

JILL SCHROEDER, Ph.D.

jischroe@nmsu.edu

575/646-2328 fax 8087

Education: Ph.D. in Agronomy/Weed Science, University of Georgia, Athens, 1985
M.S. in Soil Science (Soil Microbiology), University of Minnesota, St. Paul, 1981
B.A. in Biology, Macalester College, St. Paul, MN, 1975

Current Position: Professor
Department of Entomology, Plant Pathology and Weed Science
New Mexico State University
Box 30003, MSC 3BE
Las Cruces, NM 88007

Previous Positions:

1993-1999 Associate Professor, Entomol., Plant Path. and Weed Sci. Dept., NMSU
1987-1993 Assistant Professor, Entomol., Plant Path. and Weed Sci. Dept., NMSU
1985-1987 Research Agronomist, USDA-ARS, Coastal Plain Expt Stn, Tifton, GA
1981-1985 Graduate Research Assistant, Agronomy Dept., Univ. of Georgia, Athens.
1979-1981 Laboratory Assistant, Plant Pathology Dept., Univ. of Georgia, Athens.
1977-1979 Graduate Research Assistant, Soil Sci. Dept., Univ. of Minnesota, St. Paul.

Responsibility:

Research in Weed Science (87%)
Teaching in Weed Science (13%)

Research Interest: Weed management, sustainable cropping systems; weed interactions with other pests including root-knot nematodes, soilborne diseases, viruses and insect vectors; identification and mapping of weeds found on irrigation canals, water use by canal weeds and effect of improved weed management on irrigation efficiency.

Additional Research and Professional Experience:

2003 CSREES Review Team, University of Idaho, PSES Department
2002, 2003 Cultivating Leadership for a Changing Agriculture; Shared Leadership Workshops I & II, participant.
1998-1999 Panel Manager, USDA/CSREES National Research Initiative, Weed Biology and Weed Management Program
2000-2001 CAST/ICL Advisory Council for Leadership for Food System Change Program
1995-2000 CAST Conversations on Change

Regional Research Projects:

1987-1992 S-215 Regional Research Project, "Behavior and Fate of Selected Sulfonyl Urea and Imidazolinone Herbicides in the Southern Environment".
1992-1997 S-254 Regional Research Project, "Behavior, Fate and Bioactivity of Acetolactate Synthase (ALS) Inhibiting Herbicides".

Review Experience:

Panel Member, USDA/Southern Region IPM Grants, USDA/North Central IPM Grants
Panel Member, WRIPM Center Issues and Workgroup Grants
Panel Member, USDA/CSREES National Research Initiative, Weed Biology and Weed Management Program, Weedy and Invasive Species Program
Panel Member, USDA/CSREES PMAP, Methyl Bromide Replacement, and CAR/RAMP Programs
Weed Science Journal - reviewer
Weed Technology Journal - reviewer, Associate Editor - 2000-2003
other journals - review on an ad hoc basis

Honors and Awards:

2006 Team Award, co-awardees were S. H. Thomas, L. Murray and I Ray, NMSU College of Agriculture and Home Economics
2005 Team Award, Rio Grande Basin Initiative, NMSU College of Agriculture and Home Economics
2005-09 Vice-president, President-elect, President, Past-President (current), Weed Science Society of America
2002-05 Council for Agricultural Science and Technology Board of Directors
2001-04 President-elect and Program Chair, President, and Past President; Western Society of Weed Science
2001 Fellow Western Society of Weed Science
1999 Distinguished Research Award, NMSU College of Agriculture and Home Economics
1998-00 Secretary, Board of Directors Weed Science Society of America
1997 Western Society of Weed Science Presidential Award of Merit

Grants:

2008-2011 J. Schroeder, A. Ulery, J. Ashigh, L. Murray. Soil property and salinity impacts on horsetail growth and population development on irrigation canals and on horsetail management. USDA Special Grants, Rio Grande Initiative.
2007-2009 R. Creamer, S. Bundy, J. Schroeder, L. Murray. Seasonal phenology of the beet leafhopper in relation to its weed hosts and beet curly top virus infection. Western Region IPM.
2006-2009 J. Schroeder, S. H. Thomas, L. W. Murray, J. Libbin. Root-knot nematode resistant alfalfa for suppression of the yellow and purple nutsedge and root-knot nematode complex. USDA/CSREES Pest Management Alternatives Program.
2005-2008 J. Schroeder, R. Sanderson, A. Ulery, M. Renz, L. Murray. Identification and detection of problem and noxious weeds on irrigation canals will lead to effective weed management programs and increase water for irrigation. USDA Special Grants, Rio Grande Basin Initiative.
2004-2006 J. Schroeder, S.H. Thomas, I. Ray, M. Renz. Development of management strategies for multiple pest systems on chile pepper. Chile Improvement Project, NMAES.

- 2004-2006 M. Renz, S. Walker, J. Schroeder, E. Silva. Root development of chile peppers and weed management under two different irrigation regimes. Chile Improvement Project, NMAES.
- 2004-2006 R. Creamer, J. Schroeder, and S. Hanson. Working group for curly top virus biology, transmission, ecology, and management. Western Region IPM.
- 2003-2006 R. Creamer and J. Schroeder. The influence of climate on London rocket and beet leafhoppers and their role in curly top infection of chile in New Mexico. Western Region IPM.
- 2001-2005 J. Schroeder, R. Sanderson, A. Ulery. Identification and detection of problem and noxious weeds on irrigation canals will lead to effective weed management programs and increase water for irrigation. USDA Special Grants, Rio Grande initiative.
- 1998-2003 J. Schroeder, S. Thomas, L. Murray. Nutsedge-pepper-root-knot nematode interactions in an irrigated system. CSREES/National Research Initiative.
- 1997-2004 I. Ray, J. Schroeder, S. Thomas. A sustainable approach to nematode and weed management in chile using nematode-resistant alfalfa as a rotation crop. Chile Improvement Project. NMAES
- 1995-1997 J. Schroeder. Cucumber response to low concentrations of foliar and soil applied sulfonylurea herbicides. DuPont Corporation.
- 1994-1997 J. Schroeder, S. Thomas, L. Murray. Pepper-weed-root-knot nematode interactions in an irrigated system. CSRS/National Research Initiative.
- 1994-1996 J. Schroeder, J. Libbin. Herbicide influence on yield, quality, and cost of managing weeds in chile peppers. Western Region Pesticide Impact Assessment, National Pesticide Impact Assessment Program.
- 1994-1996 B. Lewis and J. Schroeder. Influence of alternate hosts on pepper weevil. Chile Improvement Project. NMAES
- 1992-2004 J. Schroeder and S. Thomas. Effects of multiple pest systems on chile peppers. Chile Improvement Project. NMAES.
- 1992-1994 S. Thomas, C. Liddell, C. Biles, J. Schroeder. *Phytophthora* interactions with root-knot nematodes and weeds. Chile Improvement Project. NMAES
- 1992-1994 R. Bowman, J. Schroeder. Plant uptake and plant toxicity of fluorobenzoates used as soil and groundwater tracers. CSRS Special Grants for Water Quality.
- 1991-1994 N. Christensen, J. Schroeder, T. Jones, J. Hendrickx. Chemical transport and persistence in a furrow irrigated no-till management system. CSRS Special Grants for Water Quality.
- 1991-1993 N. Christensen, J. Schroeder, J. Libbin. Economic comparisons between chemical fallow no-till farming systems and conventional clean till farming systems. Western Region Pesticide Impact Assessment.
- 1988-2007 J. Schroeder. Industry, commodity and student support.

PUBLICATIONS :

Refereed Journal Publications

Fiore, C., J. Schroeder, S. H. Thomas, I. Ray, L. Murray. 200X. Non-dormant, root-knot nematode resistant alfalfa suppresses the perennial nutsedge-nematode pest complex for rotation crop production. *Agronomy Journal* (in review).

- Ou, Z., L. Murray, S. H. Thomas, J. Schroeder, and J. Libbin. 200X. Nutsedge Counts Predict *Meloidogyne incognita* Juvenile Counts in an Integrated Management System. *Journal of Nematology* (accepted).
- Norsworthy, J. H., J. Schroeder, S. H. Thomas, L. W. Murray. 2007. Purple Nutsedge (*Cyperus rotundus*) management in direct-seeded chile peppers (*Capsicum annuum*) using halosulfuron and cultivation. *Weed Technology* 21: 636-641.
- Ray, J., J. Schroeder, R. Creamer, and L. W. Murray. 2006. Planting date affects phenology of London rocket (*Sisymbrium irio*) and interaction with beet leafhopper (*Circulifer tenellus*) in southern New Mexico. *Weed Science* 54:127-132.
- Norsworthy, J. H., J. Schroeder, S. H. Thomas, and L. W. Murray. 2005. Southern root-knot nematode effect on purple nutsedge (*Cyperus rotundus*) and chile pepper response to halosulfuron. *Weed Technology* 19: 1004-1011.
- Schroeder, J., S. H. Thomas, and L. W. Murray. 2005. Impacts of crop pests, and their management, on weeds. *Weed Science* 53:918-922.
- Thomas, S. H., J. Schroeder and L. W. Murray. 2005. The role of weeds in nematode management. *Weed Science* 53:923-928
- Ray, J., R. Creamer, J. Schroeder, and L. W. Murray. 2005. Moisture and temperature requirements for London rocket (*Sisymbrium irio*) emergence. *Weed Science* 53:187-192.
- Thomas, S. H., J. Schroeder, and L. Murray. 2004. *Cyperus* tubers protect *Meloidogyne incognita* from 1,3-dichloropropene. *Journal of Nematology* 36(2):131-136.
- Schroeder, J. S. H. Thomas, and L. W. Murray. 2004. Root-knot nematodes affect annual and perennial weed interactions with chile pepper. *Weed Science* 52:28-46.
- Schroeder, J. and P.A. Banks. 2003. Herbicide injury. *In* Pernezny, K., P. Roberts, J. Murphy, and N. Goldberg, editors. *Compendium on Pepper Diseases*. APS Press, St. Paul, MN. P. 56-57.
- Banks, P. A. and J. Schroeder. 2002. Carrier volume affects herbicide activity in simulated spray drift studies. *Weed Technology* 16: 833-837.
- Ozaydin, F., D. M. VanLeeuwen, C. S. Miller, J. Schroeder. 1999. Factor effects on the variance in a replicated two-way treatment structure in an agricultural system. *Journal of Agricultural Biological and Environmental Statistics* 4:166-184.
- Schroeder, J., S. H. Thomas, and L. W. Murray. 1999. Yellow and purple nutsedge are not injured by root-knot nematodes inoculated at increasing population densities. *Weed Science* 47:201-207.
- Schroeder, J. 1998. Cucumber response to selected foliar and soil applied sulfonylurea herbicides. *Weed Technology* 12:595-601.
- VanGessel, M.J., J. Schroeder and P. Westra. 1998. Comparative growth and development of four spurred anoda (*Anoda cristata*) accessions. *Weed Science* 46:91-98.
- Bowman, R.S., J. Schroeder, R. Bulusu, M. Remmenga, and R. Heightman. 1997. Plant toxicity and plant uptake of fluorobenzoate and bromide water tracers. *Journal of Environmental Quality* 26:1292-1299.
- Thomas, S. H., M. J. Kenney, J. Schroeder, L. Murray. 1997. *Meloidogyne incognita* inoculum source influences yellow nutsedge (*Cyperus esculentus*) and chile pepper (*Capsicum annuum*) response to the nematode. *Journal of Nematology* 29:402-408.
- Miller, C. S., D. M. VanLeeuwen, J. Schroeder, and M. Kenney. 1995. Variance as a factor effect in interdisciplinary studies of agricultural systems. *Proceedings of the 1995 Kansas State University Conference on Applied Statistics in Agriculture*. P 73-85 (refereed).

- Schroeder, J. 1994. Chlorimuron and imazaquin persistence in selected southern soils under controlled conditions. *Weed Science* 42:635-640.
- Schroeder, J., M. J. Kenney, S. H. Thomas, and L. Murray. 1994. Yellow nutsedge response to southern root-knot nematode, chile pepper, and metolachlor. *Weed Science* 42:534-540.
- Schroeder, J., S. H. Thomas, and L. Murray. 1993. Yellow and purple nutsedge and chile peppers host southern root-knot nematode. *Weed Science* 41:150-156.
- Schroeder, J. 1993. Late-season interference of spurred anoda in chile peppers. *Weed Science* 41:172-179.
- Elmore, C. D. and J. Schroeder. 1992. Woolly morningglory as a weed-taxonomic clarification. *Weed Technology* 6:1027-1030.
- Schroeder, J. 1992. Oxyfluorfen for postemergence weed control in hot peppers. *Weed Technology* 6:1010-1014.
- Schroeder, J. 1991. Pepper cultivar (*Capsicum annuum*) response to metolachlor in three New Mexico soils. *Weed Technology* 6:366-373.
- Schroeder, J., C. C. Dowler and J. R. Stansell. 1990. Texas panicum, *Panicum texanum* Buckl. growth as affected by irrigation management and planting date. *Weed Science* 38:374-378.
- Hanna, W. W., C. Swann, J. Schroeder, and P. Utley. 1989. Sulfometuron for eliminating bahiagrass, *Paspalum notatum*, from centipedegrass, *Eremochloa ophiuroides*, and bermudagrass, *Cynodon dactylon*. *Weed Technology* 3:509-512.
- Schroeder, J. 1989. Wild radish control in soft red winter wheat, *Triticum aestivum*. *Weed Science* 37:112-116.
- Schroeder, J. and P. A. Banks. 1989. Soft red winter wheat, *Triticum aestivum*, response to dicamba and dicamba plus 2,4-D. *Weed Technology* 3:67-71.
- Kvien, C. S., J. Schroeder, and P. A. Banks. 1988. A field technique to study root growth in peanuts. *Agronomy Journal* 80:852-854.
- Schroeder, J. and P. A. Banks. 1986. Persistence of norflurazon in five Georgia soils. *Weed Science* 34:595-599.
- Schroeder, J. and P. A. Banks. 1986. Persistence and activity of norflurazon and fluridone in five Georgia soils under controlled conditions. *Weed Science* 34:599-606.
- Schroeder, J. and P. A. Banks. 1986. Persistence of fluridone in five Georgia soils. *Weed Science* 34:612-616.
- Schroeder, J., P. A. Banks, and R. L. Nichols. 1986. Soft red winter wheat (*Triticum aestivum*) cultivar response to metribuzin. *Weed Science* 34:66-69.

Experiment Station Publications

- Schroeder, J., R. Sanderson, and A. Ulery. 2003. Weeds: an Indicator of Soil and Water Salinity and Water Loss along the Irrigation Canals. In Rossana Sallenave (ed.) Water Task Force Publication No. 1. New Mexico State University College of Agriculture and Home Economics.
- Corgan, J., M. Wall, C. Cramer, T. Sammis, B. Lewis, and J. Schroeder. 2000. Bulb onion culture and management. New Mexico State University Cooperative Extension Service Circular 563. 16 pages.
- Schroeder, J. (editor). 1997. Behavior and fate of selected sulfonylurea and imidazolinone herbicides in the southern environment. Southern Cooperative Series Bulletin No. 385. Arkansas Agricultural Experiment Station, Fayetteville, AR.
<http://www.msstate.edu/org/saesd>.

- Lee, R. and J. Schroeder. 1995. Weed management in Chile. Agricultural Experiment Station. Circular 548.
- Jones, J. M., J. D. Libbin, N. B. Christensen, and J. Schroeder. 1994. Economic Comparison of Conventional and Conservation Tillage in Eastern New Mexico. NMSU Experiment Station Research Report 687.
- Schroeder, J. and C. E. Barnes. 1993. Weed control in cotton with postemergence directed herbicides. NMSU Experiment Station Technical Report Number 8.
- Schroeder, J. and N. Christensen. 1993. Weed management in conventional till grain sorghum. NMSU Experiment Station Technical Report 15.
- Banks, P. A. and J. Schroeder Kvien. 1983. Weed control evaluations in no-till soybeans (*Glycine max*) double-cropped with rye (*Secale cereale*). Research Report 431. University of Georgia College of Agriculture Experiment Stations.

Unnumbered Reports - 21 printed 1986-2007.

I distribute an annual report of field research trials to extension and research faculty and industry cooperators.

Educational Materials

- Banks, P. A., J. Schroeder, and J. B. Weber. 1991. FATE OF PESTICIDES IN THE ENVIRONMENT-Program 1: Introduction to pesticides and transport processes. 25 min video tape.
- Banks, P. A., J. Schroeder, and J. B. Weber. 1991. FATE OF PESTICIDES IN THE ENVIRONMENT-Program 2: Degradation processes and summary pesticide behavior. 25 min video

Abstracts and Proceedings since 2002

(* NMSU undergraduate or graduate student presentation).

- Fiore, C., X. Liu, J. Schroeder, L. Murray, and A. Ulery. 2007. Survey of vegetation and soils on irrigation canals in southern New Mexico. Weed Science Society of America, Abstracts Vol. 47:87.
- Fiore, C., X. Liu, J. Schroeder, L. Murray, and A. Ulery. 2007. Survey of souring rush and soils on irrigation canals in southern New Mexico. Western Society of Weed Science, Proceedings 60:30.
- *Ou, Z., L. Murray, J. Schroeder, and S. H. Thomas. 2007. Using nutsedge counts to predict root-knot nematode juvenile counts in an integrated management system. Western Society of Weed Science, Proceedings 60:37.
- Schroeder, J., S. C. Nunez, S. H. Thomas, L. W. Murray. 2007. Early season irrigation affects initial development of yellow nutsedge, purple nutsedge, and root-knot nematode. Western Society of Weed Science, Proceedings 60:39.
- Trojan, J., S. H. Thomas, J. Schroeder, and L. W. Murray. 2007. The influence of *Meloidogyne incognita* inoculum source and competition on nematode virulence on Chile pepper. Journal of Nematology 39: (in press).
- Fiore, C., X. Liu, J. Schroeder, S. Schuster, L. Murray, R. Sanderson, M. Renz, A. Ulery, O. El-Sebai. 2006. Vegetation on irrigation canals in southern New Mexico. Proceedings, Western Society of Weed Science 59:46.

- *Nunez, S. C., J. Schroeder, S. H. Thomas, and L. W. Murray. 2006. Effect of Early Season Irrigation and Heat Unit Accumulation on Yellow Nutsedge, Purple Nutsedge, and Root-Knot Nematode Development. Proceedings, Western Society of Weed Science 59:106.
- Trojan, J. M., S. H. Thomas, J. Schroeder, and L. W. Murray. 2006. Host suitability of yellow nutsedge and purple nutsedge for *Meloidogyne javanica*, *M. hapla*, and *M. incognita* races 1, 2, and 3. Journal of Nematology 38: (in press).
- Trojan, J. M., S. H. Thomas, J. Schroeder, and L. W. Murray. 2005. Histological examination of yellow nutsedge and purple nutsedge tuber for the presence of *Meloidogyne incognita*. Journal of Nematology 37:400.
- Schroeder, J., B. J. Greenfield, S. H. Thomas, L. W. Murray, and J. M. Fuchs. 2005. Root-knot nematodes (*Meloidogyne incognita*) increase early season growth of purple and yellow nutsedge (*Cyperus rotundus* and *C. esculentus*) emerging from large tubers. Weed Science Society of America, Abstracts 45:205.
- *Nunez, S. C., J. Schroeder, S. H. Thomas, and L. W. Murray. 2005. The effects of soil temperature on yellow nutsedge, purple nutsedge, and root-knot nematode development. Proceedings, Western Society of Weed Science 58:30.
- Fiore, C., J. Schroeder. 2005. The Potential for Germination and Establishment of Select Weed Seed on Irrigation Canals in Southern New Mexico. http://riogrande.tamu.edu/2005_conferencewrapup/posters/Fiore.pdf.
- Fiore, C., J. Schroeder. 2005. The Potential for Germination and Establishment of Select Weed Seed on Irrigation Canals in Southern New Mexico. Proceedings of the Western Society of Weed Science 58:27.
- *Barron, Santos, J. Schroeder, and C. Fiore. 2005. Rotational Crop Response to Trifloxysulfuron. Proceedings of the Western Society of Weed Science 58:11.
- *Fiore, C., J. Schroeder, R. Sanderson, A. Ulery, L. Murray, L. DeMouche, and S. Schuster. 2004. Can soil characteristics be used to predict weed species along the irrigation canals in southern New Mexico. Proceedings, Western Society of Weed Science 57:36-37.
- *Greenfield, B. J. Schroeder, S. H. Thomas, and L. W. Murray. 2004. The effect of nitrogen and potassium levels on the relationship between purple and yellow nutsedges and southern root-knot nematode. Proceedings, Western Society of Weed Science 57:40.
- Schroeder, J., S. H. Thomas, C. Fiore, J. M. Fuchs, I. Ray, and L. W. Murray. 2004. Alfalfa suppresses concomitant populations of nutsedges and root-knot nematode in a subsequent pepper crop. Abstracts, Weed Science Society of America 44:128.
- *Schuster, S., D. Cowley, C. Fiore, L. Murray, and J. Schroeder. 2004. Are weed species associated with crayfish habitat along the irrigation canals? Proceedings, Western Society of Weed Science 57:37.
- *Wang, K., L. W. Murray, J. Schroeder, and S. H. Thomas. 2004. Techniques of topological analysis for examining purple and yellow nutsedge root architecture. Proceedings, Western Society of Weed Science 57:43-44.
- *Luna, E., J. Schroeder, S. H. Thomas and L. W. Murray. 2003. Purple nutsedge growth and biomass partitioning in response to root-knot nematodes. Proceedings, Western Society of Weed Science 56: 36.
- *Greenfield, B. J., J. Schroeder, S. H. Thomas, and L. W. Murray. 2003. Root-knot nematodes and tuber size affect early season growth of purple and yellow nutsedges. Proceedings, Western Society of Weed Science 56: 92.

- *Fiore, C., L. W. Murray, I. Ray, J. Schroeder and S. H. Thomas. 2003. Chile response to rotational crops for nutsedge and nematode suppression. Proceedings, Western Society of Weed Science 56: 60.
- Schroeder, J. 2003. WSWS: Successes and Challenges. WSWS Presidential Address. Proceedings, Western Society of Weed Science 56:11-14.
- Schroeder, J., S. H. Thomas, and L. W. Murray. 2003. Impacts of crop pests, and their management, on weeds. Abstracts, Weed Science Society of Weed Science 43:328 (*invited* symposium presentation).
- Thomas, S. H., J. Schroeder and L. W. Murray. 2003. The role of weeds in nematode management. Weed Science Abstracts, Weed Science Society of Weed Science 43:333 (*invited* symposium presentation)
- Schroeder, J., C. Fiore, I. Ray, S.H. Thomas and L.W. Murray. 2002. Yellow and purple nutsedge population response to crop management in root-knot nematode infested fields. Weed Science Society of America, Abstracts 42:55.
- *Greenfield, B.J., J. Schroeder, S. Thomas, L.W. Murray, J. Fuchs. 2002. The effect of *Meloidogyne incognita* on purple nutsedge and yellow nutsedge inter- and intra-specific competition. Proceedings Western Society of Weed Science 55:46.
- *Norsworthy, J., Schroeder, J., P.A. Banks, and L. W. Murray. 2002. Halosulfuron for purple nutsedge management in chile. Proceedings Western Society of Weed Science 55:31.
- *Fiore, C., L. Murray, I. Ray, J. Schroeder, and S.H. Thomas. 2002. A sustainable approach to nematode and nutsedge management in chile using nematode resistant alfalfa as a rotation crop. Proceedings Western Society of Weed Science 55:46.
- *Luna, E. L., J. Schroeder, C. Fiore, D. Coolidge. 2002. The effects of root-knot nematodes on the growth and development of purple nutsedge. Proceedings Western Society of Weed Science 55:9.

TEACHING ACTIVITIES:

Courses taught

EPWS/AGRO 311/511 Introduction to Weed Science (4 hr): undergraduate/graduate course taught each fall semester.

EPWS 311: 986 total student credit hours, 1988-2007

EPWS 511: 208 total student credit hours, 1988-2006

EPWS 520 Environmental and Physiological Pesticide Science (3 hr): graduate course co-taught with Tracy M. Sterling spring semester every other year. 78 total student credit hours, 1993 - 2007

Other courses taught as needed include seminar, special problems and special topics.

Graduate Student Advising:

PhD students:

Martina W. Murray, graduation December, 1999.

Dissertation: Tolerance of Extra-Long Staple Cotton (*Gossypium barbadense* L.) and Subsequent Crops to Pyriithiobac.

M.S. students:

Michael Kenney, graduation 1992.

Thesis: Population Development of Root-Knot Nematode on Yellow Nutsedge and Chile Peppers as Affected by Inoculum Source and Metolachlor.

Ramona R. Parra, graduation 1994.

Thesis: Metolachlor Dissipation in the Soil Profile under Furrow Irrigated No-till and Conventional Till Management.

Asuncion Rios Torres, graduation 1997 (co-advisor)

Thesis: Effects of Three Acetolactate Synthase (ALS) Herbicides in Soils and Nutrient Solutions at Different pHs and Water Potentials.

Justin Norsworthy, graduation 2003.

Thesis: Sustainable Management of Purple Nutsedge and Root-Knot Nematodes in Chile Peppers

Cheryl Fiore, graduation 2004.

Thesis: A Sustainable Approach to Nematode and Nutsedge Management in Chile using Nematode-Resistant Alfalfa as a Rotation Crop

Sonia Nunez, graduation 2007.

Thesis: The effects of soil temperature and pre-plant irrigation on yellow nutsedge, purple nutsedge, and root-knot nematode development.

M.S. Theses related to collaborative projects:

Ke Wang, 2003. L. Murray, advisor

Thesis: Topological Analysis of Root-Knot Nematodes Influence on Purple Nutsedge and Yellow Nutsedge Root Architecture.

Jarren Ray, 2004. R. Creamer, advisor

Thesis: The Impact of Environmental Factors on London Rocket Emergence, Seasonal Development and its Potential Role in Curly Top Infection of New Mexico Chile Peppers

Jacki Fuchs (Trojan), 2004. S. H. Thomas, advisor.

Thesis: Characterization of the Relationship of *Meloidogyne incognita* in Association with Chile, Yellow Nutsedge, and Purple Nutsedge.

Xiaoli Liu, 2007. L. Murray, advisor.

Thesis: Vegetation and Soils on Irrigation Canals in southern New Mexico.

Zhining Ou, 2007. L. Murray, advisor

Thesis: Nutsedge Counts Predict *Meloidogyne incognita* Juvenile Counts in an Integrated Management System.

Graham Davis, 20XX, S. Bundy, advisor

Thesis: Seasonal phenology of the beet leafhopper in relation to its weed hosts and beet curly top virus infection.

Member of Ph.D. student committees: 8

Member of M.S. committees: 34

Undergraduate Student Advising:

Department advisor for Renae Pablo, Edward Morris, Thomas McDaniel, Michael Ronquillo, Ericka Luna, Santos Barron

Ronald E. McNair Post-Baccalaureate Achievement Program Mentor

1993-1995 Abel Covarrubias

Project title: The relationship of three yellow nutsedge biotypes with chile peppers and their interaction with southern root-knot nematode.

Abel prepared poster presentations for four professional meetings including the Western Society of Weed Science (see abstracts).

Published abstracts:

Covarrubias, A. and J. Schroeder. 1994. The relationship of three yellow nutsedge biotypes with chile peppers and their interaction with southern root-knot nematode. *The National McNair Journal* 2(1):15.

Covarrubias, Abel. 1996. The relationship of three yellow nutsedge biotypes with chile peppers and their interaction with southern root-knot nematode. *Journal of the New Mexico State University McNair Program* 2:39.

Bridges to Native Americans in Community Colleges Program Mentor

Since 1993, I have presented seminars at the Navajo Community College at Shiprock, NMSU at Alamogordo, Northern NM Community College at Espanola, and Navajo Community College at Tsaille, AZ. In addition, I have served as a mentor to the following students participating in the summer research program at NMSU.

1993 Renae Pablo

Project: Metolachlor Movement in Leaching Columns as Influenced by Irrigation Location.

1994 Vicki Nevarez

Project: Crop Response to Increasing Concentrations of Imazapyr in Three Soils.

1998 Shawn Bitsuie

Project: Yellow Nutsedge Tubers Protect Root-Knot Nematodes that may Infect Susceptible Crops

2001 Devonna Coolidge

Project: Influence of Root-Knot Nematodes on the Growth and Development of Purple Nutsedge.

2002 Shyree Luna

Project: Water use by several weeds of southern NM

WERC

2001-02 Vanessa Duncan interned: RGBI project

Projects: Literature search: *Equisetum* biology; Water use by nutsedges

MARC

2002-03 Ericka Luna (see abstracts)

ASSURED Program

2003 Santos Barron

Project: Response of chile pepper and other crops to trifloxysulfuron (see abstracts)

2004 Pablo Rios

I have also worked with the following undergraduate students on research projects that they subsequently presented at *Western Society of Weed Science annual meetings (see abstracts)*:

1994-95 Casey McDaniel (supported by Gus Foster, Sandoz Corporation)

1995-96 Ricky Cox

1996-97 Cheryl Fiore (supported by the Weed Science Society of America Undergraduate Research Award)

1996-97 Thomas McDaniel (supported by Gus Foster, Sandoz Corporation)

1997-98 Thomas McDaniel (supported by Gus Foster, BASF Corporation)

1998-99 Thomas McDaniel (supported by Gus Foster, BASF Corporation)

1998-99 Amy Anchieta (supported by the Weed Science Society of America Undergraduate Research Award)

1998-00 Michael Ronquillo

2000 Nora McCaw White

2001-03 Ericka Luna

2004-06 Santos Barron

2007-08 Jessica Ebler (first place, Undergraduate Poster competition)