

**Lee E. Schweitzer**  
**Professor of Agronomy**  
**Purdue University**

**Education:**

B.S. Agronomy, Purdue University. 1974.  
M.S. Agronomy, Crop Physiology. University of Illinois. 1978.  
Ph.D. Agronomy, Crop Physiology. University of Illinois. 1980.

**Professional Employment:**

1994 to present - Professor of Agronomy, Purdue University  
1986 to 1993 - Associate Professor of Agronomy, Purdue University  
1980 to 1986 - Assistant Professor of Agronomy, Purdue University  
1974 to 1980 - Graduate Teaching & Research Assistant, University of Illinois

**Professional Memberships**

American Society of Agronomy  
Crop Science Society of America  
Gamma Sigma Delta  
National Association of Colleges and Teachers In Agriculture (Institutional Membership)  
Sigma Xi

**Service To ASA / CSSA And Other Professional Service:**

Division Chairman. A1a (Student Subdivision), American Society of Agronomy. 1989.  
Committee Chairman. Outstanding Senior Recognition. American Society of Agronomy.  
1989.  
SAS-ASA Photography Contest Committee, Faculty Chairman. 1989.  
Program Planning Committee. American Society of Agronomy. 1989.  
Invited speaker. ASA for A1 teaching symposium. 1993.  
Software Scene. Session Chairman. American Society of Agronomy Meetings. 1996.  
SAS-ASA Speech Contest Committee. American Society of Agronomy. 1995, 1996,  
1997.  
G.O. Mott Scholarship Committee. Crop Science Society of America. 2000.  
Crop Science Society of America. Chairman, Crop Science Teaching Award Selection  
Committee. 2002. Chairman in 2003.  
American Seed Trade Association. Corn and Sorghum Program Planning Committee.  
Chairman Elect, 2006; Chairman, 2007.

### **Teaching Awards:**

Amoco Outstanding Teacher, Purdue University, 1987.  
Outstanding Teacher, School of Agriculture, Purdue University, 1987.  
Outstanding Counselor, School of Agriculture, Purdue University, 1987.  
Fellow, National Association of Colleges and Teachers of Agriculture, 1986.  
Agronomic Resident Education Award, American Society of Agronomy, 1991.  
E.B. Knight Award for Outstanding Teaching Journal Article - National Association of Colleges and Teachers of Agriculture, 1994.  
Gamma Sigma Delta Award of Merit for Teaching. Purdue University, 1995.  
American Society of Agronomy Educational Materials Award for the development of the "Corn Growth, Development, and Diagnostics Germination To Knee-High" CD-ROM. 1996.  
Fellow, Purdue University Teaching Academy, 1999.  
Book Of Great Teachers, Purdue University. 1999.  
Crop Science Teaching Award, Crop Science Society of America, 2001.

### **Current Teaching Responsibilities:**

**AGR 113 Freshman Seminar** (0.5 credit hours). Taught each Fall semester beginning in 2008). Introduction of incoming students to the Agronomy profession, the department, career planning, interviewing, resume writing and placement services and strategies.

**AGRY 350 Global Awareness.** (1- 3 credit hours). Taught each spring semester beginning in 1988 as a means to expand the international awareness of undergraduate students. Enrollment has been 55 or more students each spring. International guest speakers (Purdue faculty and students raised in cultures outside the U.S.) share insights about agriculture, climate, geography, geology, land resources, environment, culture, history, economics, politics, and family traditions in their home countries.

Students prepare weekly by reading background news stories covering current events in the nation to be discussed in that week's class. Students report on these current events and also note changes in their perceptions resulting from interaction with their guest speaker(s).

Throughout the semester students also journal week to week changes in a select current international topic which they choose (e.g. GMOs in international trade). Students research their topics in international media using Lexis – Nexis (searchable data base software) to gain access to English language versions of newspapers published all over the world. A semester – long portfolio of their research reading is composed and each student writes a fully referenced summary paper presenting the international topic they've followed.

Marion Baumgardner and Lee Schweitzer co-developed this unique course in 1988 and in 1993 published an account its development (Schweitzer, L.E. and M.F. Baumgardner. 1993. Global Awareness - A Course Expanding the International Perspective of

Undergraduate Students. NACTA Journal 37 (4): 4 - 7). This paper received the E.B. Knight Award for Outstanding Teaching Journal Article - National Association of Colleges and Teachers of Agriculture, 1994.

Refinements and enhancements of the course continue with each new offering. Students have greatly appreciated the direct interaction which this course has provided for them as they speak with individuals from all over the world. Excellent questions and candid answers have been very effective in opening the eyes of students to a much greater understanding of the complexities of international problems and the challenges, responsibilities and opportunities each student faces as they contribute to solutions.

In 2007 the course was expanded to include use of Adobe Connect through which Dr. Gebisa Ejeta successfully (with a few technological ad libs) presented to the class live from Nairobi, Kenya.

**AGRY 375 Crop Production Systems.** (3 credits hours). Developed in Fall of 1980 by Dr. Schweitzer and taught each semester since then. Class enrollment averages 55 to 75 each semester and serves students (mostly Juniors and Seniors) from many departments in the College of Agriculture. Topics include crop management strategies (profitability, environmental stewardship, sustainability, global resource management), precision ag applications (GPS, GIS, VRT management tools) crop diagnostics, soil compaction and drainage, weed control strategies, corn production, water use and irrigation, wheat production, soybean production and double crop soybeans intercropped with or relay cropped after wheat. Dr. Schweitzer developed a series of 4 crop management CDs in support of this class as a way to provide the students with virtual field agronomy experience and to enhance their understanding of crop growth, development and diagnostics.

**AGRY 398 Sophomore Seminar.** (1 credit hour). Dr. Schweitzer has taught this professional development class each fall since 1980 and continues to refine and improve it. Students interact with industry mentors, set professional goals and supporting plans of action, build resumes, learn and practice interviewing protocols and do background research on companies for whom they would like to work.

#### **Additional Teaching Responsibilities at Purdue:**

Teaching Coordinator/ Co-Coordinator. Since 2007. Manage Department of Agronomy undergraduate teaching and related activities. Support and encourage Agronomy teaching faculty and teaching assistants in the fulfillment of the departmental teaching mission.

Coordinator - Academic Advising. Since 2005. Manage the academic advising process and resolve issues pertaining to student progression through B.S., Associate's and Minor In Agronomy degrees. Creatively advise Academic Advisers and students with regard to curriculum and degree requirements. Manage the audit process and advocate at the College level when necessary on behalf of students and departmental Academic Advisers.

Primary Academic Adviser for 48 undergraduates (some of whom were Tom Housley's prior to his retirement). Also Advised Cale Bigelow's 25 students as needed during his sabbatical in Fall 2011. Back-up Academic Adviser for all 163 current Agronomy undergraduates. Informally advise several more walk - in students from other majors seeking academic advice or information on placement in internships with industry.

Coordinator - Placement Support Services. Assure that all Agronomy students are trained in and have the functional skills necessary to write excellent resumes; prepare for, schedule, participate in, and follow up on placement interviews; and explore alternative career paths. Training begins in their first semester in the Agronomy Freshman Seminar AGR 113 (our Freshmen thereby prepared for and begin participation in the College of Agriculture Career Fair their first semester on campus. Their training continues more intensively in the Agronomy Sophomore Seminar (AGRY 398). Internship placement of Agronomy students continues to be strong. Nearly all Seniors surveyed in AGRY 498 report having participated in multiple summer/semester internship and/or research experiences. Placement of B.S. graduates continues to be strong with near full employment for students who actively sought positions.

Promote Agronomy to and counsel numerous students entering Purdue Agronomy via change of degree option from other College of Agriculture departments, other Colleges/Schools at Purdue and other universities each semester. The Agronomy ratio of CODO into the department vs. out of the department continues to be about 3 in for each 1 CODOing out.

Scholarship Coordinator - Fall 2005 to present.

Curriculum and Student Relations Committee. Agronomy Representative. College of Agriculture. 2005 to 2008 and Fall 2011.

Instructional Innovation Grant Program Selection Committee. College of Agriculture. Co-Chairman 2006-2011.

#### **Teaching and Research Publications In Refereed Journals:**

Schweitzer, L.E. and J.E. Harper. 1985. Effect of hastened flowering on seed yield and dry matter partitioning in diverse soybean genotypes. *Crop Science* 25 (6): 995 – 998.

Schweitzer, L.E. and J.E. Harper. 1985. Leaf nitrate reductase, D-ribulose-1,5-bisphosphate carboxylase, and root nodule development of genetic male-sterile and fertile soybean isolines. *Plant Physiology* 87 (1): 61 - 65.

Schweitzer, L.E. and J.E. Harper. 1985. Effect of multiple factor source-sink manipulation of nitrogen and carbon assimilation by soybean. *Plant Physiology*. 78 (1): 57 - 60.

Nelson-Schreiber, B.M. and L.E. Schweitzer. 1986. Limitations on leaf nitrate reductase activity during flowering and podfill in soybean. *Plant Physiology* 80 (2): 454 - 458.

Schweitzer, L.E. 1986. Management Team Analysis of Crop Production Systems - A Course in Problem Identification and Resolution. *Journal of Agronomic Education* 15: 34 - 37.

Schweitzer, L.E., Nyquist, W.E., Santini, J.B. and Kimes, T.M. 1986. Soybean cultivar mixtures in a narrow-row noncultivable production system. *Crop Science* 26 (5): 1043 – 1046.

Nelson, R.L. and L.E. Schweitzer. 1988. Evaluating soybean germplasm for specific leaf weight. *Crop Science* 28 (4): 647 – 649.

Schweitzer, L.E. and M.F. Baumgardner. 1993. Global Awareness - A Course Expanding the International Perspective of Undergraduate Students. *NACTA Journal* 37 (4): 4 - 7.

Schweitzer, L.E. and T. W. Semmel. 1994. Advanced Crop Management and Diagnostics - A field Laboratory Course. *J. Nat. Res. and Life Sci.* Ed. 23 (2): 93 - 97.

Thompson, J.A., R.L. Nelson, and L.E. Schweitzer. 1995. The Relationships Between Specific leaf Weight, Photosynthetic Rate, and Seed Yield in Soybean. *Crop Sci.* 35 (6): 1575 - 1581.

Thompson, J.A., L.E. Schweitzer, and R.L. Nelson. 1995. Association of specific leaf weight, leaf reflectance, and chlorophyll concentration with apparent photosynthesis in soybean. *Photosynthesis Research* 49 (1) 1 - 10.

### **Teaching Abstracts Published:**

Schweitzer, L.E. 1993. At the heart of teaching. *Agron. Abstr.* p. 5. (Invited by ASA for A1 teaching symposium).

Schweitzer, L.E. 1993. Computer based interactive media. Laser disc and Compact Disc Development for Resident and Extension Education. *Agron. Abstr.*, p. 73.

Schweitzer, L.E., D. Childs, M. Ross, J. Charlesworth, and S. Yost. 1993. An Interactive Multimedia Package For Weed Identification. *N.C. Weed Sci. Soc. Proceedings*. 48:58.

Schweitzer, L.E., T.W. Davey, R.L. Nielsen, T.W. Semmel, D.B. Mengel, and J.L. Ahlrichs. 1996. An interactive multimedia project. Corn growth, development and diagnostics from germination to knee high. *Agronomy Abstracts*. p. 1.

Schweitzer, L.E., T.W. Davey, R.L. Nielsen, T.W. Semmel, D.B. Mengel, and J.L. Ahlrichs. 1996. Corn growth, development and diagnostics from germination to knee

high. Agronomy Abstracts. p. 62.

Schweitzer, L.E. 2006. Teaching Crop Diagnosis in a Virtual Field Environment. Proceedings of the American Society of Agronomy (CDROM).

### **Interactive Multimedia (CD ROM) Development:**

Dr. Schweitzer has pioneered the development of a series of computer-based interactive multimedia units published on compact discs for use in crop management teaching both in the classroom and for distance education. Agricultural industry and crop producers all over the world are also using these CDs as technical support for crop management decision making. In this effort Dr. Schweitzer has brought together a team of faculty from the departments of Agronomy, Agricultural Engineering, Botany and Plant Pathology, Entomology, Horticulture, and the Agricultural Communications Service at Purdue. Technical input, critical review, field testing, partial financial support, and media resources have also been contributed by the agricultural industry community including Pioneer Hi-Bred International, Beck's Superior Hybrids, Countrymark Cooperative, Novartis Seeds, and BASF.

Three CD titles have been completed and published thus far and over 7000 copies of these crop management CDs have been ordered for use around the world. Additional titles covering Soybean management and Grass Weed Seedling identification are nearing release while other titles such as Wheat Diagnostics and Management are in early stages of development. All three of these CD-ROMs have been fully integrated into crops teaching at Purdue and student feedback continues to be very positive as the students are able to effectively learn applied crop diagnostic skills through the use of these multimedia interactive tools.

International peer review and university and industry collaboration have guaranteed accuracy of the content of the CD series and have encourage the sharing of outstanding media resources from a wide array of sources.

On a technical level, the refinement and testing of new and innovative interactive programming has also involved creative teaching developmental effort. As an example, a unique extension of Quicktime VR programming was developed (in collaboration with Tom Davey, project programmer) to seamlessly deliver a virtual field linked to geo-referenced yield and soils map data in the Corn To Maturity CD-ROM.

Innovation in the development of these multimedia resources has generated considerable positive exposure for Purdue Agronomy. Demonstration audiences have included the Indiana General Assembly and numerous educators, public policy, government and industry representatives from across the nation and around the world. Former Purdue President Dr. Steven Beering featured the Corn To Knee High CD-ROM when sharing examples of teaching innovation at Purdue. A highlight presentation was made to the House Ways and Means Committee as part of Dr. Beering's Purdue budget presentation at the State Capitol on January 25, 1997.

**Interactive Multimedia CD Crop Management Series Published:**

Schweitzer, L.E., T.W. Davey, J.L. Ahlrichs, W.W. McFee, D.B. Mengel, R.L. Nielsen, T.L. Semmel, D.J. Childs, J.E. Grogan, G.E. Ruhl, D.H. Scott, P.R. Sellers. 1996. Corn Growth, Development and Diagnostics - Germination To Knee High. CD-ROM. Purdue University Media Distribution. Lafayette, IN. CD - AY - 1.

Schweitzer, L.E., T.W. Davey, D.J. Childs, M.A. Ross, T.T. Bauman, G.E. Shaner, and S.C. Weller. 1998. Broadleaf Weed Seedling Identification. CD-ROM. Purdue University Media Distribution. Lafayette, Indiana. CD - AY - 3.

Schweitzer, L.E., T.W. Davey, J.L. Ahlrichs, S.M. Brouder, B.C. Joern, W.W. McFee, D.B. Mengel, R.L. Nielsen, T.L. Semmel, D.J. Childs, J.E. Grogan, G.E. Ruhl, D.H. Scott, P.R. Sellers. 1999. Corn Growth, Development, and Diagnostics - Knee High To Maturity. CD-ROM. Purdue University Media Distribution. Lafayette, IN. CD - AY - 2.

Schweitzer, L.E., T.W. Davey, J.L. Ahlrichs, G. K. Blumhoff, E. P. Christmas, W.W. McFee, G.E. VanScoyoc, J.R. Wilcox. 2003. Soybean Growth, Development, and Diagnostics. CD-ROM. Purdue University Media Distribution. Lafayette, IN. CD - AY - 4.

**Invited Presentations:**

Integrated Media Development for Undergraduate Education. An invited presentation for the North Central Teaching Symposium at Purdue. June 22. 1993.

Poster Session - "Global Awareness" course for the North Central Regional Teaching Symposium. June 22. 1993.

Interactive Multimedia Use In Industry Training For Agronomists - Growmark Cooperatives, Annual Meeting of the Regional Directors. Bloomington, IL. December. 1993.

Potential For Interactive Multimedia Use in Educational Programming - National Crop Hail Insurance Adjusters. Kansas City, KS. December. 1993.

Demonstration of Corn To Knee High CD-ROM for Indiana Soybean Development Council. Purdue Memorial Union - South Ballroom. March 4. 1995.

Unit on Corn Management. CCA training (coordinated by Dave Mengel). Stewart Center 310. 1 lecture of 1.5 hours duration. 1996.

Demonstration of CD-ROM teaching development for state legislators. Indiana State Capitol building rotunda. January 22. 1997.

Demonstration of Corn CD-ROM teaching technology innovation for Indiana House Ways and Means Committee as part of Dr. Beering's budget request presentation on behalf of Purdue University. Indiana State Capitol Building, House Ways and Means Committee Room. January 29. 1997.

Presentation of Corn Growth, Development, and Diagnostics - Germination To Knee High CD-ROM to Purdue Legislative Breakfast. Indiana State Teacher's Association Building, Indianapolis. March 18. 1997.

Demonstration of Corn CD-ROM teaching technology innovation for the Dean's Advisory Council. ARB 116. April 26. 1997.

Demonstration of Corn CD-ROM teaching technology innovation for Vice President Ringle's Distance Learning retreat for Deans and Department Heads. Stewart Center. May 13. 1997.

Presentation of Corn Growth, Development, and Diagnostics - Germination To Knee High CD-ROM to Senator Lugar's staff. Botany Conference Room of Lilly Hall. May 28. 1997.

Demonstration of Corn CD-ROM teaching technology innovation for the visiting leadership of American Farm Bureau (Dean Kleckner) and the Indiana Farm Bureau (Harry Pearson and others). ARB 116. July 9. 1997.

Presentation of Teaching Philosophy to visiting delegation of Russian university faculty and administrators. ARB 116. July 28. 1997.

Presentation of Corn Growth, Development, and Diagnostics - Germination To Knee High CD-ROM development process to the Food Science Departmental Teaching Retreat. Seattle Beanery, West Lafayette. August 12. 1997.

Demonstration of Corn CD-ROM teaching technology innovation for the visiting Indiana High School Science Teachers. Hicks Undergraduate Library. G959. November 30. 1997.

Demonstration of Corn CD-ROM teaching technology innovation for Dean Lechtenberg and Dr. Beering at the Boilermaker Blockbuster reception for P-CARET and PLAN. Rathskellar room of The Athenaeum. Indianapolis. December 20. 1997.

Presentation of Corn Growth, Development, and Diagnostics - Germination To Knee High CD-ROM to Purdue Ag. Forum audience. Stewart Center. January 23. 1997.

Presentation of Corn Growth, Development, and Diagnostics - Germination To Knee High CD-ROM to extension educators and administrators from Poland. Botany Conference Room of Lilly Hall. May 14. 1997

Presentation of Corn Growth, Development, and Diagnostics - Germination To Knee High CD-ROM for NAIA Conference. Crown Plaza Hotel. Indianapolis. September 30. 1997.

Farming With A Mouse: Agronomy Information On The Web And On CD-ROM. Beck, R.H. and L.E. Schweitzer. Commodity Classic. Albuquerque, NM. February 19. Invited Presentation. 1999.

Presentation of prototype of Soybean CD-ROM to SMART Soybean Conference hosted by the Indiana Soybean Board. Adams Mark Hotel. Indianapolis. February 25. 1999.

Diagnosis Of Corn Problems. A Multimedia Presentation. Fielder's Choice Hybrids. Monticello, IN. May 20. 1999.

PPI Information Agriculture Conference. Poster Session. Demonstration of Crop Management CD-ROM series. M. Finney and L.E. Schweitzer. University Inn. W. Lafayette. August 9. 1999.

Presentation of Corn I, Corn II, and Broadleaf Weed Seedling Identification CD-ROMs for the Top Farmer Crop Workshop hosted by the Department of Agricultural Economics at Purdue. 1999.

Herbicide Mode of Action Course (Continuing Education course coordinated by Steve Weller). Presented the herbicide injury component of the Corn Growth, Development, and Diagnostics - Germination To Knee High CD-ROM plus the Broadleaf Weed Seedling Identification CD-ROM. 4 lectures. 1999.

GPS/GIS/VRT demonstration and display in the Purdue and Technology 2000 tents at the 1998 Farm Progress Show.

Demonstrations of the Crop Development and Diagnostic CD-ROM series in the Purdue and Technology 2000 tents at the 1998 Farm Progress Show.

Demonstrations of the Crop Development and Diagnostic CD-ROM series in the Purdue tents at the 2003 Farm Progress Show In Henning, Illinois.

### **Eastern Europe and European Community Agricultural Travel Course.**

An intensive travel study course was organized for the Summer of 1990 to investigate European Community and Eastern European agriculture. Included were contacts with universities, research agribusinesses, production farms, and retail food outlets in The Netherlands, Germany, Hungary, and Switzerland. Six students participated in this 30 day tour and were provided with an opportunity to interact with the general population in each country and operate on the principle of cultural immersion, encouraged to function within each local economy. In addition, the students were involved in a multinational conference in Hungary. They provided official expertise in English language

at this conference and gained much goodwill as the sole representative from North America to attend the proceedings. To complete the experience, the students were encouraged to present their observations for Purdue students and faculty through classroom presentations and through seminars. In addition to the organization and leading of this course, a grant of \$6000 was obtained from Central Soya which defrayed all but approximately \$1300 in expenses per student.

Funded and coordinated a return faculty exchange visit to Purdue by Willem van de Westeringh, Dept. of Soil Science and Geology, Wageningen Agricultural University. Wageningen, the Netherlands.