

Recommendation of

Dr. Shawn P. Conley

For Promotion to Associate Professor with
Tenure Rank in the Biological Sciences at the
University of Wisconsin, Madison

Submitted by:

Department of Agronomy

2008

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2004 ASA Educational Materials Awards Program Certificate of Excellence (Pub. >16 pages) for “Management of Soft Red Winter Wheat”

2000 University of Wisconsin Weed Science Graduate Student Award

North Central Weed Science Society Weed Contest

First Place Graduate Team 1996

Third Place Undergraduate Team 1994

National Association of Colleges and Teachers of Agriculture (NACTA) Crops Judging Contest:

Third Place Undergraduate Team 1994

D. Society Memberships

American Society of Agronomy (2002 – present)

Crop Science Society of America (2002 – present)

Gamma Sigma Delta (1999 – present)

Purdue University Cooperative Extension Specialist Association (2004-2007)

Great Lakes Canola Association (2004-2007)

North Central Weed Science Society of America (1996-2001)

Weed Science Society of America (1996-2001)

6. Performance

Dr. Conley does not have a formal teaching appointment. Therefore, this document begins with his primary appointments in research and Extension and is followed by teaching.

A. Research (40% appointment)

(1) Statement by the candidate

My research goal is to generate science based solutions to address real world problems in soybean and small grain production. My research program has two broad components. The first is to address/answer critical issues in response to problems and needs expressed by agricultural professionals and growers not only in Wisconsin, but across the Midwest. Results of this research have an immediate application by agricultural professionals. The second component is to identify fundamental agronomic problems not recognized by my clientele, determine the cause, and develop management strategies to mitigate these issues.

The primary objective of my research program is to develop the fundamental knowledge to improve crop management recommendations that maximize economic return for soybean and small grain growers. This knowledge is integrated and delivered through my Extension program.

I have initiated research in three program areas within the focal area of soybean productivity: hail damage assessment, understanding soybean yield potential, and mitigating yield loss caused by pests and pathogens. I have also initiated and led coordinated team projects in small grains.

Damage caused by hail is common across many soybean producing areas in the United States (National Crop Insurance Service, 2008). Since 2003 the National Crop Insurance Service has paid claims on an average of 0.9 million hectares of soybean per year at an average cost of \$53.5 million. With increasing global temperatures, more extreme and unpredictable weather patterns have been suggested; therefore, grower risk for severe hail damage may increase. Research has been conducted on the impact of hail and defoliation on soybean physiology and recovery. However, little information exists on yield response to soybean node or plant removal, which should influence replant decisions. I have determined that node removal at the early vegetative growth stage reduced yields by 15.9 % more than hail injury at the late vegetative growth stage and that seed mass was 7.7% greater with early injury than late injury (Conley et al. (2009). My research also suggests that soybean oil content was only affected by extreme node removal treatments while protein content was unaffected. These results indicate that the soybean developmental stage when crop injury occurs must be considered when predicting soybean seed yield loss and that an oil content adjustment is not needed to properly compensate growers for economic losses caused by hail injury. These research findings contradict current yield loss adjustments used by the National Crop Insurance Service. These results will be used to amend current crop yield loss formulas and will provide accurate science-based recommendations for the 23.5 million hectares of soybeans in the U.S. that are covered by the Federal Crop Insurance program.

Soybean Yield Potential. Climate change is being witnessed first hand by our agricultural clientele. Current recommendations for soybean are to plant from mid-May through June. However, anecdotal evidence suggested that earlier planting can improve yield. My research has shown that soybean yield increased 23% when planted from late March to mid-May as compared to late May and early June planting dates in 2006 (Robinson et al., 2009). In 2007, soybean yield increased 11% when planted on 10 April, 30 April, and 9 May planting dates as compared to the late-March and early-June plantings. Path analysis revealed that pods m⁻² had the greatest impact

on yield, but seed mass was also an important constituent. Mean oil concentration decreased approximately 12 g kg⁻¹ as planting was delayed in both years. In 2006, average seed protein concentration varied by planting date. In 2007, mean protein concentration increased 14 g kg⁻¹ as planting was delayed. Delaying planting until late May or early June altered seed composition slightly, but significantly reduced yield. My results suggest that planting in April or early May is an effective management strategy to increase soybean yield.

Soybean Pest Mitigation. In November of 2004, Asian soybean rust (*Phakopsora pachyrhizi*) was first identified in the continental United States. Soybean rust is a potentially devastating disease that may lead to 50% or greater yield loss in soybean. In 2005, the USDA estimated that the economic loss of this disease would range from \$640 million to \$1,341 million depending on the severity of infestation. Because no commercial soybean cultivars were resistant to soybean rust, effective management of rust required the application of fungicides. Narrow row soybean (\leq 38-cm) produces greater yield than soybean planted in wide (76-cm) rows. However, fungicide applications will physically damage narrow row soybeans if needed to control soybean rust. In addition, no research had been conducted to determine if soybean row spacing has an effect on spray droplet penetration into the soybean canopy. My research has shown that row spacing has no effect on spray canopy penetration at any application timing and that damage from sprayer wheel tracks will significantly reduce soybean yield (1.3 to 4.9%) once the soybean crop enters the reproductive growth stage (Hanna et al., 2008). At the whole-field level, this damage will depend on sprayer boom width. My research determined that growers should apply fungicides in at least 140 liters per hectare of carrier for optimum penetration. These results suggest that soybean growers may only need slight modifications of their production practices to manage soybean rust. These research results are applicable to the ~28.4 million hectares of soybean grown annually across the United States.

Small Grains Team Research. Barley yellow dwarf is one of the most damaging diseases of wheat, *Triticum aestivum* L. and pasture grasses in the world. Yield is lost when aphids extract plant sap and transmit viruses. Given current yield and price levels, growers may lose \$567 million dollars annually to this insect/disease complex. Current state economic thresholds indicate that aphids should not be treated below 50 aphids per stem. However, these thresholds were developed in the early 1970s and do not reflect today's wheat yields and management. To research the aphid/bydv complex, I organized an interdisciplinary team of scientists in the fields of plant pathology, entomology, and agronomy. My research team has determined that the aphid/bydv complex reduced wheat yield 15% (Zwiener et al. 2005). This research also developed new economic thresholds for aphid management; 16 aphids per meter of row in the fall and 165 aphids per meter of row in the spring. This research is applicable to 4.3 million hectares of soft red winter wheat.

Given today's competitive academic and funding environment, it is critical to effectively communicate research results to peers. To date, I have authored or co-authored 23 refereed journal articles and 44 scientific abstracts. I have supported my research with \$879,325 in grants and have \$122,036 of proposals pending review.

(2) Publications

The candidate role in each manuscript listed below is defined according to the following key: (c): concept development and design; (d): data acquisition; (a): analysis; (w): writing

a. Papers published in or accepted by refereed journals.

***Conley, S. P.**, Pedersen, P., and Christmas, E. P. 2009. Main-stem node removal effect on soybean seed yield and composition. *Agronomy Journal*: 101:1-4. (c) 10, (d) 40, (a) 50, (w) 90. *Results of this research will be used to amend current crop yield loss formulas and will provide accurate science-based recommendations for the 23.5 million hectares of soybeans in the U.S. that are covered by the Federal Crop Insurance program. Please see research statement for more detail.*

Krupke, C. H., Marquardt, P. T., Johnson, W. G., Weller, S. C., and **Conley, S. P.** 2009. Volunteer Corn Presents New Challenges for Insect Resistance Management. In Press *Agronomy Journal*. (c) 5, (d) 0, (a) 10, (w) 15

*‡Robinson, A. P., **Conley, S. P.**, Volenec, J. J., and Santini, J. B. 2009. Analysis of high yielding, early-planted soybean in Indiana. *Agronomy Journal* 101:131-139. (c) 85, (d) 10, (a) 10, (w) 50. *This research has defined a new planting date window for soybean in Indiana and further clarified the impact of environment on soybean seed composition. Please see research statement for more detail.*

***Conley, S. P.**, Abendroth, L., Elmore, R., Zarnstorff, M., and Christmas, E. P. 2008. Soybean seed yield and composition response to stand reduction at vegetative and reproductive growth stages. *Agronomy Journal*: 100:1666-1669. (c) 10, (d) 40, (a) 50, (w) 90. *This research will be used to amend current crop yield loss formulas and will provide accurate science-based recommendations for the 23.5 million hectares of soybeans in the U.S. that are covered by the Federal Crop Insurance program. Please see research statement for more detail.*

*‡Hanna, S., **Conley, S. P.**, Shaner, G., and Santini, J. 2008. Fungicide application timing and row spacing effect on soybean canopy penetration and grain yield. *Agronomy Journal*: 100:1488-1492. (c) 85, (d) 10, (a) 10, (w) 50. *This research has shown that row spacing has no effect on spray canopy penetration at any application timing and that damage from sprayer wheel tracks will significantly reduce soybean yield (1.3 to 4.9%) once the soybean crop enters the reproductive growth stage. Please see research statement for more detail.*

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*. 45:6; 4RIB3. (c) 85, (d) 90, (a) 10, (w) 10

Conley, S. P., Krupke, C., Santini, J., and Shaner, G. 2007. Pest management in Indiana soybean production systems. *Journal of Extension*. 45:4; 4RIB8. (c) 85, (d) 90, (a) 10, (w) 90

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. (c) 85, (d) 90, (a) 10, (w) 90

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 Science*. 55:592-598. (c) 10, (d) 0, (a) 30, (w) 10

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. (c) 15, (d) 15, (a) 10, (w) 10

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. (c) 50, (d) 50, (a) 50, (w) 50

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. (c) 0, (d) 0, (a) 20, (w) 30

Conley, S. P. and Bradley, K. E. 2005. Wheat (*Triticum aestivum*) yield response to henbit (*Lamium amplexicaule*) interference and simulated winterkill. *Weed Technology*. 19:902-906. (c) 85, (d) 90, (a) 90, (w) 90

Conley, S. P., Stevens, W. G., and Dunn, D. D. 2005. Grain sorghum response to row spacing, plant density, and planter skips. *Crop Management*, doi: 10.1094/CM-2005-0718-01-RS, June 2005. (c) 85, (d) 50, (a) 90, (w) 90

McKendry, A. L., Tague, D. N., Wright, R. L., Tremain, J. A., and **Conley, S. P.** 2005. Registration of 'Truman' wheat. *Crop Science*. 45:421-423. (c) 0, (d) 0, (a) 0, (w) 15

*‡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. (c) 85, (d) 30, (a) 90, (w) 90. *My research team determined that the aphid/bydv complex reduced wheat yield 15%. Our research also led to new economic thresholds for aphid management; 16 aphids per meter of row in the fall and 165 aphids per meter of row in the spring. Please see research statement for more detail.*

Conley, S. P., Bordovsky, D., Rife, C., and Wiebold, W. J. 2004. Winter canola survival and yield response to nitrogen and fall phosphorus. *Crop Management*. Online. *Crop Management* doi: 10.1094/CM-2004-0901-01-RS. (c) 85, (d) 90, (a) 90, (w) 90

Reinbott, T. M., **Conley, S. P.**, and Blevins, D. G. 2004. No-tillage corn and grain sorghum response to cover crop and nitrogen fertilizer. *Agronomy Journal*. 96:1148-1157. (c) 0, (d) 0, (a) 90, (w) 90

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. (c) 85, (d) 90, (a) 90, (w) 90

Conley, S. P., Stoltenberg, D. E., Boerboom, C. M., and Binning, L. K. 2003. Predicting soybean yield loss in giant foxtail and common lambsquarters communities. *Weed Science*. 51:402-407. (c) 85, (d) 90, (a) 90, (w) 90

Conley, S. P. and Wiebold, W. J. 2003. Grain sorghum response to planting date. Online. *Crop Management* doi: 10.1094/CM-2003-0204-01-RS. (c) 0, (d) 0, (a) 50, (w) 50

Conley, S. P., Binning, L. K., Boerboom, C. M., and Stoltenberg, D. E. 2002. Estimating giant foxtail cohort productivity in soybean based on weed density, leaf area, or volume. *Weed Science*. 50:72-78. (c) 85, (d) 90, (a) 90, (w) 90

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. (c) 85, (d) 90, (a) 90, (w) 90

*Denotes five most noteworthy publications.

‡Denotes research conducted by my graduate student.

- b. Papers submitted to refereed journals but not yet accepted for publication - none**
- c. Papers published in, or accepted by, non refereed journals – Please see Extension section**
- d. Invited papers published in conference proceedings – none**
- e. Monographs or books published – none**
- f. Chapters in books – none**
- g. Books or conference proceedings edited – none**

h. Contributed papers and/or abstracts: Dr. Conley has authored or co-authored 44 published abstracts.

Conley, S. P. 2008. Barley yellow dwarf impact on wheat yield. In Agronomy Abstracts. ASA, Madison, WI.

Esker, P. D., Gaska, J. M., and **Conley, S. P.** 2008. Integrated management for fusarium head blight of winter wheat in Wisconsin. Fusarium Head Blight Forum. Indianapolis, IN.

‡Robinson, A., **Conley, S. P.**, and Volenec, J. 2008. Early planting effect on soybean seed protein and oil. In Agronomy Abstracts. ASA, Madison, WI. *“Poster won second place in the Joint C02/C04 Graduate Student Competition held during the poster presentation session “Genetic and Environmental Effects on Physiology” of the Crop Science Society of America’s annual meeting in Houston, TX on 6 October 2008.”*

Conley, S. P. and Santini, J. 2007. Integrating survey data into Extension programs. In Agronomy Abstracts. ASA, Madison, WI.

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.

Faghihi, J., **Conley, S. P.**, and Ferris, V. R. 2007. Field reaction of selected scn-resistant soybean germplasm towards SDS. In Journal of Nematology, 39:1, page 76.

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.

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.

‡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.

‡Robinson, A., **Conley, S. P.**, and Volenec, J. 2007. Earlier planting date increases yield in indeterminate soybean. In Agronomy Abstracts. ASA, Madison, WI.

‡Robinson, A., **Conley, S. P.**, and Volenec, J. 2007. Soybean germination among various planting dates. In Agronomy Abstracts. ASA, Madison, WI.

Conley, S. P. and Pedersen, P. 2006. Recovery of node removal on soybean using two populations. In Agronomy Abstracts. ASA, Madison, WI.

Conley, S. P. and Shaner, G. 2006. Deposition and efficacy of electrostatic versus conventional fungicide spray systems. National Agricultural Aviation Association annual meetings.

‡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.

‡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.

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.

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.

Pedersen, P. and **Conley, S. P.** 2006. Effect of node removal on soybean grain yield and composition. In Agronomy Abstracts. ASA, Madison, WI.

‡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.

Conley, S. P. 2005. Hail induced stand reduction and timing impact soybean yield and quality. In Agronomy Abstracts. ASA, Madison, WI.

Conley, S. P. and Shaner, G. 2005. Spray application technology in soybean: implications for disease and insect management. National Agricultural Aviation Association annual meetings.

‡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.

Pedersen, P. and **Conley, S. P.** 2005. Node removal affects soybean grain yield and composition. In Agronomy Abstracts. ASA, Madison, WI.

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.

Conley, S. P. 2004. Development of a grain sorghum ratoon cropping system for Missouri. In Agronomy Abstracts. ASA, Madison, WI.

‡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.

Conley, S. P. 2003. Wheat yield response to winter annual weed interference and crop stand loss. In Proceedings of the North Central Weed Science Society. Vol. 58. NCWSS, Kansas City, MO.

Conley, S. P. 2003. Looking back and moving forward: results of NCWSS extension survey. In Proceedings of the North Central Weed Science Society. Vol. 58. NCWSS, Kansas City, MO.

Conley, S. P. 2003. Estimating grain sorghum yield based on crop density, leaf area, and volume. In Agronomy Abstracts. ASA, Madison, WI.

Conley, S. P. 2003. Weed interference in soft red winter wheat. Mid-American Wheat Scientists Meeting (MAWS). Olive Branch MS.

‡Zwiener, C. M., **Conley, S. P.**, L. E. Sweets, and W. C. Bailey. 2003. Management of the barley yellow dwarf virus complex. In Agronomy Abstracts. ASA, Madison, WI.

Conley, S. P. 2002. Plant density and row spacing affect grain sorghum phenology. In Agronomy Abstracts. ASA, Madison, WI.

‡Zwiener, C. M. and **Conley, S. P.** 2002. Winter annual weed interference in soft red winter wheat. In Proceedings of the North Central Weed Science Society. Vol. 57. NCWSS, Kansas City, MO.

Conley, S. P., Binning, L. K., Boerboom, C. M., and Stoltenberg, D. E. 2001. Giant foxtail (*Setaria faberi*) cohort and density affect soybean yield. In Weed Science Society of America Abstracts. Vol. 41. WSSA, Lawrence, KS.

Conley, S. P., Binning, L. K., Boerboom, C. M., and Stoltenberg, D. E. 2000. Cohort and density affect giant foxtail-soybean interactions. In Proceedings of the North Central Weed Science Society. Vol. 55. NCWSS, Kansas City, MO.

Conley, S. P., Binning, L. K., Boerboom, C. M., and Stoltenberg, D. E. 2000. Soybean yield loss in common lambsquarters (*Chenopodium album*) and giant

foxtail (*Setaria faberi*) communities. In Weed Science Society of America Abstracts. Vol. 40. WSSA, Lawrence, KS.

Aguilera, J., L. K. Binning, and **S. P. Conley**. 1999. Weed-potato competition: effects on growth and development. In Weed Science Society of America Abstracts. Vol. 39. WSSA, Lawrence, KS.

Conley, S. P., Binning, L. K., and Connell, T. R. 1999. Row spacing effects on weed biomass, potato yield, and economic return. In Weed Science Society of America Abstracts. Vol. 39. WSSA, Lawrence, KS.

Conley, S. P., Binning, L. K., Boerboom, C. M., and Stoltenberg, D. E. 1999. Cohort and density effects of giant foxtail on soybean. In Proceedings of the North Central Weed Science Society. Vol. 54. NCWSS, Kansas City, MO.

Conley, S. P., Binning, L. K., Stoltenberg, D. E., and Boerboom, C. M. 1999. Weed growth parameters for predicting soybean yield loss. In Proceedings of the North Central Weed Science Society. Vol. 54. NCWSS, Kansas City, MO.

Conley, S. P., Binning, L. K., and Connell, T. R. 1998. Effects of row spacing of potato canopy development and yield. In American Journal of Potato Research Abstracts. 76:273.

Conley, S. P., Binning, L. K., and Connell, T. R. 1998. Effects of row spacing on potato canopy development and yield. In Weed Science Society of America Abstracts. Vol. 38. WSSA, Lawrence, KS.

Conley, S. P., Binning, L. K., Stoltenberg, D. E., and Boerboom, C. M. 1998. Interference among common lambsquarters, giant foxtail, and soybean. In Proceedings of the North Central Weed Science Society. Vol. 53. NCWSS, Kansas City, MO.

Conley, S. P., Binning, L. K., and Connell, T. R. 1997. Effects of reduced row spacing on potato and weed development. In Proceedings of the North Central Weed Science Society. Vol. 52. NCWSS, Kansas City, MO.

‡Denotes my graduate student.

i. Technical reports and other publications

Conley, S. P. and Christmas, E. P. 2006. Columbia City, IN. *In*: Stamm, M. et al. National Winter Canola Variety Trial. Kansas Agricultural Experiment Station Publication. SRP973.

Christmas, E. P. and **Conley, S. P.** 2005. Columbia City, IN. *In:* Stamm, M. et al. National Winter Canola Variety Trial. Kansas Agricultural Experiment Station Publication. SRP954.

Conley, S. P. 2004. Columbia, MO. *In:* Rife, C. et al. National Winter Canola Variety Trial. Kansas Agricultural Experiment Station Publication. SRP937.

Conley, S. P. 2003. Columbia, MO. *In:* Rife, C. et al. National Winter Canola Variety Trial. Kansas Agricultural Experiment Station Publication. SRP924.

Conference proceedings:

Conley, S.P. and Gaska, J. 2008. Soybean yield loss by growth stage. Proc. Wisc. Fert. Aglime Pest Management Conf. 47:212-215.

Conley, S.P. and Laboski, C. 2008. Does glyphosate interact with Mn in soybean. Proc. Wisc. Fert. Aglime Pest Management Conf. 47:84-88.

Conley, S.P. 2005. Improve wheat yield through more intensive crop management. Proc. Indiana CCA Conference. CD-AY-6.

Conley, S. P., Binning, L. K., Kelling, K. A.. 2001. Row spacing and fertility affect Russet Burbank, Dark Red Norland, and Snowden yield. Proc. Wisc. Annual Potato Meetings, 14:317-320.

Conley, S. P., and Binning, L. K. 2000. Row spacing effects on Russet Burbank, Dark Red Norland, and Snowden yield. Proc. Wisc. Annual Potato Meetings, 13:281-282.

Conley, S. P., Moechnig, M. J, Binning, L. K., Stoltenberg, D. E., and Boerboom C. M. 1999. Effect of common lambsquarters and giant foxtail competition on field corn and soybean yield. Proc. Wisc. Fert. Aglime Pest Management Conf. 38:214-220.

Conley, S. P., Binning, L. K. and Connell, T. R.. 1998. Effects of reduced row spacing on potato and weed development. Proc. Wisc. Annual Potato Meetings, 11:103-104.

Conley, S. P., Binning, L. K., and Connell, T. R.. 1997. Weed competitiveness and potato canopy differentiation in varied row spacings. Proc. Wisc. Annual Potato Meetings, 10:103-104.

j. Patents - none

(3) List of invited research presentations

Conley, S. P. 2008. Maximum yield: theoretical versus economic. American Seed Trade Association. Chicago, IL.

Conley, S. P. 2007. Soybean growth and development: management implications. Indiana CCA Conference. Indianapolis, IN.

Conley S. P. 2003. Integrated crop and pest management strategies in soft red winter wheat. National Honam Experiment Station (NHES). Iksan, Korea.

(4) Research support

I have been awarded \$879,325. (University of Wisconsin: \$409,919; Purdue University: \$359,654; University of Missouri: \$109,752) during my academic career. Grant money is used to support research, Extension, and teaching efforts. Grant money is also used to help fund salaries for technical support, graduate students, and undergraduate labor.

Grant and Gift Dollars received:

University of Wisconsin Grants - \$409,919

Title of Grant: Wisconsin Soybean and Winter Wheat Variety Trial Program
Agency: Multiple donors
Duration of funding: September 2007 to present; unlimited
Total amount of award: \$183,814.40
Role: PI

Title of Grant: Root Lesion Nematode: Nibbler or Major Pest
Agency: Wisconsin Soybean Marketing Board
Duration of funding: March 1, 2008 to February 28th, 2009
Total amount of award: \$10,000
Role: Co-PI

Title of Grant: Strategies to reduce soybean cyst nematode populations in corn/soybean rotations
Agency: Wisconsin Soybean Marketing Board
Duration of funding: March 1, 2008 to February 28th, 2009
Total amount of award: \$12,933
Role: PI

Title of Grant: Soybean Cyst Nematode Testing and Education
Agency: Wisconsin Soybean Marketing Board
Duration of funding: March 1, 2008 to February 28th, 2009
Total amount of award: \$12,977
Role: PI

Title of Grant: Glyphosate Effect on Manganese Availability and Yield Loss in Glyphosate Resistant Soybean
Agency: Wisconsin Soybean Marketing Board
Duration of funding: March 1, 2008 to February 28th, 2009

Total amount of award: \$15,000

Role: Co-PI

Title of Grant: Soybean Production Systems in Wisconsin: A Grower Survey to Identify Key Research and Extension Needs

Agency: Wisconsin Soybean Marketing Board

Duration of funding: March 1, 2008 to February 28th, 2009

Total amount of award: \$10,243

Role: PI

Title of Grant: Grain Composition of Wisconsin Soybean Varieties

Agency: Wisconsin Soybean Marketing Board

Duration of funding: March 1, 2008 to February 28th, 2009

Total amount of award: \$13,348

Role: PI

Title of Grant: Nitrogen Management and Replant Decision Recommendations for Winter Wheat Production Systems

Agency: Wisconsin Fertilizer Research Program

Duration of funding: July 2008 - 2010

Total amount of award: \$33,436

Role: PI

Title of Grant: Unrestricted gift

Agency: Monsanto

Duration of funding: Unlimited

Total amount of award: \$10,000

Role: PI

Title of Grant: Unrestricted gift

Agency: Valent

Duration of funding: Unlimited

Total amount of award: \$5,000

Role: PI

Title of Grant: Unrestricted gift

Agency: WI Crop Improvement Association

Duration of funding: Unlimited

Total amount of award: \$20,000

Role: PI

Title of Grant: Unrestricted gift

Agency: Syngenta

Duration of funding: Unlimited

Total amount of award: \$15,000

Role: PI

Title of Grant: Unrestricted gift

Agency: BASF

Duration of funding: Unlimited

Total amount of award: \$8,500

Role: PI

Title of Grant: Integrated management studies to improve overall management of FHB and DON in Wisconsin

Agency: US Wheat and Barley Scab Initiative

Duration of funding: 6/09-5/10

Total amount of award: \$15,000

Role: Co-PI

Title of Grant: Improving Disease Management in Wheat Through Novel Disease and Economic Threshold Models

Agency: Regional Integrated Pest Management Competitive Grants Program – North - Central Region

Duration of funding: 5/09-4/11

Total amount of award: \$44,668

Role: Co-PI

In-review (\$ Pending: \$122,036)

Title of Grant: Soybean Cyst Nematode Testing and Education

Agency: Wisconsin Soybean Marketing Board

Duration of funding: 4/09-3/10

Total amount of award: \$13,026

Role: Co-PI

Title of Grant: Long term efficacy and viability of *Coniothyrium minitans* (Contans® WG) for white mold control in soybean.

Agency: Wisconsin Soybean Marketing Board

Duration of funding: 4/09-3/10

Total amount of award: \$30,982

Role: Co-PI

Title of Grant: Characterizing Soybean Yield Response to Inoculants

Agency: Wisconsin Soybean Marketing Board

Duration of funding: 4/09-3/10

Total amount of award: \$38,394

Role: Co-PI

Title of Grant: Root lesion nematode: Nibbler or Major pest?

Agency: Wisconsin Soybean Marketing Board

Duration of funding: 4/09-3/10

Total amount of award: \$13,778

Role: Co-PI

Title of Grant: Glyphosate effect on manganese availability and yield loss in glyphosate resistant soybean

Agency: Wisconsin Soybean Marketing Board

Duration of funding: 4/09-3/10
Total amount of award: \$13,986
Role: Co-PI

Title of Grant: Evaluation of Stress Tolerance of Soybean Varieties in Wisconsin
Agency: Wisconsin Soybean Marketing Board
Duration of funding: 4/09-3/10
Total amount of award: \$21,870
Role: Co-PI

Purdue University Grants - \$359,654

Title of Grant: Unrestricted gift
Agency: Philom Bios
Duration of funding: Unlimited
Total amount of award: \$500
Role: PI

Title of Grant: Unrestricted gift
Agency: Becker Underwood
Duration of funding: Unlimited
Total amount of award: \$4,000
Role: PI

Title of Grant: Unrestricted gift
Agency: National Crop Insurance Service
Duration of funding: Unlimited
Total amount of award: \$9,000
Role: PI

Title of Grant: Management of Asian Soybean Rust
Agency: Indiana Soybean Alliance
Duration of funding: 5/05-4/06
Total amount of award: \$33,591
Role: PI

Title of Grant: Soybean Production Systems in Indiana
Agency: Indiana Soybean Alliance
Duration of funding: 5/05-4/06
Total amount of award: \$19,089
Role: PI

Title of Grant: Unrestricted gift
Agency: Monsanto
Duration of funding: Unlimited
Total amount of award: \$4,000
Role: PI

Title of Grant: Unrestricted gift
Agency: BASF
Duration of funding: Unlimited
Total amount of award: \$5,000
Role: PI

Title of Grant: Unrestricted gift
Agency: Foundation for Agronomic Research
Duration of funding: Unlimited
Total amount of award: \$6,000
Role: PI

Title of Grant: Unrestricted gift
Agency: Dow Agro Sciences
Duration of funding: Unlimited
Total amount of award: \$2,000
Role: PI

Title of Grant: Cultural Practice Evaluation for Canola Production Under Indiana
Conditions
Agency: USDA
Duration of funding: 9/05-8/06
Total amount of award: \$21,920
Role: subcontract

Title of Grant: Unrestricted gift
Agency: Becker Underwood
Duration of funding: Unlimited
Total amount of award: \$4,000
Role: PI

Title of Grant: Unrestricted gift
Agency: Foundation for Agronomic Research
Duration of funding: Unlimited
Total amount of award: \$11,105
Role: PI

Title of Grant: Unrestricted gift
Agency: ABG LLC
Duration of funding: Unlimited
Total amount of award: \$1,500
Role: PI

Title of Grant: Soybean Management
Agency: Mary S. Rice Grant
Duration of funding: Unlimited
Total amount of award: \$10,000
Role: PI

Title of Grant: Unrestricted gift
Agency: Monsanto
Duration of funding: Unlimited
Total amount of award: \$3,000
Role: PI

Title of Grant: Unrestricted gift
Agency: National Crop Insurance Service
Duration of funding: Unlimited
Total amount of award: \$10,000
Role: PI

Title of Grant: Unrestricted gift
Agency: ABG LLC
Duration of funding: Unlimited
Total amount of award: \$4,725
Role: PI

Title of Grant: Management of Asian Soybean Rust
Agency: Indiana Soybean Alliance
Duration of funding: 5/06-4/07
Total amount of award: \$30,000
Role: PI

Title of Grant: Unrestricted gift
Agency: Monsanto
Duration of funding: Unlimited
Total amount of award: \$2,000
Role: PI

Title of Grant: Monitoring the distribution of the Western corn rootworm rotation-resistant variant using ELISA
Agency: USDA
Duration of funding: 5/06-3/07
Total amount of award: \$0/53,727 (I was not directly responsible for funding)
Role: PI

Title of Grant: Unrestricted gift
Agency: BASF
Duration of funding: Unlimited
Total amount of award: \$17,000
Role: PI

Title of Grant: Unrestricted gift
Agency: Foundation for Agronomic Research
Duration of funding: Unlimited
Total amount of award: \$8,600

Role: PI

Title of Grant: Unrestricted gift
Agency: Dow Agro Sciences
Duration of funding: Unlimited
Total amount of award: \$1,050
Role: PI

Title of Grant: Cultural Practice Evaluation for Canola Production Under Indiana
Conditions
Agency: USDA
Duration of funding: 9/06-8/07
Total amount of award: \$21,500
Role: subcontract

Title of Grant: Physiology of Early Planted Soybean
Agency: Indiana Soybean Alliance
Duration of funding: 5/07-4/08
Total amount of award: \$30,000
Role: PI

Title of Grant: Soybean Management in the Biodiesel Era
Agency: Indiana Soybean Alliance
Duration of funding: 5/07-4/08
Total amount of award: \$88,070: I was responsible for \$52,162
Role: Co-PI: this money was moved to another PI with my departure from
Purdue

Title of Grant: Effective Manganese Management for High Yields in Glyphosate-
Dominant Cropping Systems
Agency: Indiana Soybean Alliance
Duration of funding: 5/07-4/08
Total amount of award: \$66,487: I was responsible for \$22,162
Role: Co-PI: this money was moved to another PI with my departure from
Purdue

Title of Grant: Unrestricted gift
Agency: National Crop Insurance Service
Duration of funding: Unlimited
Total amount of award: \$6,000
Role: PI

Title of Grant: Unrestricted gift
Agency: Monsanto
Duration of funding: Unlimited
Total amount of award: \$3,000
Role: PI

Title of Grant: Cultural Practice Evaluation for Canola Production Under Indiana
Conditions
Agency: USDA
Duration of funding: 9/07-8/08
Total amount of award: \$20,750
Role: subcontract

University of Missouri Grants - \$109,752

Title of Grant: Development and Management of Canola in the Great Plains Region
Agency: National canola initiative
Duration of funding: 9/01-6/03
Total amount of award: \$20,666
Role: subcontract

Title of Grant: Unrestricted gift
Agency: Gustafson LLC
Duration of funding: Unlimited
Total amount of award: \$2,000
Role: PI

Title of Grant: Unrestricted gift
Agency: Bio-Plantek
Duration of funding: Unlimited
Total amount of award: \$9,000
Role: PI

Title of Grant: Soft Red Winter Wheat Replant Decision Aid Based on Spring Nitrogen
Recommendations and Percent
Agency: Missouri Fertilizer and Lime Board
Duration of funding: 10/03-7/05
Total amount of award: \$29,200
Role: PI

Title of Grant: Development of a Grain Sorghum Ratoon Cropping System for SE
Missouri
Agency: Missouri Fertilizer and Lime Board
Duration of funding: 4/03-10/05
Total amount of award: \$32,352
Role: PI

Title of Grant: Development and Management of Canola in the Great Plains Region
Agency: National canola initiative
Duration of funding: 9/03-8/05
Total amount of award: \$6,666
Role: subcontract

Title of Grant: Unrestricted gift

Agency: Gustafson LLC
Duration of funding: Unlimited
Total amount of award: \$1,500
Role: PI

Title of Grant: Unrestricted gift
Agency: Thomas Jefferson Institute
Duration of funding: Unlimited
Total amount of award: \$1,500
Role: PI

Title of Grant: South West Missouri Winter Wheat Scouting Clinics
Agency: University of Missouri Plant Protection Program Grant Award
Duration of funding: 3/04-12/04
Total amount of award: \$2,516
Role: PI

Title of Grant: State Contacts Grant Program. NC-IPM State Contact for Missouri
Agency: North Central Integrated Pest Management Center
Duration of funding: 1/04-12/04
Total amount of award: \$0/25,000 (I was not directly responsible for funding)
Role: PI

Title of Grant: Unrestricted gift
Agency: BASF
Duration of funding: Unlimited
Total amount of award: \$2,500
Role: PI

Title of Grant: Characterizing environmental effects on Nu-Sun sunflower yield and oil quality
Agency: University of Missouri Research Council Grant
Duration of funding: 5/04-4/05
Total amount of award: \$1,852
Role: PI

B. Outreach/Extension

(1) Statement by the candidate

My primary responsibility is to direct the Extension program for Wisconsin soybean and small grain growers and seed producers. This is a significant responsibility as Wisconsin is the 15th largest soybean producing state with an estimated 1.5 million acres of soybeans grown annually, valued at \$0.5 B. Wisconsin also ranks as the 2nd and 24th largest oat and winter wheat producing state, respectively. I have two primary clientele groups who rely extensively on my research-based information. The first group consists of agricultural professionals and county Extension agents who service growers across the Midwest. I provide 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 that I serve is Wisconsin growers. I provide transformational education for this group through county and regional crop meetings and via electronic and printed media.

The overall goal of my Extension program is to increase the economic and environmental sustainability of Midwest soybean and small grains production through improved crop and pest management strategies.

My goals as an educator are guided by my Extension-education philosophy. I strive to develop educational programs that promote active learning, stimulate critical thinking, and provoke insightful questions. I believe that we must employ a holistic approach when developing educational offerings and those programs must encourage active participation and include hands-on activities. This approach often stimulates a more complete understanding of the complex agronomic systems employed by my clientele. To apply this belief I have actively engaged in developing curriculum for the Diagnostic Training Workshops that I participate in. I have provided training at over 30 workshops in association with the Crop Diagnostic Training and Research Centers across Missouri, Indiana, and Wisconsin. These participants influence production decisions on over 3,000,000 acres of farmland in the Midwest annually. I have personally instructed over 1,000 clients during these training events. I have received survey ratings of 1.6/5 for both degree of satisfaction and usefulness (1 to 5 scale where 1 = excellent).

I believe that a successful Extension program must begin by defining the key educational needs of the clientele. Once these needs are defined, educational resources can be developed to satisfy each need. Using a comprehensive needs-assessment strategy that included extensive surveys, listening group sessions, and commodity group input, I identified three specific educational program areas to improve current soybean and small grain production systems (Alexander et al. 2007; Conley, Krupke et al. 2007; Johnson et al. 2007; Conley and Santini, 2007). These were: 1) impact of agronomic production practices on Asian soybean rust, 2) integrated soybean and small grain production systems, and 3) value added grain crops.

Asian Soybean Rust.

To meet the educational needs of Asian soybean rust, I co-initiated and co-organized the Soybean “Rust Buster” Team. Purdue University teamed with the Indiana Soybean Alliance to deliver five one-day informational meetings that covered all aspects of soybean production related to Asian soybean rust. These meetings attracted ~1,000 growers and industry clientele and according to survey results, impacted management on 3.5 million acres of soybean across

Indiana, Illinois, and Ohio. Following the success of this initial offering, I continued this program through our traditional educational efforts of 47 local county meetings (>2000 clientele). I also teamed with the Purdue Diagnostic Training Center (DTC) to provide five, hands-on training events that serviced an additional 300 clientele. During this series of meetings, several common questions arose that required immediate attention. To meet this need, I co-authored Extension publication *ID-324, Preparing for Asian Soybean Rust*. I solicited the Indiana Soybean Alliance to secure funding to print and distribute 10,000 copies of this publication to Indiana growers at no cost. In recognition of our statewide efforts, the Purdue “Rust Buster” Team was awarded the Purdue University Cooperative Extension Specialist Association team award in 2005. Due to my expertise, I was invited to co-author a chapter entitled: *Soybean Growth and Development* in the 2007 *Using Foliar Fungicides to Manage Soybean Rust* publication (11,067 copies distributed). This was a national publication supported by the United Soybean Board.

Integrated Soybean and Small Grain Production Systems

To meet the educational needs of “Integrated soybean and small grain production systems,” I developed Missouri’s first wheat production manual *IPM Manual 1022: Management of Soft Red Winter Wheat*. This is an all inclusive manual that provides management recommendations from planting through harvest and marketing. To date, 2,341 copies of this manual have been purchased while 29,538 chapters have been downloaded. I also significantly revised the soybean section of Purdue Extension Publication ID-179, *Corn and Soybean Field Guide*. Sales of this guide have increased from 16,235 guides sold in 2005 (prior to revisions) to 26,519 in 2006 and 51,247 in 2007. I have authored or co-authored 20 peer-reviewed Extension publications and produced one Nematode Management DVD (UWEX A3848). Due to my expertise in soybean production systems, I was asked to develop a series of on-line presentations on soybean production for the Pest Management Network Education and Training Center. This series provides up-to-date crop management information and recommendations for U.S. soybean growers and agricultural professionals. Lastly, in an effort to address the continuing and ever-changing educational needs of my clientele, I developed www.coolbean.info. This webpage was an instant success and was featured on AgDay, a National Ag TV program on February 15th of 2006. Since January 1, 2008, this webpage has received 208,895 hits, 100,283 page views, and 24,030 total sessions. To further meet the changing needs and demands of my agricultural clientele, I employed new technology and co-developed the Soy Report Blog (<http://thesoyreport.blogspot.com/>) in April 2008. The Soy Report facilitates immediate responses to crop and pest management needs as they become evident throughout the growing season.

Value Added Grain Crops

To meet the educational needs of “Value added grain crops”, I teamed with Dr. Bernie Tao to develop two new extension publications related to biodiesel production. These publications have been downloaded over 49,200 times. I have also contributed to the National Winter Canola Variety Trial program to evaluate F1 to F5 germplasm. This multi-state breeding effort is vital to the advancement of canola production in the U.S. Lastly, I have used the UW Soybean and Winter Wheat Variety trials to rigorously compare novel value added grain traits to current production traits. This provides Midwest growers with unbiased recommendations for integrating these new traits into their soybean or small grain production systems.

(2) Activities documentation

a. Publications:

Extension publications in both electronic and printed forms are essential to my response to the requests for information from agricultural clientele. Upon arrival at the University of Missouri I developed the first ever wheat production manual at the University of Missouri. Since then I have developed or co-developed 21 new publications, with faculty from the Departments of Agronomy, Botany and Plant Pathology, Agricultural and Biological Engineering, and Agricultural Economics.

Single print: (Numbers as of 10/28/08)

Pedersen, P., Kumudini, S., Board, J., and **Conley, S. P.** 2008. Soybean Growth and Development. *In:* Dorrance, A. E., Draper, M. A., and Hershman, D. E. Using Foliar Fungicides to Manage Soybean Rust. p. 41-47. Land-Grant Universities Cooperating NCERA 208 OMAF. (Printed: 20,500; distributed:11,067). (c) 10, (d) 10, (a) 10, (w) 20

‡Hanna, S., **Conley, S. P.**, Shaner, G., and Santini, J. 2007. Managing Fungicide Applications in Soybean. Purdue Extension, SPS-103-W. 3 p. (6,087 downloads). (c) 85, (d) 90, (a) 90, (w) 90

Miller, W., Dobbins, C., Nielsen, R., Vyn, T., Johnson, W., and **Conley, S. P.** 2007. 2008 Purdue Crop Cost and Return Guide. ID-166-W. 2 p. (distribution data not available). (c) 5, (d) 0, (a) 0, (w) 10

Murrell, S. T., **Conley, S. P.**, and Murrell, L. 2007. Be Your Own Soybean Doctor. International Plant Nutrition Institute. Ref.# 07046; Item # 08-0006. 4 p. (distribution data not available). (c) 25, (d) 30, (a) 30, (w) 60

‡Robinson, A. and **Conley, S. P.** 2007. Thin Soybean Stands: Should I Replant, Fill In, or Leave Them Alone? SPS-104-W. 6 p. (741 downloads). (c) 100, (d) 100, (a) 100, (w) 100

‡Robinson, A. and **Conley, S. P.** 2007. Plant Populations and Seeding Rates in Soybean. AY-217-W. 3 p. (4,788 downloads). (c) 100, (d) 100, (a) 100, (w) 100

Alexander, C., **Conley, S. P.**, Dobbins, C., Hurt, C., and Patrick, G. 2006. Forward Pricing Practices of Indiana Soybean Producer. Purdue Extension, SPS-101-W. 3 p. (1,832 downloads). (c) 85, (d) 90, (a) 10, (w) 30

Alexander, C., **Conley, S. P.**, Dobbins, C., Hurt, C., and Patrick, G. 2006. Where Do Indiana Soybean Producers Sell? Purdue Extension, SPS-102-W. 4 p. (2,594 downloads). (c) 85, (d) 90, (a) 10, (w) 30

Conley, S. P. 2006. Soybean Management. *In:* Corn and Soybean Field Guide. 2007 Edition. Purdue Extension, ID-179. p. 103-133. (51,245 copies sold). (c) 5, (d) 10, (a) 10, (w) 90

Conley, S. P. and Tao, B. 2006. What is Biodiesel? Purdue Extension, ID-338. 2 p. (18,351 downloads). (c) 85, (d) 90, (a) 50, (w) 50

Conley, S. P. and Tao, B. 2006. Biodiesel Quality: Is All Biodiesel Created Equal? Purdue Extension, ID-339. 4 p. (30,890 downloads). (c) 85, (d) 90, (a) 50, (w) 50

Conley, S. P. 2005. Soybean Management. *In: Corn and Soybean Field Guide. 2006 Edition.* Purdue Extension, ID-179. p. 103-133. (26,519 copies sold). (c) 85, (d) 90, (a) 90, (w) 90

Conley, S. P. and Christmas, E. P. 2005. Utilizing Inoculants in a Corn-Soybean Rotation. Purdue Extension, SPS-100-W. 4 p. (10,967 downloads). (c) 5, (d) 10, (a) 10, (w) 90

Shaner, G. E., **Conley, S. P.**, Dobbins, C. L., Hurt, C. A., Patrick, G. F., and Ruhl, G. E. 2005. Preparing for Asian Soybean Rust. Purdue Extension, ID-324. 15 p. (28,344 downloads; Initial printing of 10,000 hard copies sold out). (c) 50, (d) 30, (a) 30, (w) 40

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. Univ. Missouri Ext. Pubs., IPM 1022. 43 p. (2,341 hard copies distributed; 29,538 chapters downloaded). (c) 100, (d) 60, (a) 60, (w) 70

‡Denotes Extension publications authored by my graduate student.

Series publications, UW Extension publications:

Conley, S.P., P. Esker, Martinka, M.J., and Gaska., J. 2008. Wisconsin Winter Wheat Performance Tests. UWEX publication A3868. 8 p. (c) 5, (d) 90, (a) 90, (w) 90

Conley, S.P., Martinka, M.J., Gaska, J., Esker, P., Grau, C., and Koval, N. C. 2008. 2008 Wisconsin Soybean Variety Test Results. UWEX publication A3654. 28 p. (c) 5, (d) 90, (a) 90, (w) 90

Mochon, J., **Conley, S. P.**, and Kaeppler, H. F. 2008. Wisconsin Oats and Barley Performance Test. UWEX publication A3874. 6 p. (c) 5, (d) 10, (a) 0, (w) 40

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. UWEX publication A3397. 8 p. (c) 50, (d) 50, (a) 60, (w) 70

Conley, S.P., Martinka, M.J., Gaska, J., and Grau, C. 2007. 2007 Wisconsin Soybean Variety Test Results. UWEX publication A3654. 34 p. (c) 5, (d) 90, (a) 90, (w) 90

Newsletter Articles:

I use newsletter articles for widespread circulation of soybean and wheat management information to growers and clientele of all expertise levels. I was an author or co-author of 75 newsletter articles appearing in state, regional, and national publications. The impact of newsletters is significant. For example, the Purdue Pest and Crop Newsletter has 1250 subscribers and was accessed 262,865 times in 2007. Similarly the Wisconsin Crop Manager newsletter had > 60,000 visitors seeking agronomic assistance in 2008.

University of Wisconsin, Wisconsin Crop Manager (WCM) Newsletter Articles

Conley, S.P. 2009. Why Bin-Run Soybeans Don't Pay. WCM: 16-2.

Esker, P., J. Gaska, **S.P. Conley**, and C. Grau. 2008. Diagnosing Late Season Soybean Diseases. WCM: 15-26.

Conley, S.P. and J. Gaska. 2008. Planting Bin Run Wheat Seed is Not a Good Idea in 2008. WCM: 15-24.

Conley, S.P., P. Esker, M. Martinka, and J. Gaska. 2008. 2008 Winter Wheat Variety Results. WCM: 15-22.

Esker, P. and **S.P. Conley**. 2008. Foliar Fungicides for Corn and Soybean – Don't Rush to Spray. WCM: 15-18.

Esker, P., J. Gaska, and **S.P. Conley**. 2008. Scab Incidence and Severity Relatively Low Across the State. WCM: 15-17.

Conley, S.P. and J. Lauer. 2008. 2008 Wisconsin "PEPS" Program Entry Forms Now Available. WCM: 15-17.

Esker, P. and **S.P. Conley**. 2008. Wheat Head Scab Beginning to Occur in Wisconsin. WCM: 15-16.

Conley, S.P., P. Esker, and G. Shannon. 2008. Assessing Flood Damage to Soybean. WCM: 15-14.

Esker, P.D. and **S.P. Conley**. Winter wheat update for Early June Wheat Diseases. WCM 15-14.

Conley, S.P., J. Gaska, and C. Boerboom. 2008. Double Crop Soybeans in WI: More Risk than Reward. WCM: 15-13.

Esker, P. and **S.P. Conley**. 2008. Flag Leaf Emergence and Foliar Fungicides in Winter Wheat. WCM: 15-12.

Conley, S.P. 2008 Variable Germination and Emergence in Soybean: Which Seeds are Still Viable. WCM: 15-11.

Conley, S.P. and J. Gaska. 2008. How Much Do I Lose by Delaying My Soybean Planting Date. WCM: 15-8.

Conley, S.P. and J. Gaska. 2008. Soybean Seed Quality and Seeding Rates for 2008. WCM: 15-8.

Conley, S.P. and P. Esker. 2008. The Soy Report: A New Web Resource for WI. WCM: 15-7.

Esker, P. and **S.P. Conley**. 2008. Understanding and Using the Fusarium Head Blight Prediction Center. WCM: 15-7.

Conley, S.P. and J. Gaska. 2008. FREE Soybean Cyst Nematode Testing. WCM: 15-5.

Esker, P., C. Grau, **S.P. Conley**, and J. Gaska. 2008. Foliar Fungicides for Winter Wheat in 2008. WCM: 15-5.

Esker, P., **S.P. Conley**, and M. Suneri. 2008. New Soybean/Legume Seed Treatment Labeled in Wisconsin. WCM: 15-5.

Esker, P., C. Grau, **S.P. Conley**, and J. Gaska. 2008. Identifying Wheat Diseases Controlled by Foliar Fungicides. WCM: 15-5.

Conley, S.P., J. Gaska., and C. Laboski. 2008. Early Season Wheat Stand and Yield Assessment. WCM: 15-4.

Esker, P. and **S.P. Conley**. 2008. Early and Reduced Rate Applications of Foliar Fungicides for Wheat. WCM: 15-4.

Conley, S.P. and J. Gaska. 2008. Read the Tag and Check the Germ in 2008. WCM: 15-2.

Esker, P., C. Grau, B. Hudelson, **S.P. Conley**, and M. Ballweg. 2007. Soybean Stem Canker in 2007. WCM: 14-31.

Conley, S. P., Cullen, E., and Esker, P. 2007. Check Combine Settings and Scout Fields Prior to Soybean Harvest. WCM: 14-29.

Conley, S. P., Gaska, J., Esker, P., Grau, C., and Hanson, M. 2007. Wheat following soybean, corn, and wheat? WCM: 14-29.

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: 14-27.

Conley, S. P. and Gaska, J. 2007. Winter Wheat Seeding Rate, Depth, and Planting Date. WCM: 14-25.

Conley, S. P., Gaska, J., and Grau, C. 2007. Winter Wheat Variety Selection and Seed Quality. WCM: 14-24.

Martinka, M., **Conley, S. P.**, and Gaska, J. 2007. 2007 Winter Wheat Variety Results. WCM: 14-24.

Conley, S. P. and Gaska, J. 2007. Drought Stress in Soybean. WCM: 14-23.

Purdue Pest and Crop Manager Newsletter Articles

Conley, S. P. Dehydrated Soybean Seeds: Are They Still Viable? Pest and Crop Newsletter. May 2007, No. 9

Shaner, G. and **Conley S. P.** Yellow Dwarf of Wheat. Pest and Crop Newsletter. May 2007, No. 8.

Conley, S. P. Wheat Stem and Head Injury in Southern Indiana. Pest and Crop Newsletter. April 2007, No. 5.

Conley, S. P. Know your Wheat Growth to Understand Spring Freeze Injury to Wheat. Pest and Crop Newsletter. April 2007, No. 3.

Conley, S. P. and Johnson, W. J. Planting Soybean Into Freeze Injured Wheat. Pest and Crop Newsletter. April 2007, No. 3.

Shaner, G., **Conley, S. P.**, and Johnson, W. J. Identifying Wheat Growth Stages. Pest and Crop Newsletter. April 2007, No. 3.

Shaner, G. and **Conley S. P.** Wheat Head Scab. Pest and Crop Newsletter. June 2006, No. 12.

Conley S. P. Is it Time to Plant an Earlier Maturity Group Soybean? Pest and Crop Newsletter. May 2006, No. 9.

Conley S. P. Thin Soybean Stands – Should I Replant, Fill in, or Leave it Alone? Pest and Crop Newsletter. May 2006, No. 9.

Conley, S. P., Shaner, G., and Anderson, J. Purdue Researcher Offers Wheat Virus Screen. Pest and Crop Newsletter. April 2006, No. 5.

Conley S. P. Impact of Hail on Jointing Wheat. Pest and Crop Newsletter. April 2006, No. 4.

Conley S. P. Profitability of Cutting Seeding Rates: Fact or Fiction. Pest and Crop Newsletter. April 2006, No. 4.

Shaner, G., **Conley S. P.**, and Johnson, B. Identifying Wheat Growth Stages. Pest and Crop Newsletter. March 2006, No. 2

Conley S. P. What's Wrong with my Soybean Leaves. Pest and Crop Newsletter. June 2005, No. 9.

Conley S. P. Anthesis: Critical Stage for Soft Red Winter Wheat. Pest and Crop Newsletter. May 2005, No. 8.

Conley S. P. Frosted Beans: Should I Replant? Pest and Crop Newsletter. May 2005, No. 8.

Conley S. P. Wheat Yield Response to Cold Stress. Pest and Crop Newsletter. May 2005, No. 7.

Conley S. P. Spring Wheat Injury and Shallow Planting. Pest and Crop Newsletter. April 2005, No. 3.

Conley S. P. Spraying for Soybean Rust: Fact vs. Fiction. Pest and Crop Newsletter. March 2005, No. 2.

Shaner, G., **Conley S. P.**, and Johnson, B. Identifying Wheat Growth Stage. Pest and Crop Newsletter. March 2005, No. 2.

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Conley, S.P. and L.E. Sweets. 2004. Evaluate winter wheat seed quality prior to planting. Integrated Pest and Crop Management Newsletter. 14:16.

Conley, S.P. 2004. Grain Sorghum Replant Decision. Integrated Pest and Crop Management Newsletter. 14:11.

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Conley, S.P. 2004. Hollow Stem and Jointing in Wheat. Integrated Pest and Crop Management Newsletter. 14:4.

Conley, S.P., L.E. Sweets, and W. Bailey. 2004. Begin Scouting Wheat Fields for Spring Aphid Infestations. Integrated Pest and Crop Management Newsletter. 14:3.

Conley, S.P. 2003. MU Grain Sorghum Performance Trial. Integrated Pest and Crop Management Newsletter. 13:25.

Bradley, K. and **S.P. Conley.** 2003. Weed Control in Winter Wheat. Integrated Pest and Crop Management Newsletter. 13:25.

Conley, S.P. 2003. Critical components in maximizing wheat yield. Integrated Pest and Crop Management Newsletter. 13:22.

Scharf, P. K. Bradley, **S.P. Conley**, and W. Wiebold. 2003. Risk of atrazine carryover damage to wheat and soybean. Integrated Pest and Crop Management Newsletter. 13:22.

Scharf, P. and **S.P. Conley.** 2003. Nitrogen management: wheat following low-yielding corn. Integrated Pest and Crop Management Newsletter. 13:22.

Sweets, L. and **S.P. Conley.** 2003. Evaluate winter wheat seed quality prior to planting. Integrated Pest and Crop Management Newsletter. 13:22.

Conley, S.P. 2003. Grain Sorghum Flowering Characteristics. Integrated Pest and Crop Management Newsletter. 13:20.

Conley, S.P. 2003. Wheat Following Corn Grown Under Drought Conditions. Integrated Pest and Crop Management Newsletter. 13:18.

Conley, S.P. 2003. Replant Concerns Related to Grain Sorghum Stand. Integrated Pest and Crop Management Newsletter. 13:12.

Conley, S.P. and W. Wiebold. 2003. Planting Date Affect on Grain Sorghum Yield. Integrated Pest and Crop Management Newsletter. 13:11.

Conley, S.P. 2003. Anthesis: Critical Stage for Soft Red Winter Wheat. Integrated Pest and Crop Management Newsletter. 13:8.

Conley, S.P. 2003. Assess Winter Wheat Stand Prior to Replanting. Integrated Pest and Crop Management Newsletter. 13:3.

Conley, S.P. and P. Scharf. 2003. Wheat Tiller Number and Spring Nitrogen Recommendations. Integrated Pest and Crop Management Newsletter. 13:2.

Conley, S.P. 2002. MU Grain Sorghum Performance Trial. Integrated Pest and Crop Management Newsletter. 12:25.

Conley, S.P. and L. Sweets. 2002. Evaluate Winter Wheat Seed Quality Prior to Planting. Integrated Pest and Crop Management Newsletter. 12:21.

Conley, S.P. 2002. Sprout damage in wheat. Integrated Pest and Crop Management Newsletter. 12:14.

Conley, S.P. and P. Scharf. 2002. Early Season Assessment of Winter Wheat Crop Health. Integrated Pest and Crop Management Newsletter. 12:3.

Wisconsin Soy Sentinel Extension and Research Update Column

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

Conley, S.P., Martinka, M., Gaska, J. and Esker, P. 2008. Variety Selection in a Soybean Cyst Nematode Environment. 5:4. p. 18.

Esker, P., **Conley, S. P.**, Gaska, J., and Hughes, T. 2008. Charcoal Rot – A Disease of Drought Stressed Environments. 5:4. p. 16.

Conley S.P. and Gaska, J. 2008. Free Soybean Grain Quality Testing Being Offered. 5:2. p. 3.

Conley S.P. and Gaska, J. 2008. 2008 – The Year of Water Extremes. 5:2. p. 7.

Esker, P., Gaska, J., **Conley, S. P.**, and C. Grau. 2008. Diagnosing Late Season Soybean Diseases. 5:2. p. 8.

Conley S.P. and Gaska, J. 2008. Markets for Specialty Soybeans in WI. 5:1. p. 8.

Conley S.P. and Gaska, J. 2008. Read the Bag and Check the Germ in 2008. 5:1. p. 9.

Conley S.P. 2007. Why an Average Bean Costs You Money. 4:3. p. 8.

b. Computer Software Development - none

c. Extension media development

1. **Conley, S.P.**, Grau, C., MacGuidwin, A., Boerboom, C., and Schmidt, R. 2008. Nematode Management DVD. A3848. UWEX publications. (c) 35, (d) 40, (a) 20, (w) 90
2. *Development of The Soy Report*: <http://thesoyreport.blogspot.com/>: The goal of this blog is to provide Wisconsin growers and agricultural clientele with timely crop management recommendations, diagnostics, and crop updates. The SoyReport was launched in collaboration with Dr. Esker in April 2008 and has received 3,978 visits and 5,305 page views to date. (34 reports written). (c) 100, (d) 50, (a) 50, (w) 50
3. *Pest Management Network Education and Training Center Webcast: (2008)* <http://www.plantmanagementnetwork.org/edcenter/>
I developed a series of on-line presentations on soybean production to provide up-to-date crop management information and recommendations for U.S. soybean growers and agricultural professionals. In this series of modules, I discuss soybean variety selection, row spacing trends, changes in seeding rate and planting dates, and lastly re-plant decisions. These presentations are designed to provide recommendations that cover a wide range of environmental and geographic conditions. (c) 0, (d) 100, (a) 100, (w) 100

The individual modules are entitled:

Row Spacing Affect on Soybean Yield
Soybean Variety Selection
Soybean Planting Date and Replant Decisions
Soybean Seeding Rate

4. *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. I post timely research results from my program as well as summarized research results from across the Midwest on this Web page. I also post copies of all my soybean-related Extension presentations, Extension publications, newsletters, and soybean management updates. This web page was developed at Purdue University and was featured on AgDay (National Agricultural television program) on February 15th, 2006. I brought the webpage to the University of Wisconsin and since January 1, 2008 www.coolbean.info has received 208,895 hits, 100,283 page views, and 24,030 total sessions. (c) 100, (d) 100, (a) 100, (w) 100

Video Crop Diagnostics Series posted on www.coolbean.info. (c) 100, (d) 100, (a) 100, (w) 100

Conley, S. P. 2006. Cotyledon Damage to Soybean.
<http://www.agry.purdue.edu/ext/coolbean/video/6-06-video1.wmv>

Conley, S. P. 2006. Soybean Growth Stage V1.
<http://www.agry.purdue.edu/ext/coolbean/video/6-06-video2.wmv>

Conley, S. P. 2006. Soybean Growth Stage R5 and R6.
<http://www.agry.purdue.edu/ext/coolbean/video/R5growthstage-lg.wmv>

Conley, S. P. 2006. Estimating Soybean Yield.
<http://www.agry.purdue.edu/ext/coolbean/video/conley2-lg.wmv>

Radio, Magazine, and Newspaper Interviews (MU, Purdue, and UW)

I am frequently invited to provide commentaries on current soybean management topics via radio and television clips, and interviews by reporters from the popular press and newspapers. These educational releases are disseminated throughout Wisconsin and nationally. It is difficult to enumerate the actual number of venues this information has been distributed to, but it is estimated to be well in excess of 300. Most recently, I was interviewed to discuss two of my research initiatives for two separate articles in the Corn and Soybean Digest. The circulation of this magazine is 147,000 U.S. corn and soybean growers.

Press Releases

I have worked with Agricultural Communications Service to produce > 40 press releases that target growers and the agricultural industry.

d. Continuing education programs - none

e. Extension presentations

I have presented 280 Extension lectures, workshops, and seminars to ~19,421 clients during my academic career.

National and State Level Events

Event	Title of presentation	Participants	Number of Lectures
2009			
Corn/Soy Expo	Management Considerations for Soybean in 2009?	257	1
WI Crop Management Conference	Soybean Seed Costs: Time for the bin?	225	1
2008			

Mishianna, IN	New Findings in Soybean and Wheat Research	170	2
Corn/Soy Expo	Soybean Management Issue in 2008 Seed Quality and SCN	56	1
N. Central Soybean Research Meeting	Agronomy meets Plant Pathology	37	1
WI Crop Management Conference	Does glyphosate interact with Mn in soybean?	176	1
WI Crop Management Conference	Soybean Yield Loss By Growth Stage	71	1
2007			
WI CCA Training	Soybean and Wheat Growth and Development	42	1
Indiana CCA Meeting	Risk vs. Reward: Can We Resolve Row Spacing and Seeding Rate Questions in Soybean?	177	2
Missouri CCA Meeting	Growing Wheat Profitably	137	1
Missouri CCA Meeting	Wheat/Soybean Double Crop	121	1
Indiana Crop Management Conference	Soybean Management in the Biofuel and Food Era	750	5
Pennsylvania Agronomic Education Conference	Soybean Management: An Indiana Perspective	68	1
Pennsylvania Agronomic Education Conference	Why Soybean Growers Do What They Do	223	1
Diagnostic Training Clinics - ACRE	Soybean Management issues	325	7
Indiana Crop Improvement Association	2006 Year in Review – Current Issues	66	1
2006			
Indiana CCA Conference	Soybean Growth and Development	320	1
Crop Production Clinic	Soybean Management Update for 2007 and the Soybean Rust	150	1

	Fungicide Label		
Iowa CCA Conference	Why Soybean Growers Do What They Do: An Indiana Perspective	850	1
2005			
Indiana CCA	Improve Wheat Yields Through More Intensive Wheat Management	140	1
Mid Indiana CCA Conference	Soybean Management Issues	197	1
Crop Management Workshops	Pest Management Strategies in Wheat	901	5
Michianna Crops Conference	Top Producer Panel Discussing Production Practices	153	1
2004			
Kentuckianna	Past, Present and Future Outlook on Soybean Production	180	1
MFA Annual Crops Meeting	Current Issues in Small Grains and Alternative Programs at MU	125	1
2003			
MU Crop Management conference	Winter Wheat Pest Management	235	2
MFA Annual Crops Meeting	Missouri small grains production program	225	1
2002			
Missouri CCA Meeting	Wheat growth and development	25	1
MU Crop Management conference	Wheat growth, development, and agronomic principles	133	1
MU Crop Management conference	Managing the winter wheat pest complex	133	1
Total		6186	45

County and Regional Events

Event	Title of presentation	Participants	Number of Lectures
2009			
Agronomy and Crop Insurance Update	Integrating Today's Input Costs into your Management System	52	2
Crop Decision Webinar	Crop Decisions 2009, Soybean Management	29 audience feeds	
Agronomy Update	Soybean and Small Grains Update	324	8

Meetings			
Syngenta Update Meeting	Strategies to Maximize Soybean Yield	53	1
JAM Corn and Soybean Growers	Maximizing Soybean Yields in the North		2
Winter wheat workshops	1. Winter wheat growth staging 2. Nitrogen and weed management		3
2008			
Agronomy Update Meetings	Soybean and Wheat Management Issues in 2008	337	7
Syngenta Update Meeting	2008 Technical Disease Insect Update	84	1
Indiana Seed Trade DTC	Seed quality issues in soybean	61	2
UW Madison ANRE Conference	Making Your One on One Visit Count	13	1
Agronomy Field Day	Do Emergence Patterns matter in Soybean	81	2
Northern Safari Crops Tour	Growing Oil-Seed Crop for Energy	31	5
Columbia County Corn Growers Meeting	Soybean Management for 2008	42	1
Channel Seeds Update meeting	Soybean Management Issues	62	1
Sheboygan County Crops Forum	2008 Farm Forum: Maximizing Soybean Seed Emergence	77	1
NE WI Crops Meetings	Rotation Relationships Between Soybean and Wheat	89	2
Ag Ventures Crops meeting and Pioneer	Soybean and Wheat Management for 2008	126	3
IP Video Feed	Spring Wheat in 2008	75	11
Sheboygan County	Winter Wheat management	49	1
2008 Hancock ARS Agronomy Crops Field Day	Soybean Cyst Nematode	26	1
UW DTC	Integrating Crop growth stage and management decisions	78	2
Calumet County Winter wheat	Winter Wheat Walk-through	19	1

meeting			
Center for Sustainability and the Global Environment	Integrating Biodiesel Into WI Production Systems: Challenges from the Ground Up	11	1
Garst Update Meeting	Growing Better Beans	59	1
Rio Creek Field Day	Wheat Management Decisions	36	1
Crop Production Services DTC	Soybean Production Issues	136	2
Chippewa Valley Agronomy Field Day	Soybean Disease Issues	36	1
Fond du Lac Field Day	Soybean Decisions for 2009	63	2
Pioneer Seed Growers Meeting	Agronomic Update Soybeans & Wheat	60	1
SCN Field Day	Management of Soybean Cyst Nematode (SCN)	19	1
Area Soybean Conferences	Maximizing Your Soybean Yield	150	3
WI CCA Training	Soybean and Wheat Production	22	1
WI Crop Improvement Association	Agronomic principals that influence fungicide decisions in winter wheat	31	1
Diagnostic Troubleshooting Workshop	Replant Decisions in Soybean	60	6
2007			
DTC Field Scout Intern Day	Soybean Growth and Development, Stand Establishment, Uniformity, Populations, and the Replant Decision-Making Process	26	1
Posey County Wheat Field Day	Wheat Management Issues	103	1
SW Indiana Crop Clinics	Soybean Management in 2007	168	2
Soybean Rust and Crop Management Workshops	Soybean Rust and Crop Management	274	3
Kosciusko County Crops Meeting	Who Cares About Corn on Corn What About Bean on Bean	71	1

Area Corn & Soybean Day	Soybean Aphids, Deer, and Rust Oh My	81	1
North Eastern Indiana PARP IP Video Sessions	Soybean Crop and Pest Management Practices	217	1
Harvestland Yield Pro Crops Forum	Soybean Management in 2007	280	3
Indiana Farm Bureau Young Farmer Meeting	Soybean Management in 2007	111	1
Wisconsin Crop Improvement Annual meeting	Wheat Management Strategies to Maximize Yield	51	1
Agronomy Field Day	Soybean Variety Selection in the Biofuel Era	123	3
2006			
Grupo Rio Cuarto Norte (Argentina agronomist group)	Midwest Soybean Production Systems	9	1
Optimizing Soybean Production	Optimizing Soybean Production	123	1
Syngenta Learning Center	Quest for 100 Bushel Soybeans	123	1
Davis and PPAC Field Days	Reading the Soybean Rust Fungicide Label: Rust, Aphids and Other Hot Soybean Topics	169	2
PPAC Field Day	Soybean Issues and Concerns	321	1
Late Season Diagnostic Workshop: Yield Factors	Yield Impact of Early and Mid Season Stress Factors on Soybean	47	1
Pioneer Davis DTC	“Soybeans – Current Issues, Diseases and Fungicides”	53	1
Indiana Soybean Board Meeting	Results of 2005 Soybean Production Survey	46	1
The Andersons Walton Farm Center Field Day	Seed Treatments and Growth and Development in Soybeans	81	1
Agrilience Field Day	Soybean Seed Treatments, Management, and Growth	71	1
ACRE DTC	Wheat Production (Growth Staging Wheat, General Production Practices, Latest on Disease Resistance)	27	1

SEPAC DTC	Basics of Soybean Scouting, Soybean Growth and Development, Seed Treatments, and Soybean Rust Update	61	2
Growers Co-op Summer Crops and Crop Protection Meeting	Growing Better Yielding Soybeans	37	1
4-H Plant Science Workshop	Indiana Soybean Systems	13	1
Beck's Hybrids Day at the Purdue University Diagnostic Training and Research Center	Maximize Soybean Production	70	1
Randolph County – Davis Field Day	Soybean Management	27	1
Pioneer Day at the Pinney Purdue University Agricultural Center	Soybean Production “Issues”	67	1
ISTA Day at the Purdue University Diagnostic Training and Research Center	Wheat Production	40	1
National Cheminova Training Meeting	Soybean Production in the Midwest	24	1
Yield Pro Meeting	High Yield Soybean	38	1
Agrilience Dealer Meeting	Managing for High Yield Soybean Production	167	1
Crop Production Clinic	Soybean Production Systems	62	1
PARP meeting in Benton County	Soybean Research Update for 2006	87	1
IAPCC Annual Meeting	Vistive Soybean: What and Why!	41	1
Clinton County CES – Soybean Meeting	2006 Soybean Crop and Pest Outlook	17	1
Biodiesel Plant	Canola Feasibility in SW Indiana	9	1

Initiative			
National Crop Insurance Service (NCIS) Annual Meeting	Estimating Hail Damage to Soybean	29	1
Cover Crop & Soybean Mgmt Meeting	Pest Management in No-till Soybean Production Systems	108	1
SW IN Crops Clinics	Soybean Crop and Disease Management Update	156	2
JD Planter Tune-up Meetings	Soybean Crop Establishment and Management	60	2
SE IN Crops Discussion	Soybean Management in 2006	42	1
Gibson Southern Meeting PARP	Soybean Production in Southern Indiana	59	1
Area Corn & Soybean Day	Impact of Row Spacing & Seeding Rates on Soybean Yields, With or Without Rust	137	1
Pioneer Soybean Update	Improving Your Soybean Production System	41	1
Consolidated Grain and Barge Grower Meeting	Integrating Grain Sorghum into Your Corn and Soybean System	17	1
YieldPro Crops Forum	Management Strategies to Improve Your Soybean Production System	227	4
Ron Martin Seed and Supply Grower Meeting	Maximizing Soybean Yield	52	1
PARP IP Video	Soybean Management	112	1
BASF Dealer Meeting	Yield Management in Soybean	87	1
2005			
Farm Fest	Soybean Rust Wrap-Up	14	1
NEPAC Field Day	2005 Soybean Rust and Management Update	113	1
PPAC Field Day	Integrated Soybean Production Systems	350	1
Growers Field Day	Principles of Soybean Management	54	1
NIDERA Seed of Argentina campus visit	Soybean Forum	35	1
SEPAC Field Day	Soybean Management and Rust	180	1

PPAC PARP	Soybean Management Issues in 2005	53	1
Top Crop Farmer Workshop	Management of Yield-Limiting Factors in Soybeans	106	1
N. Indiana Diagnostic Training Clinics	Early Season Soybean Management	150	3
SWPAC Diagnostic Clinic	Soybean Diagnostics	93	1
DTC Soybean Rust Management Workshop	Soybean Crop Response to Soybean Rust	427	7
Pesticide Applicator Recertification Programs	Agronomic Strategies to Combat Soybean Rust	841	9
Grower Night Meetings	Integrated Crop and Pest Management Strategies in Soybean	85	2
Indiana Crop Improvement Annual Conference	Management Strategies for Today's Soybeans	58	1
DTC Soybean Rust Management Workshop	Soybean Crop Response to Soybean Rust	78	1
Soybean Rust First Detector and Management Training	Agronomic Implications of Soybean Rust	720	4
IP Video Soybean Rust	Agronomic Implications of Soybean Rust	215	3
Sullivan County Young Farmers Meeting-Rust Update	Optimal Strategies to Manage Soybean in Southwest Indiana	18	1
Gibson County Coop Soybean Meeting	Rust and Soybean Seedling Diseases	70	1
Union County Coop Meeting	Soy Rust Issues	35	1
Fort Wayne Farm Show Soybean Pest Update	Soybean Crop and Pest Update	47	1
Gibson County	Soybean Pest Management	98	1

Farmer Night Meeting			
Area Corn & Soybean Day	Soybean Rust is Here, Now What Do We Do?	120	1
Cooperative annual crops meetings	Soybean Management	100	2
Purdue-Indiana Seed Industry Forum	Crop Production Research and Extension Update	27	1
UAP	Soybean Management	76	1
Osborn Seed Field Day	Soybean Management Under Drought Conditions	225	1
DPAC Soybean Management Training	Sprayer Set-Up for Foliar Fungicides	27	1
2004			
Hail adjusters school	Wheat production issues	51	1
Novelty winter wheat field day	Wheat management issues for 2004	17	1
SWMO Winter Wheat Clinic	Begin Scouting Wheat Fields for Spring Aphid Infestations	31	1
MU Crop Improvement Association	Intensive Wheat Management in Missouri	27	1
Saline county	Winter wheat crop outlook 2004	123	1
Henderson county KY growers meeting	Grain sorghum production systems	37	1
Decatur County PARP Meeting	Agronomic Implications of Soybean Rust	115	1
2003			
MU County Extension Meetings	Wheat growth and development, agronomic principles, and managing the winter wheat pest complex	84	4
MU County Extension Meetings	Winter Wheat Management	227	8
SWMO Crops Meeting	Using wheat as a forage	17	1
MU County Extension Meetings	Pest management in Winter Wheat	100	4

Hail adjusters school	Herbicide Injury in Winter Wheat	70	1
Huntley Whaley and Novelty Field Days	Wheat Yield and Yield Constraints	570	8
MU DTC	Grain Sorghum Crop Management	47	3
Audrain County Extension meeting	Grain sorghum production issues	17	1
2002			
MO County Extension Meetings	Wheat growth, development, and management	189	7
SWMO Wheat Meeting	Managing winter wheat is a double-crop soybean system	30	1
MU Winter wheat Diagnostic Clinic	Winter wheat crop management	30	1
Hail adjusters school	Wheat growth and development and yield	60	1
Weed science field day	Percent stand loss and weed interference affect winter wheat yield	75	1
Huntley Whaley Field Day	Integrating sunflower into your production system	350	6
MU Diagnostic Training Clinic (DTC)	Integrated sunflower crop and pest management	100	1
MO County Extension Meetings	Alternative crop and pest management	58	2
Total		13,235	235

Clientele evaluation of extension teaching:

I strive to continuously improve my educational programming and enhance the impact of my program. To accomplish this goal, I seek clientele input whenever feasible. Below are two recent examples of the typical feedback that I receive.

2008 University of Wisconsin Diagnostic Training Center: Evaluation of Dr. Conley: (N = 78)

- Good
- Excellent
- Great presenter
- Well done, fun

- Enjoyed Shawn's knowledge for real life questions
- Best speaker – excellent knowledge base
- Good
- Great
- Loved the attitude, enthusiastic. This was very informative – eye opener!
- Learned a lot about growth staging
- Knowledgeable energetic, good PR man, good use of test questions before field discussion
- Great review, keep doing, small grains also
- If folks didn't learn at least one thing here, they were totally day dreaming
- Good review and update
- Well presented and very interesting
- Excellent review of basics, plant physiology, good appreciation of management keep things current and relevant to Wisconsin
- Excellent Shawn does an awesome job teaching- visually and interactive
- Very interesting speaker
- Great favorite section
- Very interesting, good review of plant stages – good info on whether or not to replant
- Good info, would like more on wheat
- Excellent
- Very infective, learned much
- Excellent, learned a lot

2007 Indiana CCA meeting, Evaluation of Dr. Conley: (N = 39)

I received a 4.5 and a 4.7 (Rating scale (1-5) - 1 = poor; 5 = excellent) respectively for information presented and ability of lecturer. The comments related to my presentation are as follows:

- Excellent!
- Good info. Some confusing charts.
- Great Speaker-room crowded, should be a mainliner in the lunch room.
- Knows his stuff, not just reading the slides.
- Excellent-as always
- Good presenter "Best of Show"
- Average presenter. In a hurry, needs to focus, quick to jump to generalizations.
- Excellent!!
- Good presentation
- Great enthusiasm!
- Very good info and presenter
- Tried to cover too much
- Very good
- Shawn is a Great speaker. It is good to have him visit IN.

Clientele evaluation of Extension Impact:

I distributed a program impact survey on 10/28/2008 to my clientele email distribution list. This list consists of several hundred growers, county agents, consultants, and agricultural professionals. I received 66 completed surveys. The impacted acreage of the respondents was 656,333 acres. Listed below are the results of this survey.

<p>The email solicitation request for completing the survey.</p> <p>Good morning everyone,</p> <p>Attached please find below a link to a Zoomerang survey that will be used to document the impact of my Extension and research program (Dr. Conley). The survey consists of 8 questions and will take less than 10 minutes to complete. The survey has been designed to assure 100% anonymity and will be active through November 5th. Portions of this survey will be used in my promotion and tenure document.</p> <p>http://www.zoomerang.com/Survey/?p=WEB228ETNBSA7A</p> <p>I would like to thank you in advance for your assistance with this assessment.</p>
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Question 1. Please indicate which category best describes you.		
	Number of Respondents	Percent of Total
County Extension Agent	36	55%
Agricultural professional	14	20%
Consultant	11	17%
Grower	5	8%
Total	66	100%

Question 2. How many acres do you manage or consult? N = 63 responses		
Acres reported	656,333	N = 33
N/A		N = 30

Question 3. Objectively quantify Dr. Conley's Soybean and Small Grains Extension and research program? N = 57 responses					
	Strongly agree	Somewhat agree	Agree	Somewhat disagree	Strongly disagree
The educational material that Dr. Conley provides is timely and useful	52 80%	5 8%	7 11%	0 0%	1 2%
The educational material that Dr. Conley provides directly	41 62%	12 18%	10 15%	1 2%	1 2%

benefits my operation					
The research generated from Dr. Conley's program directly benefits my operation	35 54%	19 29%	9 14%	1 2%	1 2%

Question 4. In what capacity have you experienced Dr. Conley's Extension Soybean and Small Grains management program? N = 57 responses
as a county agent I have appreciated Shawn's timeliness at getting information out and his responses to questions that producers have posed to me have been thorough and thoughtful, satisfying both the producer and the county agents needs for response.
From attending meetings to having him attend our plot day to speak, he has been a true professional and just a great all around person to work with and gather information.
Used Shawn as speaker
Used material in educational programs
Used web site
We are a test site for his plots.
Had Dr C up to speak to growers, consult with local agronomists and involved in his projects.
As a newer county agent with a background in dairy, rather than crops, I have found Dr. Conley to be a valuable resource. He posts timely information on his website that continuously helps me to address timely issues. In addition, he is always available to answer questions that I don't know the answer to.
Dr. Conley's research and research results have been used extensively when consulting small grain and soybean producers.
seminars, crop manager, blog site
as a specialist working with farmers
I have listened to presentations made at UW Ext meetings and found his "Cool Bean" newsletter to be very helpful.
I have called Him several times for trouble shooting soybean production problems
Hear his presentation and read his written works.
Through articles he has written to provide to our customers extensive knowledge
Phone calls, email, CCA training, coolbean.com, inoculant trials, and research publications.
emails and CCA seminars
Heard him speak at field day.
medium, started late spring and have found most of Dr. Conley's advice to be very good
I get the emails. I visit his website frequently. I find the info useful and usually print it off and share it with my growers. it seems like whenever I have a question it is usually already being addressed on cool beans website
Shawn has been a presenter at Extension programs in the county. The blog site that Shawn and Paul do is excellent.
I have used Dr. Conley's programming in several ways. Using his blog, emails, and personal communications have all been useful ways to access the information that Dr. Conley has access to.
Utilize his information to share with growers and participate in field days.

Extension programs such as field days.
As an extension agent I valued his advice for our farmers. He was very timely
As professional use we use his lead as another dimension in our consulting. Third
source of information.
Your ongoing blog and several professional presentations that I've attended of yours
Guess speaker at plot day for producers and Extension education programs
programming at Arlington, and the blog, which I find most useful
Dr. Conley has been a key resource for me when answering production questions and developing my own growth and development training.
We currently have trials located on our farm. A first time relationship with UW Extension for us with regards to Soy beans. Very good. Shawn is an asset to the Extension program and provides to direction we need to take. His enthusiasm is infectious.
Very interested in the fungicide treatment data
2 local seminars and online
Crop consultant
MEETINGS & INTERNET
Web site
Extension sponsored meetings and field days and guest speaker at a Crop protection company update.
field days, meetings, internet
I use his web page info when I am scouting, but it would be nice if possible for him the send the info Monday morning before I go check my first field.
I have attended several meetings. I have hosted 2 meetings myself and I have had direct interaction with Dr. Conley on Specific situations that my growers encountered.
Educational presentations from Dr. Conley; news releases, e-mail's, personal contact
Graduate student
Soybean producer
County Extension Agent
Winter and Spring Wheat info on disease control.
I have used resources developed by and consulted with Dr. Conley to help answer producer questions about soybeans and small grains. He has also been a part of local programming in this county.
Field days, news articles
At field meetings and programs
Dr. Conley has assisted as an Extension Educator in Indiana. In particular, I worked with him a lot on my annual county soybean plots. He was so helpful in running the statistical analysis. I attended many programs with him as the presenter. He also was my main contact when I always did a soybean update in January at our Adams County January PARP workshop over IP video.
Web blogs, Extension meetings
Direct interaction with Dr. Conley and frequent reading of his web postings and newsletter comments.
workshops, web site, pubs
Shawn has been a direct contact resource for questions regarding soybean production, but more importantly has been actively involved in providing updated winter wheat growing

information
Via email announcements, PU Extension publications and field day talks.
knowing what to look for
I use the information with my clients
Dr. Conley serves as an expert resource for information that I transfer to County clientele.
Attended field days. Entered varieties in state trials.
Read most of the material posted on the internet soon after posted. The soybean blogs are great. I share them with about 15 people on my e-mail list serve
Heads up information on insect/disease problems on the horizon before they are serious in my area.
presentations at twilights and grain seminars as well as WCM and the Coolbeans website
Attended meetings, personal conversation

Question 5. What is something (be as specific as you desire) you learned or benefited from Dr. Conley's Soybean and Small Grains Extension program that you consider valuable? N = 54 responses
great job keeping up with the quickly changing soybean situation this year
I think in his first year he really shined on explaining things person to person about everything from yield loss % all the way to specific seeding rates on wheat and beans and gave everyone the first heads up about the poor germ on soybean seed.
We've started to rebuild the knowledge base of applied research for soybean and wheat production after many years of stagnation.
Performance of short season Public Soybean Varieties. Winter wheat performance data along with date of planting data.
Soybean... population work
Wheat... seeding rates
I started getting a lot of questions about spring wheat during the winter last year because it was selling for such a high price. I emailed Dr. Conley to learn about the benefits and drawbacks, and he responded promptly as well as posted an article or two on his website for everyone.
Dr. Conley was informative on Wisconsin seed laws.
wheat production and management. SCN
info on soybean diseases, variety recommendations and biodiesel production
Details about soybean diseases and wheat planting tips
Label rates and recommendations on herbicides
Keys to high yield in wheat crop.
his useful articles with useable research
Found his training at two CCA events this summer to be very informative.
scouting tips during the growing season, and soybean production management
I am from the grain corn area and we do not grow wheat there so the information that I have been able to get about wheat has been very useful especially with the amount of it that is grown in my area
disease outlook
The most useful information he has provided dealt with the decision to replant or not depending on the stand density and growth stage.

Seeding date impact on maturity.
No till and weed management in beans
What to look for with rust. Planting dates
Planting dates on wheat
Certified seed for planting
Disease pressure by product
Information on charcoal rot
Where to begin, probably early in the season with helpful reminders about the small soybean seed size because of crop stress to the rest of the updates over the growing season.
When to plant wheat, just about everything he has come out with on wheat.
evaluating winter damage in winter wheat, up to date scouting information for soybean aphid, pictures on website to help me identify soybean diseases
Dr. Conley assisted me with finding information regarding the impact of early destruction on yield and seed quality. Dr. Conley has developed some outstanding presentations and videos for understanding growth and development of soybeans.
Met with Shawn prior to growing season to construct a program to enhance yields of non GMO beans. We boosted our farm average (all irrigated) by 5 bushel. That meeting paid off big time Thanks. Also learned about Moly and Mn issues. But most important was his extension of an invite to discuss issues relating to Soy Beans and keeping an open door policy.
Winter wheat yield trial data
How to asses wheat populations and determine when and how much N to apply. He gives definite thresholds to go by.
Higher winter wheat seeding rates
have potential for more tillering and higher yields
DISEASE IDENTIFICATION & DISEASE PROBLEMS AS THEY ARISE IN WI
Updates on progression of diseases. Flood tolerance of beans and replanting recommendations.
what part aphids play in virus transmission in wheat. Proper planting depth importance in wheat. Seed treatment information for wheat and soybean.
not planting bin run wheat , appreciated the links to soy diseases on timely basis because I had a lot of them this year.
I usually picked up one thing in each of his web postings and used it for the weed of scouting.
Winter wheat: I learned that planting depth (to shallow) is a big problem in WI. I spent a lot of time with growers this fall and found several were planting to shallow or were planning to plant to shallow.
He provided over 50 of my farmers with specific production information during the soybean rust hot topic a few years ago and included Plant Pathologist, Dr. Greg Shaner.
Learned that most soybean seed insecticide treatments do not provide control during a time (first 4-6 weeks of growth) when plants are actually at risk from insects.
Importance of controlling fungus on yields and test weight
I have learned more about soybean and small grain diseases.
The effectiveness of fungicides on wheat
I learned a lot about cyst nematodes and soybean aphids from Dr. Conley. His research is

always current with control recommendations and management strategies.
Basic Soybean Anatomy. Sometimes, its easy to overlook the basics, like nitrogen fixation through nodules. Dr Conley did a nice piece on soybean nodules. I used that piece to share with producers.
info on rust, planting dates & populations
Updated material on planting rates and dates for winter wheat
Recent research in use of seed inoculants.
pest and disease
He offers information as to what is happening with the different crops
Better understanding of the disease cycle in wheat, Soybean cyst nematode identification and management, choosing soybean seeding rates under high seed costs, adjustments needed for best performance of late planted soybeans, evaluating winter injury in wheat and evaluating stand density in wheat
He is a great resource for wheat info.
I specifically have benefited from the speed which Dr. Conley posts updates, yield results, pest information. The agriculture community expects the Ag Agent to be on top of these things and it saves us a lot of time when the specialist can provide the summary before we even know we need it.
Early detection techniques.
When to be applying N in the spring and why; Planting depth and issues of winter survival.
Wheat Management

Question 6. What is something (be as specific as you desire) you learned or benefited from Dr. Conley's Soybean and Small Grains Extension program that you consider valuable? N = 48 responses
NA
He has saved me as an Agronomist, the time wasted looking for answers and other things that he has posted on his website. Also, he gives you the time of day and an answer to any questions I may have.
Seeding rate data has established optimum rates for winter wheat.
Increased acres of winter wheat in the county, provides confidence to me knowing there is a "go to" person for information and guidance.
N/A
Dr. Conley's information has been timely which has likely had a positive impact on the clients I serve.
reduced seeding rate on soybeans
His program has given me additional information to use when helping my customers make decisions.
All the above, In soybean production quality is what we base our sales off of
Yes, save resources and time
Has not, at this time, had any effect.
I work for a seed company. Dr. Conley provides a little different perspective.
his program came in very helpful with helping me to learn a lot of the basics of wheat and different things to look for. also his work with soybeans and the publication about signs to look for, for diseases has been very helpful as I adjust to my new territory and job

I would say yes, if anything it makes growers more aware of all their options
Dr Conley provides current information that is summarized very well and that is easy to understand by growers. His blog addresses current topics and is very timely which makes diagnosis of problems within soybeans and small grains very easy to do.
Greater awareness in trends in soybean production profitability research.
Yes, helped with recommendations to clients
We now have a viable hole filled with regard to information and getting trials run in a proper manner so there is significant use of inputs at the right time and right amount.
he as also brought this information in an understanding manner.
His programs have improved my crop scouting techniques and the resources that I have available to make informed, research based decisions.
We got producers to not rush planting wheat
Helped me to determine when and where I needed to spray for aphids this past year. Cannot put a dollar figure on it.
Dr. Conley's extension program has helped me make better more timely decisions that will greatly impact yield and seed quality.
As stated before we are experiencing increased yields. I hope with further collaboration we can jump up another 5-10 bushels. He plays well with others. The collaboration with Dr. Ann Macguidwin was outstanding
n/a
I have changed my planting depth and population for wheat. I have also altered my N application timing and split the applications.
Dr. Conley's Extension program
has improved grower net returns/acre for both soybeans and winter wheat.
HELPED ME STAY UP TO DATE ON CROP PROBLEM ISSUES ON A TIMELY BASIS
Better stand establishment in wheat and soybeans.
reduced bin run wheat this year, better timing of wheat herbicides, reduced use of fungicide
Helped me with resources and helped support resources I used from other professionals.
First one that comes to mind is the soybean planting population debate. I come from southern MN and I can not believe the high populations we plant in Northern WI. Shawn does a great job of explaining why some growers need this population and why we can go lower if the situation and management fit! This approach has helped me get growers to pay more attention to planting populations and in turn increase there profitability.
His information has enabled me to provide local farmers with requested and needed information
Learned that a uniform stand of 100,000 soybean plants per acre is all that is required to achieve 100% of potential yield. This led to a reduction in the soybean seeding rates on the 700 acres of soybeans I produce each year.
Influenced my marketing decisions since I could sell part of the crop early at premium prices knowing I would have sufficient yield
He has provided valuable resources to use with producers.
We are giving more attention to overall soybean management
To use fungicides on wheat.
Dr. Conley has influenced many of my clients in many numerous ways, and most of which are hard to find the definite impact.

allowed me to give better info to others
Producers I have worked with are starting to manage winter wheat more rather than the historical plant/harvest management of the past
n/a
His program has given valuable and timely information I use in consulting
Dr. Conley's program has allowed me to provide information to clientele that allows them to improve wheat and soybean production. As examples clientele have learned how to evaluate wheat stands and adjust soybean planting rates for optimum yield potential.
I adjusted my wheat planting population upward.
One example is I have a much better idea of what to look for when scouting wheat and soybean diseases....Dr. Esker plays a big role in this too.
Increased planting of wheat
It has increased my ability to make proactive rather than reactive decisions.
Being more selective and updated on varieties and their tolerance to diseases is critical for yield and quality.

Question 7. Objectively quantify the value or importance of Dr. Conley's Extension program as it relates to your Soybean and Small Grains management needs. N = 64 responses

Extremely valuable	Highly valuable	Valuable	Somewhat valuable	Not valuable
36 55%	21 32%	8 12%	0 0%	0 0%

Question 8. How could Dr. Conley improve or enhance his Extension programming to better serve your soybean and small grain management needs? (be specific) N = 45 responses

NA
Remember, this was his first year and I get excellent answers back from him. Maybe more research in the future on things like what we can do for better soybean yields, but to be honest, I am not worried about it because it was his first year.
Develop an on-line soybean and wheat production guide for Wisconsin.
State wide winter barley trials. Additional winter wheat trial in NE WI.
Continue to make important connections and provide leadership to that network. Wisconsin is very well served, build on that success.
The timely articles on his website are great. Fact sheets are always nice too because then I can mail them out to a farmer who might have questions, and a fact sheet can oftentimes answer all of those questions better than I can.
Continue to focus on applied research that has direct impact on producers.
enhance small grain research - oats/barley/etc
Continue on his current track. I am sure that he will be even more helpful now that he has 1-2 years experience in Wisconsin.
I guess I believe he is doing a great job at this time, I even have his cell phone number and I believe everyone has access to it. If I leave a message he calls back
No recommendations

Not sure.
At this time my needs are met
Continue to change his research projects based on the changes of soybean and small grain management especially with the volatility in the commodity and fertilizer markets.
More current work on soybean research.
continue on the present approach of requesting good locations for testing and continue to use the internet as an information distributing tool as well as county extension meetings.
There are an increasing number of questions related to other small grains. Although soybeans are still far and away the major crop, some additional information about rye, winter rye, barley, oats, cover crops would be helpful. Dr. Conley has excellent teaching skills and interacts with producers in a very positive way. Keep up the great work!
I like the blog, and especially photos that help me diagnose disease and insect problems. The blog helps me to know when I really need to go out and scout my fields and gives me an idea of what to keep my eye out for.
Keep up the good work.
Website and Email notifications are first rate!
By increasing his collaboration with the Central Sands irrigated growers. We are a small but economically important group. Both sides can win here.
Include information showing pluses and/or minuses of rotation across all crops involved in the rotation. Also the economic value as a sum of the rotational years.
I would like to know more about P and K needs for wheat.
Continued web based updates regarding growing season decision making are very helpful and should be continued.
Be sure to keep research relevant to what is happening in the field and continue to keep and emphasis on increasing yields, not just saving input costs. Dr. Conley has brought a great amount of enthusiasm to his role and is being listened to by farmers and industry people. He is doing a good job !
He has already been a huge improvement
post his info each week on Monday on the web.
I am north of Green Bay in Pulaski WI and I would really like to see some more data from the northern counties on Wheat and Soybeans. I would be happy to help get plots and growers involved.
More extension (AY) publications on various topics
Discuss ways to cut through the propaganda that comes along with soybean and small grain seed sales and effective strategies for picking varieties that will work well for an individual's farm.
Continue to search for the next management tactic that will add appreciably to yield. Row spacing, early weed control, planting date are past examples of this. What's the next big (actually useful) thing?
Expand a little more into the crops for forage production along with grain production. Wheat grazing, triticale, rye info would be helpful. Also consider the inclusion of legumes in grass crops for N production and organic matter production.
Continue to be timely with updates and information, as well as being available to agriculture agents around the state.
Give him more support

Hard to beat
Keep up the good work!
I am waiting for Dr. Conley to get his footing a bit, he is one year into this process. I would like to see specific work done to break yield barriers in the crops under his program. I would also like to see a much more comprehensive approach taken on production research that integrates soil and water resource protection in a prominent manner - demonstrating profitability and stellar stewardship.
Shawn is such a breath of new blood it is hard to keep up with him - while Shawn has adopted new technology with gusto in his programming, Shawn as do all specialists still need to remember that only 50% of the clientele have web access and the majority (>90%) of those have only dial-up access. This means that material must also be in a downloadable format that I can easily download and print for paper distribution
Keep adding to short one or two page management factsheets that address management issues. Factsheets that allow farmers to make a decision on production questions, i.e., planting date, rates, soil prep and seeding depth, fertility management; collaborations on disease management, insect management, etc. A set of factsheets might be an updated management guide on wheat, soybean, etc.
more of the same
It is difficult to suggest improvements. Dr. Conley is a great improvement over previous personnel in that role.
rotational impact of keeping wheat in the rotation when the price is \$3-\$5 and corn is \$3.50 and beans are 8-9.
*Dr. Conley could come back to Purdue which would be fantastic! But on a more serious note, I have a hard time criticizing Dr. Conley's research and presentations. He does a great job being honest and telling farmers what they need to hear. I know he was helpful in sharing his knowledge on wheat at times while at Purdue. At least in Adams County, we always welcome more information in wheat.
*Return to Purdue,
*He could have stayed at PURDUE!!
*He could return to Purdue!

***I still have many clients from Indiana that wish I would return to Purdue University.**

f. Collaboration, planning and development of extension activities

Area Soybean Conferences. 2008. I led the development of a series of three area soybean management conferences in coordination with the Wisconsin Soybean Program. These day long conferences integrate all facets of soybean production ranging from agronomics and pest management to economics and marketing.

Spring wheat in 2008. 2008. I teamed with Greg Andrews, Pierce County Extension agent, to develop a Wis-line/IP Video program on the challenges associated with growing spring wheat in WI. The counties that participated in this program were Pierce, Chippewa, Dunn, Pepin, Buffalo, Trempealeau, Polk, Sheboygan, Outagamie, Grant and Iowa Counties. The program impacted ~75 growers and industry clientele.

Soybean Cyst Nematode Field Day. 2008. I coordinated and teamed with Dr. Esker to develop an in-field diagnostic training clinic on soybean cyst nematode identification and management.

Indiana Soybean Rust Meetings. 2005. I coordinated and teamed with Dr. Shaner and the Indiana Soybean Alliance to deliver five one-day informational meetings that covered all aspects of soybean production related to Asian soybean rust. These meetings attracted ~1,000 growers and industry clientele and according to survey results, impacted ~3.5 million acres of soybean across Indiana, Illinois, and Ohio.

University of Missouri Winter Wheat Diagnostic Clinic. 2002. I initiated and organized the first comprehensive Winter Wheat Diagnostic Clinic ever held in Missouri.

g. Special activities in the candidates area of expertise

Advise and consult with the Purdue University Plant Diagnostic Lab (2004-2007):
Assisted plant diagnostic lab personnel in the diagnosis of soybean and wheat management problems.

Conflict intermediary. I am on occasion asked to serve as an unbiased third party to assist in conflict resolution between parties.

C. Teaching (0% appointment)

(1) Statement by the candidate

I have actively participated in resident education and feel that this is an excellent complement to my Extension and research experiences. At the University of Missouri, I had the opportunity to present guest lectures in Plant Science 274: Grain Crops and guest lecture in Plant Science 10: Plant Science Orientation. I also revived the Collegiate Grain Crops Team at Missouri. At Purdue, I co-instructed Agronomy 305: Grain Grading as well as actively participated with the Collegiate Grain Crops Team. These teaching opportunities provided me an excellent opportunity to interact and develop working relationships with future agricultural leaders and clientele.

(2) Summary of teaching activities

a. Classroom teaching

- (a) **MU: Plant Science 274: Grain Crops.** Guest lectures (2) on wheat growth and development and grain quality. (Spring 2003 & 2004, 68 total students)
- (b) **MU: Plant Science 10: Plant Science Orientation.** Evaluated and graded final student reports. (Fall 2002, 15 students, pass/fail)
- (c) **MU: Plant Science 274: Grain Crops.** Guest lecture (1) on wheat growth and development. (Spring 2002, 27 students, letter grade)
- (d) **Purdue: Agronomy 305: Seed Analysis and Grain Grading.** Instruct students on plant and seed identification, seed analysis, and grain grading. (Fall 2006, 7 students, letter grade)

b. Clinical teaching – not applicable

c. Mentor teaching

(a) Post graduate training

Major Professor:

Branden Furseth, M.S. Agronomy. January 1, 2009 - present.

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: Graduated: 05/2008; Purdue University. His graduate research project modeled the impact of environment on soybean seed yield and grain composition.

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.

His graduate research project developed management recommendations for applying fungicides to soybean.

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. His graduate research project developed economic thresholds for the Barley/Cereal Yellow Dwarf Aphid complex in winter wheat.

Committee Member:

Chakradhar Mattupalli, Ph. D. Plant Pathology, Anticipated graduation date: 7/2010; UW-Madison

Emily Berstein, M.S. Agronomy, Anticipated graduation date: 7/2010; UW-Madison

Hans Schmidt, M.S. Agronomy, Graduated: 05/2008; Purdue University

Steve Troesser, M.S. Agronomy, Graduated: 05/2008; University of Missouri

Travis Belt, M.S. Agronomy, Graduated: 08/2004; University of Missouri

Romina Gueli, M.S. Agronomy, Graduated: 05/2004; University of Missouri

Jay Chism, M.S. Horticulture, Graduated: 12/2003; University of Missouri

Chris Schuster, M.S. Agronomy, Graduated: 05/2002; University of Missouri

(3) Peer review: Not applicable

(4) Student Evaluations

Quantitative Evidence of Excellence in Teaching for Purdue: Agronomy 305: Seed Analysis and Grain Grading Fall 2006.

Following is a summary of all questions used by the Department of Agronomy, Purdue University. 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

(5) **Supporting documentation** – none

D. Service

(1) University Service

a. University

Project Tracking Working Group, UWEX, 2008

b. College

None

c. Department

Farms, (Arlington) (UW)

Field Day, (2008) (UW)

Hatch Capital Exercise, (UW)

Agronomy Harvest Reunion Committee, (Purdue University)

Diagnostic Training Center (DTC) Operations Committee, (Purdue University)

Farm Family of the Year Committee, (Purdue University)

Member of Indiana Crop Improvement Association Seed and Grain Committee,
(Purdue University)

(2) Professional Service

a. Service on State, Regional, National, and International review Panels, etc.

American Seed Trade Association (ASTA) Soybean Program Planning
Committee (January 1, 2009 to present)

American Society of Agronomy A-4 (Extension) Chair Elect (10/01/08 to
present)

American Society of Agronomy Golden Scholars Mentor (10/01/08 to present)

American Society of Agronomy: Gerald O. Mott Scholarship Committee (12/1/07
to present)

Wisconsin Soybean Association Board Member (UW) (1/1/07 to present)

American Society of Agronomy (ASA) Agronomic Service Award Committee
(12/01/05 to 12/01/08)

American Society of Agronomy Extension Awards Program Category Chair
(12/01/05 to 12/01/08)

Developed ASA Symposium Entitled: Communicating Science to the Public
(2007)

Crop Science Society of America (CSSA) New Members Committee (12/01/05 to
12/01/08)

Vice Chair, Collegiate Crops Contest, Crop Science Society of America (1/1/03 to
12/31/05)

Presiding Officer Division A08 (Integrated Agricultural Systems), American
Society of Agronomy meeting (2004)

b. Appointments or Election to editorial boards.

Associate Editor; Crop Management (1/1/04 to present)

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

c. Clinical Service – Not Applicable

d. Outreach – Please see Section B. Outreach