Shawn Paul Conley

GENERAL INFORMATION

a. Academic Record

Degree	Institution	Date
B.S., Agronomy	University of Wisconsin, Madison	1996
M.S., Horticulture	University of Wisconsin, Madison	1999
Ph.D., Horticulture	University of Wisconsin, Madison	2001

b. Academic appointments

Sept. 2001-Sept. 2004	Assistant Professor, State Extension Specialist: Cropping Systems, University of Missouri, Columbia
Oct. 2004-July 2007	Assistant Professor, State Extension Specialist: Soybean Production Systems, Purdue University
Aug. 2007-present	Assistant Professor, State Extension Specialist: Soybean and Small Grain Production Systems, University of Wisconsin, Madison

c. Licenses, registrations, and certifications

Indiana Pesticide Applicators License, Category. 1a

d. Awards and Honors (since 2004)

2004 ASA Educational Materials Awards Program Certificate of Excellence (Pub. >16 pages) for "*Management of Soft Red Winter Wheat*"
2004 Outstanding Agronomy Faculty Member, University of Missouri
2005 Purdue University Cooperative Extension Specialist Association (PUCESA) Team Award "*Rust Busters*"
2006 ASA Educational Materials Awards Program Certificate of Excellence (Pub. >16 pages) for "*Corn and Soybean Field Guide*"
2006 ASA Educational Materials Awards Program Certificate of Excellence (Web pages) for "*Coolbean.info*" www.coolbean.info

e. Memberships in academic, professional, and scholarly societies

American Society of Agronomy
Crop Science Society of America
Gamma Sigma Delta
Great Lakes Canola Association (2004-2007)
Purdue University Cooperative Extension Specialist Association (2004-2007)

BASIS OF NOMINATION

SECTION A: EXTENSION, SERVICE, AND UNIVERSITY OUTREACH ACTIVITIES

Dr. Conley's primary responsibility is Extension programming for Wisconsin soybean and small grains growers and seed producers. This is a significant responsibility as Wisconsin is the 15th largest soybean producing state with an estimated 1.3 million acres of soybeans grown annually, valued at $0.5 B. Wisconsin also ranks as the 4th and 24th largest oat and winter wheat producing states, respectfully. Dr. Conley has two primary clientele groups who rely extensively on him for research results and information. The first group consists of agricultural professionals who service growers across the Midwest. Dr. Conley provides continuing education and advanced diagnostic workshop training for this group, through Certified Crop Advisor (CCA) meetings, Diagnostic Training Clinics, in-field workshops, and electronic and printed media. The second clientele group are growers who Dr. Conley serves through county and regional crop meetings and information via electronic and printed media.

The overall goal of Dr. Conley's Extension program is to increase the economic and environmental sustainability of Midwest soybean and wheat production practices through improved crop and pest management strategies. The programs that serve this goal are as follows:

Program Needs Assessment: Dr. Conley developed and distributed an extensive soybean production survey to 5000 Indiana soybean growers. A total of 1330 growers returned this survey (27% response rate). The goal of this project was to aid Extension and research faculty to identify and develop Extension programs and educational materials that meet current and future clientele needs, and to provide a framework for directing applied soybean research efforts. The specific objectives were to: 1) identify the key production concerns of Indiana soybean producers, 2) implement research and Extension efforts to address these concerns, 3) develop baseline data to support future grant proposals, 4) receive feedback from clientele on the best delivery media for research and Extension information (web, printed guides, county/regional meetings, press release, etc.), and 5) disseminate this information via Extension and peer-reviewed research publications.

Survey Impact: The results of this survey have provided Dr. Conley with a clear vision from which he developed his Extension and research priorities. The results of this survey have also been used to guide research priorities of the Indiana Soybean Alliance and the North Central Soybean Research Program. Lastly, these results have also been published as four peer-reviewed research publications (14, 15, 16, 17) and in two Extension publications (3, 4).

1. **Major Programs:**

    a. **Impact of Agronomic Production Practices on Asian Soybean Rust.**
    In response to the threat of Asian soybean rust, Dr. Conley co-developed the Soybean "Rust Buster" Team. Other members of the team included G. Shaner, E. Christmas, G. Ruhl, K. Rane, C. Alexander, G. Patrick, T. Abney, C. Dobbins, A. Westphal, and K. Smith. Purdue University teamed with the Indiana Soybean Alliance to deliver eight

day-long information meetings in the winter of 2005 and 2007 that covered all aspects of soybean production related to Asian soybean rust.

Program Impact: These meetings attracted > 1,300 growers and industry clientele and according to survey results, impacted > 3.5 million acres of soybean across Indiana, Illinois, and Ohio. The Indiana Soybean Alliance also funded the printing of 10,000 Extension publications entitled "Preparing for Asian Soybean Rust". Our traditional educational efforts comprised 47 local county meetings (> 2000 clientele) in conjunction with county Extension Educators across the state of Indiana. The Purdue Diagnostic Training Center (DTC) events provided training for an additional 300 clientele. In response to our statewide efforts in 2005, the Purdue University Soybean "Rust Buster" Team was awarded the PUCESA team award.

b. **Development of the Coolbean Web site: www.coolbean.info:** The goal of this Web page is to be the most comprehensive soybean production systems resource site in the country. Dr. Conley posts timely research results from his program as well as summarized research results from across the Midwest on this Web page. He also posts copies of all his soybean-related Extension presentations, Extension publications, newsletters, and soybean management updates.

Program Impact: This Web page was featured on AgDay on February 15th, 2006. The Web site has received 12,419 hits to his Web page since its inception in November of 2005. Dr. Conley's Web-available newsletter and PDF articles have been downloaded 29,287 times.

c. **Extension Publications and Video Crop Diagnostics**: The goal of this program is to deliver economically- and environmentally- based soybean crop and pest management recommendations as well as decision aids that maximize economic return for growers. Our new recommendations are being tailored to limit unnecessary economic losses by Indiana and Midwestern soybean growers.

Program Impact: Upon his arrival to Purdue University Dr. Conley significantly revised and updated the soybean section of Purdue Extension Publication ID-179, Corn and Soybean Field Guide. Sales of this guide have increased from 17,350 guides sold in 2005 (prior to revisions) to 28,000 in 2006 and 48,261 in 2007. Dr. Conley has also authored seven Extension publications related to soybean management (1, 2, 3, 4, 7) and biofuels (5, 6). His Extension publications have been downloaded 30,968 times. Lastly, Dr. Conley has developed a Web-based video guide series entitled "Video Crop Diagnostics" to assist clientele in scouting and diagnosing in-field soybean production issues (1, 2, 3, 4).

d. **Purdue Crop Diagnostic Training and Research Center**: Dr. Conley is a member of the operations committee that plans and conducts day-long, hands-on, in-field training to agricultural professionals.

Program Impact: Dr. Conley has conducted 28 training clinics in association with the Crop Diagnostic Training and Research Center across the state of Indiana. These participants have an impact on over 3,000,000 acres of farmland in the Midwest annually. He has personally instructed 968 clients during these training events. Dr. Conley has received survey ratings of 1.6/5 for both degree of satisfaction and usefulness (1 = excellent). According to the workshop survey results, 99% of the participants indicated that the workshops clearly helped them improve their overall crop production and management abilities, where 98% of the participants (when considering their costs) indicated that attending these workshops was well worth their time and expense.

e. **Biodiesel Impact on Indiana Soybean Production Systems**: The goal of this program is to deliver innovative biodiesel production and management information.

Program Impact: Dr. Conley teamed with Dr. Bernie Tao to develop two new extension publications related to biodiesel production in Indiana. These publications are included in the Purdue University BioEnergy Extension Series and have been downloaded > 7,200 times since their inception in January of 2007. Dr. Conley's has also contributed to the National Winter Canola Variety Trial as well as evaluate F1 to F5 germplasm. This multi-state breeding effort is vital to the advancement of canola production in the United States.

2. Invited and Coordinated Presentations: Dr. Conley develops a core curriculum that was distributed to Extension Educators each year that served as the basis of his Extension programming for that year. Summarized below are Dr. Conley's presentations since October of 2004.

	Oct 2004 – November 2007	
Type of Conference	Number	Attendance
Regional and county based grower meetings	69	4,997
Field days and demonstrations:	15	1,855
Training of professionals:	32	5,580
International professional training	2	74
Total	118	12,181

3. Research Information Transfer

a. Extension Publications

Extension publications in both electronic and printed forms are essential to Conley's response to the requests for information from agricultural clientele. Prior to Dr. Conley's arrival to the University of Wisconsin, Madison he developed the first ever wheat production manual at the University of Missouri. Since 2004, Dr. Conley has developed or co-developed 10 new publications, with faculty from the Departments of Agronomy, Botany and Plant Pathology, Agricultural and Biological Engineering, and Agricultural Economics.

Purdue Publications

1. Shaner, G. E., **Conley**, **S. P.,** Dobbins, C. L., Hurt, C. A., Patrick, G. F., and Ruhl, G. E. 2005. ID-324, Preparing for Asian Soybean Rust. (18,864 downloads)
2. **Conley, S. P.** and Christmas, E. P**.** 2005. SPS-100-W, Utilizing Inoculants is a Corn-Soybean Rotation. (3,686 downloads)
3. Alexander, C., **Conley**, **S. P.,** Dobbins, C., Hurt, C., and Patrick, G. 2006. SPS-101-W. Forward Pricing Practices of Indiana Soybean Producer. (743 downloads)
4. Alexander, C., **Conley**, **S. P.,** Dobbins, C., Hurt, C., and Patrick, G. 2006. SPS-102-W. Where Do Indiana Soybean Producers Sell? (429 downloads)
5. **Conley, S. P.** and Tao, B. 2006. ID-338, What is Biodiesel? (2,465 downloads)
6. **Conley, S. P.** and Tao, B. 2006. ID-339, Biodiesel Quality: Is All Biodiesel Created Equal? (4,781 downloads)
7. Murrell, S. T., **Conley, S. P.**, and Murrell, L. 2007. Be Your Own Soybean Doctor. International Plant Nutrition Institute. Ref.# 07046; Item # 08-0006.
8. Hanna, S., **Conley, S. P.**, Shaner, G., and Santini, J. 2007. SPS-103-W. Managing Fungicide Applications in Soybean.
9. Miller, W., Dobbins, C., Nielsen, R., Vyn, T., Johnson, W., and **Conley, S. P.** 2007. ID-166-W. 2008 Purdue Crop Cost and Return Guide.
10. Robinson, A. and **Conley, S. P.** 2007. SPS-104-W. Thin Soybean Stands: Should I Replant, Fill In, or Leave Them Alone?
11. Robinson, A. and **Conley, S. P.** 2007. AY-217-W. Plant Populations and Seeding Rates in Soybean

UW Publications

1. **Conley, S. P.,** Kaeppler, H. F., Mochon, J. Martinka, M.J., and Gaska, J.M. 2007. Small grain varieties for grain and forage in Wisconsin. A3397.
2. **Conley, S.P.,** Martinka, M.J., Gaska, J., and Grau, C. 2007. 2007 Wisconsin Soybean Variety Test Results. A3654.

In Review (UW)

1. **Conley, S.P.,** Grau, C., MacGuidwin, A., Boerboom, C., and Schmidt, R. 2007. Nematode Management DVD.

b. Manuals (MU and Purdue)

1. **Conley, S. P. (Primary Editor)**, Sweets, L. E., Fishel, F., Johnson, W.G., Bailey, W.C., Massey, R.E., Scharf, P. C., and Casady, W.W. 2003. Management of Soft Red Winter Wheat. MU pub. IPM1022 (44 pages). Univ. Missouri Ext. Pubs., Columbia, MO.
2. **Conley, S. P**. 2005. Soybean Management. pp. 103-133. *In*: Corn and Soybean Field Guide. 2006 Edition. ID-179 Purdue University Extension Publications.
3. **Conley, S. P**. 2006. Soybean Management. pp. 103-133. *In*: Corn and Soybean Field Guide. 2007 Edition. ID-179 Purdue University Extension Publications.

In development (Purdue)

1. **Conley, S. P**. 2007. Soybean Management. pp. 103-133. *In*: Corn and Soybean Field Guide. 2008 Edition. ID-179 Purdue University Extension Publications.

c. Chapters and Guides (MU)

1. **Conley, S. P**. 2003. *In*: Rife, C. et al. National Winter Canola Variety Trial. Kansas Agricultural Experiment Station Publication. SRP924.
2. **Conley, S. P**. 2004. *In*: Rife, C. et al. National Winter Canola Variety Trial. Kansas Agricultural Experiment Station Publication. SRP937.
3. Christmas, E. P. and **Conley, S. P**. 2005. *In*: Stamm, M. et al. National Winter Canola Variety Trial. Kansas Agricultural Experiment Station Publication. SRP954.
4. **Conley, S. P**. and Christmas, E. P. 2006. *In*: Stamm, M. et al. National Winter Canola Variety Trial. Kansas Agricultural Experiment Station Publication. SRP973.

In Final Review (UW)

1. Pedersen, P., Kumudini, S., Board, J., and **Conley, S. P**. 2007. Soybean Growth and Development. *In*: Dorrance, A. E., Draper, M. A., and Hershman, D. E. Using Foliar Fungicides to Manage Soybean Rust.

d. Video Crop Diagnostics (Purdue)

1. Conley, S. P. 2006. Cotyledon Damage to Soybean.
http://www.agry.purdue.edu/ext/coolbean/video/6-06-video1.wmv
2. Conley, S. P. 2006. Soybean Growth Stage V1.
http://www.agry.purdue.edu/ext/coolbean/video/6-06-video2.wmv
3. Conley, S. P. 2006. Soybean Growth Stage R5 and R6.
http://www.agry.purdue.edu/ext/coolbean/video/R5growthstage-lg.wmv
4. Conley, S. P. 2006. Estimating Soybean Yield.
http://www.agry.purdue.edu/ext/coolbean/video/conley2-lg.wmv

e. Press Releases

Dr. Conley has worked with Agricultural Communications Service to produce > 40 press releases that target growers and the agricultural industry.

f. Newsletter Articles

Dr. Conley uses newsletter articles for widespread circulation of soybean and wheat management information to growers and clientele of all expertise levels. Conley was an author or co-author of 43 newsletter articles appearing in state, regional, and national publications prior to coming to the UW. The following are examples of newsletter articles that he has written since 2005.

Purdue Newsletter Articles

1. **Conley S. P.** Wheat Tiller Number and Spring Nitrogen Recommendations. Pest and Crop Newsletter. February 2005, No. 1.
2. **Conley S. P.** Spraying for Soybean Rust: Fact vs. Fiction. Pest and Crop Newsletter. March 2005, No. 2.
3. Shaner, G.**, Conley S. P.**, and Johnson, B. Identifying Wheat Growth Stage. Pest and Crop Newsletter. March 2005, No. 2.
4. **Conley S. P.** Spring Wheat Injury and Shallow Planting. Pest and Crop Newsletter. April 2005, No. 3.

5. **Conley S. P.** Wheat Yield Response to Cold Stress. Pest and Crop Newsletter. May 2005, No. 7.
6. **Conley S. P.** Frosted Beans: Should I Replant? Pest and Crop Newsletter. May 2005, No. 8.
7. **Conley S. P.** Anthesis: Critical Stage for Soft Red Winter Wheat. Pest and Crop Newsletter. May 2005, No. 9.
8. **Conley S. P.** What's Wrong with my Soybean Leaves. Pest and Crop Newsletter. June 2005, No. 9.
9. Shaner, G.**, Conley S. P.**, and Johnson, B. Identifying Wheat Growth Stages. Pest and Crop Newsletter. March 2006, No. 2.
10. **Conley, S. P.**, Shaner, G., and Anderson, J. Purdue Researcher Offers Wheat Virus Screen. Pest and Crop Newsletter. April 2006, No. 5.
11. **Conley S. P.** Profitability of Cutting Seeding Rates: Fact or Fiction. Pest and Crop Newsletter. April 2006, No. 6.
12. **Conley S. P.** Impact of Hail on Jointing Wheat. Pest and Crop Newsletter. April 2006, No. 4.
13. **Conley S. P.** Thin Soybean Stands – Should I Replant, Fill in, or Leave it Alone? Pest and Crop Newsletter. May 2006, No. 9.
14. **Conley S. P.** Is it Time to Plant an Earlier Maturity Group Soybean? Pest and Crop Newsletter. May 2006, No. 9.
15. Shaner, G. and **Conley S. P.** Wheat Head Scab. Pest and Crop Newsletter. June 2006, No. 12.
16. Shaner, G., **Conley, S. P.**, and Johnson, W. J. Identifying Wheat Growth Stages. Pest and Crop Newsletter. April 2007, No. 3.
17. **Conley, S. P.** and Johnson, W. J. Planting Soybean Into Freeze Injured Wheat. Pest and Crop Newsletter. April 2007, No. 3.
18. **Conley, S. P.** Know your Wheat Growth to Understand Spring Freeze Injury to Wheat. Pest and Crop Newsletter. April 2007, No. 3.
19. **Conley, S. P.** Wheat Stem and Head Injury in Southern Indiana. Pest and Crop Newsletter. April 2007, No. 5.
20. Shaner, G. and **Conley S. P.** Yellow Dwarf of Wheat. Pest and Crop Newsletter. May 2007, No. 8.
21. **Conley, S. P.** Dehydrated Soybean Seeds: Are They Still Viable?. Pest and Crop Newsletter. May 2007, No. 9

UW Newsletter Articles

1. **Conley, S. P.** and Gaska, J. 2007. Drought Stress in Soybean. WCM 2007-23.
2. **Conley, S. P.**, Gaska, J., and Grau, C. 2007. Winter Wheat Variety Selection and Seed Quality. WCM 2007-24.
3. Martinka, M., **Conley, S. P.**, **and** Gaska, J. 2007. 2007 Winter Wheat Variety Results. WCM 2007-24.
4. **Conley, S. P.** and Gaska, J. 2007. Winter Wheat Seeding Rate, Depth, and Planting Date. WCM 2007-25.
5. **Conley, S. P.**, Gaska, J., Esker, P., Grau, C., and Hanson, M. 2007. Wheat following soybean, corn, and wheat? WCM 2007-26.

6. Gaska, J, **Conley, S. P.**, Grau, C., and Esker, P. 2007. Windshield Crop Scouting *or* Why you should get out of that truck to look and learn! WCM 2007-27.
7. **Conley, S. P.**, Cullen, E., and Esker, P. 2007. Check Combine Settings and Scout Fields Prior to Soybean Harvest. WCM 2007-29.

g. Radio and Newspaper Interviews (MU, Purdue, and UW)

Dr. Conley is frequently invited to provide radio and television clips, popular press, and newspaper interviews on current soybean management topics that are disseminated throughout Indiana and the country. It is difficult to quantify the actual number of venues this information has been distributed to, but it is estimated to be in excess of 300.

h. Coolbeans: Wisconsin Soy Sentinel Extension and Research Update Column

Dr. Conley developed an Extension update column for the Wisconsin Soy Sentinel. Through this quarterly column Dr. Conley can provide up-to-date research and Extension information to ~12,000 soybean growers in Wisconsin.

1. **Conley S.P.** December 2007. Why an Average Bean Costs You Money.

i. Pest Management Network Education and Training Center Webcast:

1. Row Spacing Affect on Soybean Yield (completed and being posted)
2. Soybean Variety Selection (completed and being posted)
3. Soybean Planting Date and Replant Decisions (completed and being posted)
4. Soybean Seeding Rate (completed and being posted)

http://www.plantmanagementnetwork.org/edcenter/

4. Support to Extension Educators

Dr. Conley actively assists Extension Educators in their efforts to educate local grower clientele. As a reflection of the Midwest's dependence on soybean and wheat, Extension Educators receive thousands of requests annually for production information. In response to this need, Dr. Conley developed the www.Coolbean.info Web page so they can more efficiently resolve soybean and wheat production issues. Dr. Conley corresponds regularly with county Extension Educators by phone, email, and via an IP Video program hosted by the Department of Agronomy. Dr. Conley has spoken at 68 annual crop meetings and pesticide applicator recertification programs (PARP) for soybean growers sponsored by Extension Educators. The focus of these meetings is based on the curriculum that Dr. Conley supplies to Extension Educators each year. Dr. Conley also develops and distributes presentations based on this curriculum for Extension Educators to use in their own programming.

5. University/Departmental Service: Dr. Conley is a member of the following committees:

1. Agronomy Harvest Reunion Committee (Purdue University)
2. Diagnostic Training Center (DTC) Operations Committee (Purdue University)
3. Farm Family of the Year Committee (Purdue University)
4. Member of Indiana Crop Improvement Association Seed and Grain Committee (Purdue University)
5. Plant and Pest Diagnostic Laboratory (Purdue University)
6. Farms (Arlington) (UW)

7. Field Day (2008) (UW)
8. Hatch Capital Exercise (UW)

6. State, National , and International Service: Dr. Conley is a member of the following committees:

1. Vice Chair, Collegiate Crops Contest (1/1/03 to 12/31/05)
2. Presiding Officer Division A08 (Integrated Agricultural Systems), American Society of Agronomy meeting 2004
3. American Society of Agronomy (ASA) Agronomic Service Award Committee (12/01/05 to present)
4. American Society of Agronomy Extension Awards Program Category Chair (12/01/05 to present)
5. Crop Science Society of America (CSSA) New Members Committee (12/01/05 to present)
6. Developed ASA Symposium Entitled: Communicating Science to the Public (2007)
7. American Society of Agronomy: Gerald O. Mott Scholarship Committee (12/1/07 to present)

7. Editorial responsibilities:

1. Technical Editor; Grain sorghum variety trials in Crop Management (1/1/03 to 2/31/05)
2. Technical Editor; Crop Management (1/1/04 to present)

SECTION B: CREATIVE ENDEAVOR, RESEARCH, SCHOLARSHIP

The overall goal of Dr. Conley's research program is to increase the economic and environmental sustainability of Midwest soybean production practices through improved crop and pest management strategies. Dr. Conley's research is in response to problems and needs expressed by agricultural professionals and growers in Wisconsin and the Midwest, and thus his results are immediately usable by agricultural professionals. The primary objective of Dr. Conley's research program is to develop accurate soybean crop management recommendations and decision aids that maximize economic return for soybean growers.

Impact of Research

The following are examples of projects that Dr. Conley has been working on since 2004 to meet his Extension and research objectives:

a. **Quantify the impact of agronomic production practices on management of Asian soybean rust** (Published abstracts 3, 4, 5, 11, 13, 14; Manuscripts in review 2, 3). Soybean rust is a potentially devastating disease that may lead to 50% or greater yield loss in soybean. The objective of this research project is to provide soybean growers with accurate research based recommendations to manage soybean rust.

   Research Impact: Dr. Conley's research has proven that row spacing has no effect on spray canopy penetration at any application timing and that damage from sprayer wheel tracks will significantly reduce yield once the soybean crop enters the reproductive growth stage. At the whole-field level, this damage will depend on sprayer boom width. Our results also prove that growers should apply fungicides in at least 15 GPA of carrier. These results suggest that soybean growers do not need to greatly modify their production practices to manage soybean rust. Dr. Conley's graduate student (Shane Hanna) received his M.S. degree working on this project.

b. **Effect of percent node and stand removal on soybean yield and grain composition** (Published abstracts 6, 7, 9, 12; Manuscripts in development 1, 2).
   Soybean producers across the United States are confronted with significant yield losses every year from severe hail storms. Extensive research has been conducted on the impact on soybean physiology and recovery in response to defoliation. However, little information exists in response to soybean node or plant removal which also could influence replant decisions. The objective of this study was to test the ability of soybean recovery to stand and node removal at different growth stages on soybean grain yield and composition.

   Research Impact: Dr. Conley's research has proven that grain yield and seed mass decreased as percent node and stand removal increased. Our results indicated that the greatest seed yield reductions occurred at the latest node removal timing. Soybean grain volume, oil and protein responses to percent node removal and node removal timing were variable among locations and years. Our results indicate that node removal affects grain yield and grain composition significantly and should be factored into a soybean replant

decision. This research is used to provide accurate science-based recommendations for the 58 million acres of soybeans covered by the Federal Crop Insurance program.

c. **Soybean Production Systems: A Grower Survey** (Published manuscripts 14, 15, 16, 17).
To remain economically viable in today's global soybean market, producers' require instant access to cutting edge innovations, information on new and potential pest problems, and timely, accurate information on common soybean production problems. The goal of this research is to aid Extension and Research faculty in identifying and developing Extension programs and educational materials that meet current and future clientele needs, and to provide a framework for directing applied soybean research efforts. The specific objectives are to: 1) identify the key production concerns of Midwest soybean producers, 2) implement research and Extension efforts to address these concerns, 3) develop baseline data to support future grant proposals, 4) receive feedback from clientele on the best delivery media for research and Extension information (Web, printed guides, county/regional meetings, press release, etc.), and 5) disseminate this information via Extension and peer-reviewed research publications.

Research Impact: Dr. Conley's research indicates that 67% of soybean growers are planting their crop one to three weeks earlier today than 10 years ago. This planting date shift constitutes a dramatic change in the early season environment that soybeans are grown. Research efforts must be targeted at addressing the needs of growers given this new paradigm. Our research also indicated that only 46% of growers are properly seeding their soybean crop. This suggests a targeted educational effort is required to improve current practices. Growers also indicated that their top 5 soybean pests are weeds, soybean aphid, sudden death syndrome, soybean cyst nematode, and phytophthora root rot. The results of this survey have been used to guide research priorities of the Indiana Soybean Alliance and the North Central Soybean Research Program.

d. **Yield compensation and replant decisions in ultra-low seeding rates of soybean** (Manuscripts in development 3).
Soybean growers have experienced a 107% increase in seed input costs over the last 10 years. This has prompted growers to consider significantly reducing their soybean seeding rate. The objective of this research was to define the economic optimal threshold for soybean seeding rates and to evaluate seed applied technologies to enhance early season crop establishment in low soybean populations.

Research Impact: Preliminary results from Dr. Conley's research suggests that growers only need 100,000 plants $acre^{-1}$ to achieve 100% yield potential (The average seeding rate is currently 198,000 $acre^{-1}$). Our research also suggests that a stand of 50,000 plants per acre will yield 85% of the maximum yield. Our research also suggests that as seed costs continue to rise, seed applied fungicide treatments will become cost effective.

e. Managing cropping systems for biodiesel production (Published abstracts 8).

The recent emphasis upon biofuels spans across the United States, and encompasses a variety of crops. Biofuel facilities (biodiesel, ethanol, etc.) are being constructed in almost every agriculturally significant state in the country (Biodiesel.org; Ethanol.org). As these facilities come on-line the local demand for raw materials will influence the cropping systems adjacent to each facility. The objective of this research was to identify cropping systems and agronomic practices that maximize biodiesel output.

Research Impact: Preliminary results from Dr. Conley's research suggests that modifying soybean planting date will increase soybean grain yield and oil content, thus increase biodiesel output (gallons per acre). Additionally, Dr. Conley's continuance of Dr. Christmas's research on canola production has identified high yielding winter-hardy canola cultivars as well as fine tune the optimal planting date window for canola. The addition of canola into SW Indiana cropping systems has the potential to increase biodiesel output (gallons per acre) 200%.

Published and Submitted Work

Refereed articles:

1. **Conley, S. P.**, Binning, L. K., and Connell, T. R. 2001. Effect of cultivar, row spacing, and weed management on weed biomass, potato yield and net crop value. American Journal of Potato Research. 78:31-37.
2. **Conley, S. P.**, Binning, L. K., Boerboom, C. M., and Stoltenberg, D. E. 2002. Estimating giant foxtail cohort productivity and fecundity in soybean based on weed density, leaf area, or volume. Weed Science. 50:72-78.
3. **Conley, S. P.**, Stoltenberg, D. E., Boerboom, C. M., and Binning, L. K. 2003. Predicting soybean yield loss in giant foxtail and common lambsquarters weed communities. Weed Science. 51:402-407.
4. **Conley, S. P.**, Binning, L. K., Boerboom, C. M., and Stoltenberg, D. E. 2003. Parameters for predicting giant foxtail cohort effect on soybean-yield loss. Agronomy Journal. 95:1226-1232.
5. **Conley, S. P.** and Wiebold, W. J. 2003. Response of grain sorghum yield to planting date. Online. Crop Management doi: 10.1094/CM-2003-0204-01-RS.
6. Reinbott, T. M., **Conley, S. P.,** and Blevins, D. G. 2004. Corn and grain sorghum response to winter annual legumes. Agronomy Journal. 96:1148-1157.
7. **Conley, S. P.**, Bordovsky, D., Rife, C., and Wiebold, W. J. 2004. Canola winter survival and yield response to nitrogen and fall phosphorus. Crop Management. Online. Crop Management doi: 10.1094/CM-2004-0901-01-RS.
8. McKendry, A. L., Tague, D. N., Wright, R. L., Tremain, J. A., and **Conley, S. P.** 2005. Registration of 'Truman' Wheat. Crop Sci. 45:421-423.
9. **Conley, S. P.** and Bradley, K. E. 2005. Wheat (Triticum aestivum) yield response to henbit (*Lamium amplexicaule*) interference and winterkill. Weed Technology. 19:902-906.
10. Zwiener, C. W., **Conley, S. P.,** and Sweets, L. E. 2005. Influence of Aphid Species and Barley Yellow Dwarf Virus on Soft Red Winter Wheat Yield. Journal of Economic Entomology. 98:2013-2019.

11. **Conley, S. P.,** Stevens, W. G., and Dunn, D. D. 2005. Grain sorghum response to row spacing, crop density, and planter skips. Crop Management, doi: 10.1094/CM-2005-0718-01-RS, June 2005.
12. Bradley, K. E. and **Conley, S. P.** 2006. Influence of Imazamox Rate and Tank-Mix Combinations on Winter Annual Broadleaf Weed Control and Yield in Imidazolinone-Resistant Wheat. Crop Management doi:10.1094/CM-2006-0523-01-RS, May 2006.
13. Cromley, S. M., Wiebold, W. J., Scharf, P. C., and **Conley, S. P.** 2006. Hybrid and Planting Date Effects on Corn Response to Starter Fertilizer. Online. Crop Management doi:10.1094/CM-2006-0906-01-RS.
14. **Conley, S. P.** and Santini, J. 2007. Crop Management Practices in Indiana Soybean Production Systems. Online. Crop Management doi:10.1094/CM-2007-0104-01-RS.
15. Johnson., W. G., Gibson, K. D., and **Conley, S. P**. 2007. Does Weed Size Matter? An Indiana Grower Perspective About Weed Control Timing. Weed Technology. 21:542-546.
16. **Conley, S. P**., Krupke, C., Santini, J., and Shaner, G. 2007. Pest Management in Indiana Soybean Production Systems. Journal of Extension. 45:4; 4RIB8.
17. Alexander, C., **Conley, S. P.,** Dobbins, C. L., Hurt, C. A., and Patrick, G. F. 2007. Marketing Practices of Indiana Soybean Producers. Journal of Extension. In press.
18. Creech, J. E., Santini, J. B., **Conley**, **S. P.,** Westphal, A., and Johnson, W. G. 2007. Purple Deadnettle (*Lamium purpureum*) and Soybean Cyst Nematode (*Heterodera glycines*) Response to Cold Temperature Regimes. Weed Sci. 55:592-598.

Dr. Conley's research work has been published in journals with high impact. According to the ISI Journal Reports on impact factors, there are 50 journals grouped under "Agronomy". Impact factors of top tier journals range from 3.212 to 0.960, middle tier journals have impact factors of 0.959 to 0.508 and lower tier journals have impact factors of 0.507 to 0.036.

Journal name	**Impact factor**	**Relative tier**
Weed Science	1.536	Top
Agronomy Journal	1.473	Top
Crop Science	0.925	Middle
Weed Technology	0.749	Middle
Am. J. of Potato Research	0.629	Middle
Crop Management	NA (too new)	NA

In review:

1. Hanna, S., **Conley, S. P.**, Shaner, G., and Santini, J. 2007. Impact of Fungicide Application Timing and Crop Row Spacing on Soybean Canopy Penetration and Grain Yield. Submitted to Agronomy Journal (4/10/07).

In development:

1. **Conley, S. P.**, Pedersen, P., Zarnstorff, M. E., Christmas, E. P., and Santini, J. 2007. Node removal affects soybean grain yield and composition. Agronomy Journal.

2. **Conley, S. P.**, Zarnstorff, M. E., Christmas, E. P., and Santini, J. 2007. Impact of soybean stand loss on grain yield and composition. Agronomy Journal.
3. **Conley, S. P.**, Santini, J., and Fink, N. 2007. Soybean Yield Response to Ultra-Low Plant Populations. Agronomy Journal.

Published Abstracts (Presentations at national meetings)
Dr. Conley has authored or co-authored 45 published abstracts. The following abstracts were published since 2004:

1. Zwiener, C. M., **Conley, S. P**., Sweets, L. E., and Bailey, W. C. 2004. Management of the barley yellow dwarf virus complex. *In* Agronomy Abstracts. ASA, Madison, WI.
2. **Conley, S. P.** 2004. Development of a Grain Sorghum Ratoon Cropping System for Missouri. *In* Agronomy Abstracts. ASA, Madison, WI.
3. **Conley, S. P.** and Shaner, G. 2005. Spray Application Technology in Soybean: Implications for Disease and Insect Management. National Agricultural Aviation Association annual meetings.
4. Hanna, S., **Conley, S. P.**, and Shaner, G. 2005. Impact of Fungicide Application Timing and Crop Row Spacing on Soybean Canopy Penetration and Grain Yield. National Soybean Rust Symposium.
5. Shaner, G., **Conley, S. P.**, Martyn, R., Abney, T. S., Westphal, A., Ruhl, G., and Rane, K. 2005. Indiana Prepares for Asian Soybean Rust. National Soybean Rust Symposium.
6. Pedersen, P. and **Conley, S. P.** 2005. Node Removal Affects Soybean Grain Yield and Composition. *In* Agronomy Abstracts. ASA, Madison, WI.
7. **Conley, S. P.** 2005. Hail Induced Stand Reduction and Timing Impact Soybean Yield and Quality. *In* Agronomy Abstracts. ASA, Madison, WI.
8. Fink, N., **Conley, S. P.**, and Christmas, E. 2006. An Evaluation of the Effects of Planting Date and Seeding Rate on the Yield of Winter Canola Grown at Three Different Geographic Regions. *In* Agronomy Abstracts. ASA, Madison, WI.
9. Pedersen, P. and **Conley, S. P.** 2006. Effect of Node Removal on Soybean Grain Yield and Composition. *In* Agronomy Abstracts. ASA, Madison, WI.
10. Robinson, A., **Conley, S. P.**, and Volenec, J. 2006. Germination and Vegetative Growth Analysis of Early Planted Indeterminate Soybean. *In* Agronomy Abstracts. ASA, Madison, WI.
11. Hanna, S., **Conley, S. P.**, and Shaner, G. 2006. Impact of Application Timing and Crop Row Spacing on Fungicide Penetration into a Soybean Canopy and Grain Yield. *In* Agronomy Abstracts. ASA, Madison, WI.
12. **Conley, S. P.** and Pedersen, P. 2006. Recovery of Node Removal on Soybean Using Two Populations. *In* Agronomy Abstracts. ASA, Madison, WI.
13. Naeve, S., Nafziger, E., Thelen, K., **Conley, S. P.**, Potter, B., and Breitenbach, F. 2006. Simulated Soybean Rust Infections Through Manual Defoliation; Yield and Quality Effects. *In* Agronomy Abstracts. ASA, Madison, WI.
14. **Conley, S. P.** and Shaner, G. 2007. Deposition and Efficacy of Electrostatic Versus Conventional Fungicide Spray Systems. National Agricultural Aviation Association annual meetings.

15. Hanna, S., **Conley, S. P.**, Shaner, G., and Santini, J. 2006. Impact of Application Timing and Crop Row Spacing on Fungicide Penetration into a Soybean Canopy and Grain Yield. National Soybean Rust Symposium.
16. Robinson, A., **Conley, S. P.**, and Volenec, J. 2007. Soybean Germination Among Various Planting Dates. *In* Agronomy Abstracts. ASA, Madison, WI.
17. Robinson, A., **Conley, S. P.**, and Volenec, J. 2007. Earlier Planting Date Increases Yield in Indeterminate Soybean. *In* Agronomy Abstracts. ASA, Madison, WI.
18. **Conley, S. P.** and Santini, J. 2007. Integrating Survey Data into Extension Programs. *In* Agronomy Abstracts. ASA, Madison, WI.
19. Fink, N., **Conley, S. P.**, and Santini, J. 2007. Soybean Canopy Architecture Affect on Soybean Population and Grain Yield. *In* Agronomy Abstracts. ASA, Madison, WI.
20. Lenz, E. and **Conley, S. P.** 2007. Response of Winter Canola to Seeding Rate and Fungicide-Treated Seed in the Eastern Corn Belt. *In* Agronomy Abstracts. ASA, Madison, WI.
21. **Conley, S. P.** and Shaner, G. 2007. Comparison of electrostatic and conventional applications of Stratego to corn and soybean. National Agricultural Aviation Association annual meetings.
22. Robinson, A., **Conley, S. P.**, and Volenec, J. 2007. Impact of Planting Date on Soybean Seed Composition, Germination, and Seedling Vigor . Research poster at American Seed Trade Association Annual Meeting.

Graduate Student Involvement:

Major Professor

1. Christopher M. Zwiener, M.S. Agronomy. Thesis title: Management of Barley Yellow Dwarf Virus Complex in Soft Red Winter Wheat. Graduated 12/2004; University of Missouri
2. Shane Hanna, M.S. Agronomy. Thesis title: Impact of Fungicide Application Timing and Crop Row Spacing on Soybean Canopy Penetration and Grain Yield. Graduated 05/2007; Purdue University
3. Andrew Robinson, M.S. Agronomy. Thesis title: Analyzing Yield Components and Temperature Effects of Early-Planted Soybeans in the Midwest to Accurately Determine Optimal Planting Dates: Anticipated graduation date: 05/2008; Purdue University

Committee Member

1. Chris Schuster, M.S. Agronomy, Graduated: 05/2002; University of Missouri
2. Jay Chism, M.S. Horticulture, Graduated: 12/2003; University of Missouri
3. Romina Gueli, M.S. Agronomy, Graduated: 05/2004; University of Missouri
4. Travis Belt, M.S. Agronomy, Graduated: 08/2004; University of Missouri
5. Steve Troesser, M.S. Agronomy, Anticipated graduation date: 08/2007; University of Missouri
6. Hans Schmidt, M.S. Agronomy, Anticipated graduation date: 05/2008; Purdue University

Grant Activities (Research and Extension)

Dr. Conley has been awarded $499,336 prior to his arrival at the University of Wisconsin, Madison (University of Missouri: $133,752; Purdue University: 365,584). Grant money is

used to support Extension, teaching, and research efforts. Grant money is also used to help fund salaries for technical support, graduate students, and undergraduate labor.

Grant and Gift Dollars Received Since 12/1/2005

Grant Activity

1. Agency/Title of Grant: BASF Corporation: Soybean Research
2. Duration of Funding: Jan 2005 - Unlimited
3. Total amount of award $1,000
4. Your role: PI
5. If Co-PI, for how much of the total funding are you directly responsible: 100%

Grant Activity

1. Agency/Title of Grant: Philom Bios: Soybean Research
2. Duration of Funding: Apr 2005 - Unlimited
3. Total amount of award: $500
4. Your role: PI
5. If Co-PI, for how much of the total funding are you directly responsible: 100%

Grant Activity

1. Agency/Title of Grant: Becker Underwood: Soybean Research
2. Duration of Funding: Apr 2005 - Unlimited
3.. Total amount of award $4,000
4. Your role: PI
5. If Co-PI, for how much of the total funding are you directly responsible: 100%

Grant Activity

1. Agency/Title of Grant: Indiana Soybean Board: Soybean Production Systems in Indiana: A Grower Survey to Identify Key Research and Extension Needs
2. Duration of Funding: Apr 2005 - 2006
3. Total amount of award: $19,089
4. Your role: PI
5. If Co-PI, for how much of the total funding are you directly responsible: 100%

Grant Activity

1. Agency/Title of Grant: National Crop Insurance Service: Soybean Research
2. Duration of Funding: Apr 2005 - Unlimited
3. Total amount of award: $9,000
4. Your role: PI
5. If Co-PI, for how much of the total funding are you directly responsible: 100%

Grant Activity

1. Agency/Title of Grant: Indiana Soybean Board: Management of Asian Soybean Rust
2. Duration of Funding: May 2005 - 2006
3. Total amount of award $33,591
4. Your role: PI
5. If Co-PI, for how much of the total funding are you directly responsible: 100%

Grant Activity

1. Agency/Title of Grant: Monsanto Company: Soybean Research
2. Duration of Funding: May 2005- Unlimited
3.. Total amount of award: $4,000
4. Your role: PI
5. If Co-PI, for how much of the total funding are you directly responsible: 100%

Grant Activity

1. Agency/Title of Grant: BASF: Soybean Research
2. Duration of Funding: Jun 2005 - Unlimited
3.. Total amount of award: $5,000
4. Your role: PI
5. If Co-PI, for how much of the total funding are you directly responsible: 100%

Grant Activity

1. Agency/Title of Grant: Foundation for Agronomic Research: Soybean Research
2. Duration of Funding: Jun 2005 - Unlimited
3. Total amount of award: $6,000
4. Your role: PI
5. If Co-PI, for how much of the total funding are you directly responsible: 100%

Grant Activity

1. Agency/Title of Grant: Dow AgroSciences: Nexera Canola
2. Duration of Funding: Aug 2005
3. Total amount of award $2,000
4. Your role: PI
5. If Co-PI, for how much of the total funding are you directly responsible: 100%

Grant Activity

1. Agency/Title of Grant: Southern Illinois University U.S. Dept. of Agriculture: Cultural Practice Evaluation for Canola Production Under Indiana Conditions
2. Duration of Funding: Sept 2005 - 2006
3. Total amount of award: $21,920
4. Your role: subcontract
5. If Co-PI, for how much of the total funding are you directly responsible: 100%

Grant Activity

1. Agency/Title of Grant: Becker Underwood: Soybean Research
2. Duration of Funding: Sept 2005 - Unlimited
3. Total amount of award: $2,000
4. Your role: PI
5. If Co-PI, for how much of the total funding are you directly responsible: 100%

Grant Activity

1. Agency/Title of Grant: Foundation for Agronomic Research: Soybean Research
2. Duration of Funding: Oct 2005 - Unlimited
3. Total amount of award $11,105
4. Your role: PI
5. If Co-PI, for how much of the total funding are you directly responsible: 100%

Grant Activity

1. Agency/Title of Grant: Becker Underwood: Soybean Research
2. Duration of Funding: Jan 2006 - Unlimited
3. Total amount of award: $2,000
4. Your role: PI
5. If Co-PI, for how much of the total funding are you directly responsible: 100%

Grant Activity

1. Agency/Title of Grant: ABG LLC: Soybean Research
2. Duration of Funding: Jan 2006 - Unlimited
3. Total amount of award: $1,500
4. Your role: PI
5. If Co-PI, for how much of the total funding are you directly responsible: 100%

Grant Activity

1. Agency/Title of Grant: Mary S. Rice Grant
2. Duration of Funding: Apr 2006 - Unlimited
3. Total amount of award: $10,000
4. Your role: PI
5. If Co-PI, for how much of the total funding are you directly responsible: 100%

Grant Activity

1. Agency/Title of Grant: Monsanto Company: Soybean Research
2. Duration of Funding: Apr 2006- Unlimited
3.. Total amount of award: $3,000
4. Your role: PI
5. If Co-PI, for how much of the total funding are you directly responsible: 100%

Grant Activity

1. Agency/Title of Grant: National Crop Insurance Service
2. Duration of Funding: May 2006 - unlimited
3. Total amount of award: $10,000
4. Your role: PI
5. If Co-PI, for how much of the total funding are you directly responsible: 100%

Grant Activity
1. Agency/Title of Grant: ABG AG Services LLC
2. Duration of Funding: May 2006 - unlimited
3. Total amount of award: $4,725
4. Your role: PI
5. If Co-PI, for how much of the total funding are you directly responsible: 100%

Grant Activity
1. Agency/Title of Grant: Indiana Soybean Board: Management of Asian Soybean Rust
2. Duration of Funding: May 2006 - 2007
3. Total amount of award: $30,000
4. Your role: PI
5. If Co-PI, for how much of the total funding are you directly responsible: 100%

Grant Activity
1. Agency/Title of Grant: Monsanto Company: Soybean Research
2. Duration of Funding: June 2006 - unlimited
3. Total amount of award: $2,000
4. Your role: PI
5. If Co-PI, for how much of the total funding are you directly responsible: 100%

Grant Activity
1. Agency/Title of Grant: USDA: MONITORING THE DISTRIBUTION OF THE WESTERN CORN ROOTWORM ROTATION-RESISTANT VARIANT USING ELISA
2. Duration of Funding: May 2006 – March 2007
3. Total amount of award: $53,727.00
4. Your role: Co-PI
5. If Co-PI, for how much of the total funding are you directly responsible: 0%

Grant Activity
1. Agency/Title of Grant: BASF
2. Duration of Funding: July 2006 - unlimited
3. Total amount of award: $17,000
4. Your role: PI
5. If Co-PI, for how much of the total funding are you directly responsible: 100%

Grant Activity

1. Agency/Title of Grant: Foundation for Agronomic Research
2. Duration of Funding: Aug 2006 - unlimited
3. Total amount of award: $8,600
4. Your role: PI
5. If Co-PI, for how much of the total funding are you directly responsible: 100%

Grant Activity

1. Agency/Title of Grant: Dow AgroSciences MUA
2. Duration of Funding: Sept 2006 - 2007
3. Total amount of award: $1,050
4. Your role: PI
5. If Co-PI, for how much of the total funding are you directly responsible: 100%

Grant Activity

1. Agency/Title of Grant: Southern Illinois University U.S. Dept. of Agriculture: Cultural Practice Evaluation for Canola Production Under Indiana Conditions
2. Duration of Funding: Sept 2006 - 2007
3. Total amount of award: $21,500
4. Your role: subcontract
5. If Co-PI, for how much of the total funding are you directly responsible: 100%

Grant Activity

1. Agency/Title of Grant: Indiana Soybean Alliance: Physiology of Early Planted Soybean
2. Duration of Funding: May 2007 - 2008
3. Total amount of award: $30,000
4. Your role: PI
5. If Co-PI, for how much of the total funding are you directly responsible: 100%

Grant Activity

1. Agency/Title of Grant: Indiana Soybean Alliance: Soybean Management in the Biodiesel Era
2. Duration of Funding: May 2007 - 2008
3. Total amount of award: $88,070
4. Your role: Co-PI: moved this money to another PI with my departure from Purdue
5. If Co-PI, for how much of the total funding are you directly responsible: 60% ($52,842)

Grant Activity

1. Agency/Title of Grant: Indiana Soybean Alliance: Effective Manganese Management for High Yields in Glyphosate-Dominant Cropping Systems
2. Duration of Funding: May 2007 - 2008
3. Total amount of award: $66,487
4. Your role: Co-PI

5. If Co-PI, for how much of the total funding are you directly responsible: 33% ($22,162)

Grant Activity

1. Agency/Title of Grant: National Crop Insurance Service: Soybean Research
2. Duration of Funding: Apr 2007 - Unlimited
3. Total amount of award: $6,000
4. Your role: PI
5. If Co-PI, for how much of the total funding are you directly responsible: 100%

Grant Activity

1. Agency/Title of Grant: Monsanto Company: Soybean Research
2. Duration of Funding: May 2007 - unlimited
3. Total amount of award: $3,000
4. Your role: PI
5. If Co-PI, for how much of the total funding are you directly responsible: 100%

Grant Activity

1. Agency/Title of Grant: Southern Illinois University U.S. Dept. of Agriculture: Cultural Practice Evaluation for Canola Production Under Indiana Conditions
2. Duration of Funding: Sept 2007 - 2008
3. Total amount of award: $20,750
4. Your role: subcontract
5. If Co-PI, for how much of the total funding are you directly responsible: 100%

***In-review* ($ Pending: $326,135)**

Grant Activity

1. Agency/Title of Grant: Wisconsin Soybean Marketing Board - Root Lesion Nematode: Nibbler or Major Pest
2. Duration of Funding: March 1, 2008 to February 28th, 2009
3. Total amount of award: $28,360
4. Your role: Co-PI
5. If Co-PI, for how much of the total funding are you directly responsible: NA

Grant Activity

1. Agency/Title of Grant: Wisconsin Soybean Marketing Board - Strategies to reduce soybean cyst nematode populations in corn/soybean rotations
2. Duration of Funding: March 1, 2008 to February 28th, 2009
3. Total amount of award: $12,933
4. Your role: Co-PI
5. If Co-PI, for how much of the total funding are you directly responsible: NA

Grant Activity

1. Agency/Title of Grant: Wisconsin Soybean Marketing Board - Soybean Cyst Nematode Testing and Education
2. Duration of Funding: March 1, 2008 to February 28th, 2009
3. Total amount of award: $19,580
4. Your role: Co-PI
5. If Co-PI, for how much of the total funding are you directly responsible: NA

Grant Activity

1. Agency/Title of Grant: Wisconsin Soybean Marketing Board - Glyphosate Effect on Manganese Availability and Yield Loss in Glyphosate Resistant Soybean
2. Duration of Funding: March 1, 2008 to February 28th, 2009
3. Total amount of award: $24,575
4. Your role: Co-PI
5. If Co-PI, for how much of the total funding are you directly responsible: NA

Grant Activity

1. Agency/Title of Grant: Wisconsin Soybean Marketing Board - Soybean Production Systems in Wisconsin: A Grower Survey to Identify Key Research and Extension Needs
2. Duration of Funding: March 1, 2008 to February 28th, 2009
3. Total amount of award: $10,243
4. Your role: PI
5. If Co-PI, for how much of the total funding are you directly responsible: NA

Grant Activity

1. Agency/Title of Grant: Wisconsin Soybean Marketing Board - Grain Composition of Wisconsin Soybean Varieties
2. Duration of Funding: March 1, 2008 to February 28th, 2009
3. Total amount of award: $13,348
4. Your role: PI
5. If Co-PI, for how much of the total funding are you directly responsible: NA

Grant Activity

1. Agency/Title of Grant: Wisconsin Soybean Marketing Board - Management and Stability of Value Added Soybean in WI
2. Duration of Funding: March 1, 2008 to February 28th, 2009
3. Total amount of award: $24,355
4. Your role: PI
5. If Co-PI, for how much of the total funding are you directly responsible: NA

Grant Activity

1. Agency/Title of Grant: Wisconsin Soybean Marketing Board - Soybean Replant Decision Aid: Do I Replant, Fill-in, or Just Leave it Alone?
2. Duration of Funding: March 1, 2008 to February 28th, 2009
3. Total amount of award: $21,427
4. Your role: PI
5. If Co-PI, for how much of the total funding are you directly responsible: NA

Grant Activity
1. Agency/Title of Grant: NC IPM - Integrated Management of Aphid BYDV Complex
2. Duration of Funding: Sept 2008 - 2010
3. Total amount of award: $99,929
4. Your role: PI
5. If Co-PI, for how much of the total funding are you directly responsible: NA

Grant Activity
1. Agency/Title of Grant: Wisconsin Fertilizer Research Program- Understanding Plant Availability of Manganese in Glyphosate Resistant Soybean Systems
2. Duration of Funding: July 2008 - 2011
3. Total amount of award: $37,494
4. Your role: Co-PI
5. If Co-PI, for how much of the total funding are you directly responsible: NA

Grant Activity
1. Agency/Title of Grant: Wisconsin Fertilizer Research Program- Nitrogen Management and Replant Decision Recommendations for Winter Wheat Production Systems
2. Duration of Funding: July 2008 - 2010
3. Total amount of award: $33,436
4. Your role: PI
5. If Co-PI, for how much of the total funding are you directly responsible: 100%

Past Grants (Not Funded)

Grant Activity
1. Agency/Title of Grant: NRI: Changing Landscapes: The Impacts of Biodiesel on Soybean System Health and Rotational Shifts
2. Duration of Funding: June 2007 – May 2011
3. Total amount of award: $500,000
4. Your role: PI
5. If Co-PI, for how much of the total funding are you directly responsible: NA

Grant Activity
1. Agency/Title of Grant: Cooperative State Research Service U.S. Dept. of Agriculture: Remote Sensing of Soybean Aphid

2. Duration of Funding: Not Funded
3.. Total amount of award $1,096,111
4. Your role: Co-PI
5. If Co-PI, for how much of the total funding are you directly responsible: NA

Grant Activity

1. Agency/Title of Grant: North Central Soybean Research Program: Root knot nematode damage in soybean in Indiana
2. Duration of Funding: Not Funded
3. Total amount of award: $303,847
4. Your role: Co-PI
5. If Co-PI, for how much of the total funding are you directly responsible: NA

Grant Activity

1. Agency/Title of Grant: North Central Soybean Research Program: Describing macro- and microbial populations in high and low yielding soybean rhizosphere
2. Duration of Funding: Not Funded
3. Total amount of award: $380,000
4. Your role: Co-PI
5. If Co-PI, for how much of the total funding are you directly responsible: NA

SECTION C: Teaching

Dr. Conley did not have a formal teaching appointment however he co-instructed AGRY 3005 in the fall of 2006. Dr. Conley's teaching goal is to integrate real world production issues into a classroom setting and prepare students for employment in the seed industry.

1. **Courses taught during the past three years with primary administrative responsibility**
   Agronomy 305 Seed Analysis and Grain Grading (Fall 2006)

2. **Contributions in course and curriculum development**
   This course has recently undergone an extensive updated by the previous instructor so only minor changes were introduced.

3. **Preparation of instructional materials**
   New plant, grain grading, and seed analysis samples were introduced.

4. **Quantitative Evidence of Excellence in Teaching**
   Course evaluations:
   Following is a summary of all questions used by the Department of Agronomy. The rating scale was 5=strongly agree, 4=agree, 3=undecided, 2=disagree, 1=strongly disagree.

Effectiveness Indicators	AGRY 305 – 2006 (n=5)
Course goals clearly stated	5.0
Course builds on my understanding	5.0
Content appropriate for objective	5.0
Text and materials contributed to learning	5.0
Stimulated interest	5.0
Course well-organized	4.9
Instructor treats students with respect	4.9
Evaluations are fair assessments	5.0
Assignments/exams returned promptly	5.0
Instructor is accessible	5.0
Instructor motivates to do best work	5.0
Expectations clearly explained	5.0
Instructor expresses ideas clearly	5.0
Instructor displays thorough knowledge of subject	5.0
Lectures at suitable pace	5.0
Instructor well-prepared for class	5.0
Instructor uses appropriate examples	5.0
Instructor uses effective methods for difficult material	5.0
Overall rating of course	5.0
Overall rating of instructor	5.0

Dr. Conley enjoys teaching and maintains an excellent rapport with his students. The students enjoy his class because he has incorporated so many real production issues, problems, decisions into his lectures and labs. The crops team placed 6th (out of 9) in the National competition held in Chicago.

Summary of Supporting Strengths – Shawn P. Conley

Evidence of Excellence in Extension (Primary)

1. Leads the soybean and wheat Extension program at the University of Wisconsin and services clientele across the Midwest. Wisconsin is the 15th largest soybean producing state with an estimated 1.3 million acres of soybeans grown annually, valued at $0.5 B. Wisconsin also ranks as the 4th and 24th largest oat and winter wheat producing states, respectfully.
2. Actively supports Extension through his four applied research projects designed to immediately help soybean growers.
3. Developed Web page: www.coolbean.info which has received 12,419 hits and 28,287 downloads since its inception (November 2005).
4. Authored or co-authored 10 new Extension publications emphasizing management of current soybean production systems.
5. Over 12,000 participants in educational programs provided by Dr. Conley.
6. Authored or co-authored 50 newsletter articles.
7. Member of 8 departmental, school, and state and national committees.
8. 2005 Purdue University Cooperative Extension Specialist Association (PUCESA) Team Award "*Rust Busters*".
9. 2006 ASA Educational Materials Awards Program Certificate of Excellence (Pub. >16 pages) for "*Corn and Soybean Field Guide*".
10. 2006 ASA Educational Materials Awards Program Certificate of Excellence (Web pages) for "*Coolbean.info*" www.coolbean.info.

Evidence of Excellence in Research (Secondary)

1. Research has impacted clientele by increasing the economic and environmental sustainability of soybean production practices through improved crop and pest management strategies.
2. Published 18 articles in refereed journals.
3. Published 46 abstracts.
4. Serving or served as major professor or co-major professor for 3 graduate students, committees for 6 others.
5. Generated $499,336 in extramural funding.
6. $326,135 in extramural funds in review.
7. Associate Editor for Crop Management Journal.

Evidence of Excellence in Teaching (Tertiary)

1. Crops judging team placed 6th (out of 9) in the National competition help is Chicago in 2006.