \$1,667
- 2004
- Viticulture Consortium - East (USDA) Effects of Training System on Vine Growth and Fruit Quality in Traminette. Total amount of award: \$7,000 Role: PI
- Viticulture Consortium - East (USDA) Wine Grape Cultivar Evaluation for Soils and Climates of the Midwest. Total amount of award: \$9,317 Role: PI
- Indiana Commissioner of Agriculture Value-Added Grant Program Reducing the potential for multicolored Asian lady beetle taint in Indiana wine. Total amount of award: \$22,923 Role: PI
- 2003
- Viticulture Consortium - East (USDA) Effects of Training System on Vine Growth and Fruit Quality in Traminette. Total amount of award: \$8,000 Role: PI
- Viticulture Consortium - East (USDA) Wine Grape Cultivar Evaluation for Soils and Climates of the Midwest. Total amount of award: \$9,214 Role: PI
- Mary S. Rice Grant Fund. (Purdue Agricultural Research Programs) Improved Drainage for Viticulture Research at the Meigs Facility. Total amount of award: \$7,500 Role: PI
- 2002
- Viticulture Consortium - East (USDA) Effects of Training System on Vine Growth and Fruit Quality in Traminette. Total amount of award: \$8,034 Role: PI
- Viticulture Consortium - East (USDA) Wine Grape Cultivar Evaluation for Soils and Climates of the Midwest. Total amount of award: \$8,534 Role: PI
- USDA Specialty Crop Block Grant (Indiana Commissioner of Agriculture) Indiana Fruit and Vegetable Web Site. Total amount of award: \$28,879 Role: PI
- USDA Specialty Crop Block Grant (Indiana Commissioner of Agriculture) Indiana Horticultural Congress. \$15,751 Total amount of award: Role: Co-PI directly responsible for: \$7,875
- Mary S. Rice Grant Fund. (Purdue Agricultural Research Programs) Tractor for Fruit and Vegetable Research at the Meigs Facility. Total amount of award: \$15,000 Role: CO-PI directly responsible for: \$7,500
- 2001
- Mary S. Rice Grant Fund. (Purdue Agricultural Research Programs) Pesticide Sprayer for Fruit Research at the Meigs Facility. Total amount of award: \$10,000 Role: PI
- United Agricultural Products, Inc. (UAP Richter) Nutritional studies on vineyard establishment. Total amount of award: \$4,000 Role: PI
- 1996

Viticulture Consortium - East (USDA) Development of Gene Prescriptions for Incorporation of Genetic Resistance to Fungal Pathogens in Grape. Total amount of award: \$15,000 Role: PI

Indiana Commissioner of Agriculture Value-Added Grant Program: Production of Cactus Pear Leaves as a Specialty Crop in Indiana. Total amount of award: \$13,600 Role: PI

6. Evidence of regional or national recognition:

A. Participation in regional and national organizations:

American Society for Enology and Viticulture – Eastern Section:
Chair 2005-06; Chair Elect, 2004-05, Board of Directors, 2000-2002. Exhibits Chair for the 2002 annual meeting. Judged student papers 2002-2004.

American Society for Horticultural Science:
Chair of the Viticulture and Small Fruits (VSF) working group, 1996-97. Conducted the VSF working group business meeting at the 94th Annual International Conference of ASHS, Salt Lake City, UT. July 26.
Chair of the Outstanding Extension Educator Award Committee, 2006

NCCC-22 Committee on Small Fruits and Viticulture Research:
Member 1991-present. Chair (host) 2004.

NE-1020 Multi-state Evaluation of Winegrape Cultivars and Clones:
New project began in 2005. Participant in planning sessions to develop research protocols.

7. Collaborative and interdisciplinary efforts in research or scholarship:

- At Purdue
 - Christian Butzke and Ellen Butz, Department of Food Science. 1) Wine quality of new grape genotypes. 2) Effects of training systems on Traminette wine quality. 3) Effects of fruit maturity standards on wine quality. 4) other studies. 1993-present.
 - Karl Wood, Department of Chemistry. Monoterpene quantification.
 - Rick Foster, Entomology, Christian Butzke and Ellen Butz, Food Science. Multicolored Asian Lady Beetle Research
- Nationally
 - Bruce Reisch. New York State Experiment Station. Cornell University. Advanced grape selection evaluation. 1991-present.
 - Jim Luby and Peter Hemstad. University of Minnesota. Advanced grape selection evaluation. 1991-present.
 - J.R. Clark. University of Arkansas. Advanced grape and blackberry selection evaluation. 1991-present.
 - Bob Goodman (late) and staff. Southwest Missouri State University. Evaluation of Eastern European grape importations for wine production in the Midwest US.

- Kirk Pomper, Kentucky State University. Pawpaw Regional Variety Trial. 1994-present.
- Gail Nonnecke and Craig Dilley. Iowa State University. Soil Health in Midwest Vineyards. USDA Viticulture Consortium-East funded project. 2004
- Tom Zabadal Development and Evaluation of Crown Gall Free (*Agrobacterium vitis*) White Riesling, Chardonnay, and Cabernet franc Grapevines. USDA Viticulture Consortium-East funded project. 2004-present
- Kaan Kurtural, University of Kentucky and Imed Dami, Ohio State University. A Spatial Decision Support System for Expanding Viticulture in Southern Indiana, North-Central Kentucky, and Southern Ohio. USDA Viticulture Consortium-East funded project. 2006

IV. Teaching Effectiveness:

1. Courses taught in past 3 years:

Small Fruit Production (Hort 414) Spring, 94-99 Fall 99-05.

Course Description: Small Fruit Production is an intensive five-week course on the biology, culture, and management of small fruit crops with emphasis on blueberry, brambles, strawberries and grapes. This one-credit course is one of the series of Horticultural Production courses offered as a complement to Hort 401. In addition to regular class lectures, websites, videos, and short field trips are utilized. A 76 page syllabus is provided to students.

2. Courses where guest lectured:

2007

FS 470 Wine Appreciation. Feb. 5

2006

FS 470 Wine Appreciation. Feb. 6 and Sept. 18

Hort 541 Postharvest Technology. Feb. 24.

Hort 401 Horticultural Production Technology. April 4.

Hort 401 Horticultural Production Technology lab. April 5

Hort 101 Principles of Hort. Lab (3 sections) April 17-18

2005

FS 470 Wine Appreciation. Feb. 7 and Sept. 19

Hort 401 Horticultural Production Technology. March 8.

Hort 401 Horticultural Production Technology lab. March 9.

Hort 101 Principles of Hort. April 18.

Hort 101 Principles of Hort. Lab (3 sections) April 18.

2004

Hort 401 Horticultural Production Technology. March 23.

Hort 401 Horticultural Production Technology lab. March 24.

Hort 101 Principles of Hort. April 19.

Hort 101 Principles of Hort. Lab (4 sections) April 19.

2003

Hort 401 Horticultural Production Technology. March 11.
 Hort 401 Horticultural Production Technology lab. March 12.
 Hort 541 Postharvest Technology. March 24.
 Hort 413 Tree Fruit Production. Sept. 30

4. Student counseling and advising:

a. Undergraduate advising.

Bordelon was academic advisor for 15-20 undergraduates from 1998 through 2005. He now serves as a career counselor.

5. Collaborative efforts in teaching:

Study Abroad Maymester 2007 course: Experiencing the Wine, Food and Culture of Italy, in collaboration with Christian Butzke and Mario Ferruzzi in Food Science.

V. General Contributions:

1. Departmental committees and positions:

Extension Committee Chair, 1997-present
 Distinguished Ag Alumni and Distinguished Horticulture Alumni Committee, 2006
 Landscape Nursery Management-Landscape Horticulture search committee, 2004
 Enology search committee (Food Science), 2004

2. School or University committees and positions:

Multicultural Diversity Training, 2005 participant
 Agriculture Faculty Grievance Committee, 2002-03
 CES Plan of Work Horticulture and Turf Team, Co-chair. 1999-present
 CES Commercial Hort Common Interest Group, Chair. 1998-present
 CES Agriculture Natural Resources Policy Committee, Department Representative 1997-present

Appendix I.

Conferences, schools, workshops: (last 5 years)

2006

- Purdue CES tour of Organic farms in NW Indiana with Extension Educators. June 29.
- Purdue Wine Grape Team Fall Workshop. Sept 14 Campus
- Purdue University/Industry Consortium. Overview of viticulture research. Oct. 10
- University of Santa Maria (Chile) visiting faculty tour of Meigs Oct. 13
- Institute of Food Technologists. Indiana Chapter meeting. Presentation on the Indiana wine industry. Nov. 9.
- American Society for Enology and Viticulture – Eastern Section. 31st Annual Meeting. July 9-12. Rochester, NY Chair of Section.
- Indiana Horticultural Society Summer Meeting. June 27.
- Blueberry Growers of Indiana Summer Meeting. June 13.
- Purdue Wine Grape Team Summer Workshop and Indiana Winegrower's Guild Summer meeting. June 12. Huber Orchard & Winery, Starlight, IN

- Purdue Wine Grape Team Spring Workshop. March 20. Chateau Thomas Winery, Plainfield. Presentation “Grape Acreage and Variety Trends - What is the future for the Midwest?”
- Throckmorton Purdue Agriculture Center Field Day. March 11. Fruit Production workshop.
- Blueberry IPM Scout Training Workshop. March 6-7 and June 13. Planned, organized and hosted in collaboration with Michigan State University.
- Master Gardener Training. March 4. Alexandria. Gave presentation: Growing Small Fruit in the Backyard Planting.
- Indiana Horticultural Congress. Jan. 23-25. Indianapolis. Helped plan and coordinate the overall congress, especially the Indiana Wine Grape Symposium..

2005

- Purdue Wine Grape Team Fall Workshop Sept 13. Campus.
- Indiana Horticulture Society Summer Meeting. June 30-July 1. Joe Black Farm, Vincennes.
- Blueberry Growers of Indiana Summer Meeting. June 14. Van Kley’s Berries, Demotte.
- Purdue Wine Grape Team Summer Workshop and Indiana Winegrower’s Guild Summer meeting. June 13. French Lick Winery, French Lick IN
- Master Gardener IP Video Training Session. March 15.
- Purdue Wine Grape Team Spring Workshop. March 14. SWPAC, Vincennes.
- Southwest Indiana Master Gardens Training program. March 14. SWPAC, Vincennes.
- Blackford County Cooperative Extension Service Annual Meeting. Feb 22. Hartford City..
- Indiana Horticultural Congress. Jan. 24-26. Indianapolis. Helped plan and coordinate the overall congress and specifically the Indiana Wine Grape Symposium.

2004

- Purdue Wine Grape Team Fall Workshop. Sept. 14. Meigs farm and campus labs.
- Purdue Commercial Fruit and Vegetable Plot Tour. Sept. 14. Meigs Horticulture Research Farm.
- Purdue Wine Grape Team Summer Workshop and Indiana Winegrower’s Guild Summer meeting. June 21. Chateau Pomije Winery, New Alsace, IN.
- Southwest Indiana Master Gardens Training program. March 18. SWPAC, Vincennes.
- Grape Pruning Workshop. March 18. SWPAC Pruning workshop for commercial growers.
- Purdue Wine Grape Program Spring Workshop. April 12 Anderson Orchard and Winery, Valparaiso, IN.
- Indiana Horticultural Congress. Jan. 26-28. Indianapolis. Helped plan and coordinate the overall congress and specifically the Indiana Wine Grape Symposium.

2003

- Purdue Wine Grape Team Summer Workshop and Indiana Winegrower’s Guild Summer meeting. August 11. Butler Vineyard and Winery, Bloomington.
- North Central Region Grape Pest Management Strategic Planning Committee. July 15-16. Augusta, MO.
- Indiana Horticultural Society Summer Meeting. June 23-24. Tuttle’s Orchard. Greenfield.
- 4H Plant Science Workshop. June 12. West Lafayette.
- Blueberry Growers of Indiana Summer meeting. June 5. Bonnell’s Blueberries, North Judson.
- Northeast Indiana Fruit Growers Twilight meeting. April 23. Brad Springer Vineyards, Ossian.
- Southwest Indiana Master Gardens Training program. March 6. SWPAC, Vincennes.
- Heartland Wine School- From bulk to bottle. Oliver Winery, Bloomington, IN.

- Indiana Horticultural Congress. Jan. 28-30. Indianapolis. Helped plan and coordinate the overall congress and specifically the Indiana Wine Grape Symposium.

2002

- Purdue Wine Grape Team Summer Workshop and Indiana Winegrower's Guild Summer meeting. August 5. Huber Orchard and Winery, Starlight.
- American Society of Enology and Viticulture-Eastern Section annual meeting. July 10-12. Baltimore, MD. Trade Show Chair
- Indiana Horticultural Society Summer Meeting. July 1-2. Lafayette area: Dow Agrosiences Midwest Research Center and Purdue Horticulture Research farms.
- 4H Plant Science Workshop. June 12-14 West Lafayette.
- Blueberry Growers of Indiana Summer meeting. June 11. Blueberry Dunes Farm, LaPorte.
- Starlight area fruit growers meeting and PARP program. April 9.
- Purdue Spring Grape and Wine Workshop. April 1. Oliver Winery, Bloomington.
- Martinsville Orchard School. March 19
- Grape and Bramble Production Workshop. March 14. Southeast Purdue Agriculture Center.
- Southwest Indiana Master Gardens Training program. March 7. SWPAC, Vincennes.
- SAM Training for Horticulture Staff. Feb. 27.
- Hendricks Co. Master Gardener Training in Small Fruit and Grapes. Feb. 19
- Knox Co. Extension Annual Awards Banquet. Feb. 5. Keynote speaker. Gave a talk on the Indiana wine industry and Purdue's Wine Grape programs.
- Indiana Horticultural Congress. Jan. 28-30. Indianapolis. Helped plan and coordinate the overall congress and specifically the Indiana Wine Grape Symposium.

Appendix II. Invited presentations at out of state meetings: (last 5 years)

2006

- Minnesota Cold Hardy Cultivars Workshop June 24-25. Presentation on Viticultural Issues in the Lower Midwest
- University of Wisconsin Extension LaCrosse Area Grape Growers Workshop March 25
- Wineries Unlimited. March 12-14. Lancaster, PA. Gave two talks in Beginners Session: Planning Before Planting, Pruning and Training French Hybrids.

2005

- Southwest Michigan Horticulture Days. Feb 2-3. Benton Harbor, MI Gave a talk titled Influence of viticultural practices on yield and fruit quality of Traminette.
- Illinois Grape Growers and Vintners Association annual meeting. Feb 25. Peoria, IL. Presented a workshop on Pest Management in Grapes
- Wineries Unlimited. March 20-22. Lancaster, PA. Gave presentation Matching Cultivars to Site

2004

- Ohio Grape Day. Wooster, OH. August 19. Featured speaker. Topics: Training Systems for Traminette. Cold Hardy Varieties for the Upper Midwest.
- Greater Shawnee Grape Growers Association Pruning Workshop. Carbondale, IL. March 19-20. Featured speaker. Topic: Principles and Practices of Pruning Grapes.

2003

- Midwest Annual Grape and Wine Conference, Osage Beach, MO Feb. 8-10. Invited speaker. Topic: Trellis and Training Systems for Midwestern Cultivars. Proceedings published.
- Door County Wisconsin Grape Growers Meeting. Peninsular Agricultural Research Station, Sturgeon Bay, WI. April 12. Featured speaker.
- Kentucky Grape Production Workshop. Louisville, KY Nov. 18. Featured speaker. Topic: Vineyard Practices for Quality Wine Production.

2002

- Illinois Vintners and Vineyard Growers Association annual meeting. Feb. 15-16. Invited speaker. Gave an overview of varieties for the Midwest with emphasis on results of my variety trials and implications for various regions on Illinois.