

JACQUELINE M BEACHAM (Trojan, Fuchs)

Department of Entomology, Plant Pathology and Weed Science

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jtrojan@nmsu.edu**EDUCATION:**

<u>EDUCATION:</u>	<u>DEGREE</u>	<u>YEAR</u>	<u>FIELD OF STUDY</u>
New Mexico State Univ., Las Cruces, NM	B.S.	1994	Biology (Ecology)
New Mexico State Univ., Las Cruces, NM	B.S.	1996	Agriculture (Soil Science)
New Mexico State Univ., Las Cruces, NM	M.S.	2005	Agricultural Biology

RESEARCH AND PROFESSIONAL EXPERIENCE:

1999- present	Research Scientist, Department of EPPWS, NMSU, Las Cruces, NM		
1998-1999	Diagnostic Lab Technician, Plant Sciences Department, NMSU, Las Cruces, NM		
1997-1998	Research Assistant, Department of Agronomy, KSU, Manhattan, KS		
1995-1996	Research Assistant, Department of Plant & Env. Sci., NMSU, Las Cruces, NM		
1994-1995	Jr. Fulbright Scholar, US Department of State, Bureau of Educational and Cultural Affairs, in affiliation with the Polish Academy of Sciences, Institute of Botany and the Jagiellonian University, Krakow, Poland		

HONORS AND AWARDS:

New Mexico State University College of Agriculture, Consumer and Environmental Sciences	- Team Research Award (2017)
New Mexico State University College of Agriculture, Consumer and Environmental Sciences	- Distinguished Professional Staff Award-On Campus (2016)

EXTERNAL SUPPORT ACQUIRED:

- ADAMA entomopathogenic nematode toxicology study (2017; \$5,500)
- ADAMA *Ditylenchus* toxicology study (2018; \$2,300)
- Turf nematode management (Bayer, Control Solutions) – 2018 (\$5,500)
- NAPI pinto bean nematode diagnostics (2016; \$1,700)
- Miscellaneous turf nematode management & diagnostics (2012-present; \$7,275)
- Miscellaneous crop nematode diagnostics (Helena, ADAMA, etc) (2012- present; \$14,227)

PUBLICATIONS:**Refereed Journal Publications:**

Eisenback, J. D., L. A. Holland, J. Schroeder, S. H. Thomas, J. M. Beacham, P. A. Vierro and V. S. Paes-Takahashi. 2019. *Meloidogyne aegracyperi* n. sp. (Nematoda: Meloidogynidae), a root-knot nematode parasitizing yellow and purple nutsedge in New Mexico. *Journal of Nematology* 51: (accepted for publication)

French, J., J. Beacham, A. Garcia, N. P. Goldberg, S. Thomas, S. F. Hanson. 2017. First report of stem and bulb nematode *Ditylenchus dipsaci* on garlic in New Mexico. *Plant Health Progress* 18:91-92. <https://apsjournals.apsnet.org/doi/10.1094/PHP-12-16-0069-BR>

Zbylut, J., L. Murray, S.H. Thomas, J. Beacham, J. Schroeder, C Fiore. 2014. Modeling

ratios with potential zero-inflation to assess soil nematode community structure. Conference on Applied Statistics in Agriculture. p. 130-148 <https://doi.org/10.4148/2475-7772.1007>

Sanogo, S., J. Schroeder, S. Thomas, L. Murray, N. Schmidt, J. Beacham, C. Fiore, L. Liess. 2013. Weed species not impaired by *Verticillium dahlia* and *Meloidogyne incognita* relationships that damage chile pepper. Online. Plant Health Progress [doi:10.1094/PHP-2013-0920-01-RS](https://doi.org/10.1094/PHP-2013-0920-01-RS).

Klass, J.R., D.P.C. Peters, J.M. Trojan, and S. Thomas. 2012. Nematodes as an indicator of plant-soil interactions associated with desertification. Journal of Applied Soil Ecology 58:66-77.

Murray, L., S. Thomas, J. Schroeder, S. Kreider, Z. Ou, J.M. Trojan, and C. Fiore. 2011. Modeling the root-knot nematode/nutsedge pest complex using the Poisson family of distributions: Perspectives from Weed Science, Nematology, and Statistics. Conference on Applied Statistics in Agriculture p. 128-151. <https://doi.org/10.4148/2475-7772.1051>

VanVoorhies, W. A., J. Fuchs and S. Thomas. 2005. The Longevity of *Caenorhabditis elegans* in soil. Proceedings of the Royal Society Biology Letters 1:247-249.

Thomas, S.H., J. Fuchs and Z. Handoo. 2001. First report of *Meloidogyne partityla* on pecan in New Mexico. Plant Disease 85(9):1030.

Abstracts and Proceedings:

Giese, G., J. M. Beacham, S. Thomas, C. Sutherland, T. O. Powers, and L. Roberts. 2018. Plant parasitic nematodes associated with grapevines, *Vitis vinifera*, in New Mexico. Journal of Nematology 50:636.

Thomas, S.H., J.M. Beacham, and T.O. Powers. 2017. Suppression of Criconematid-induced injury to golf course greens in New Mexico. Journal of Nematology 49:533-534.

Beacham, J. S. Thomas, J. Schroeder, L. Holland, E. Morris, N. Schmidt, L. Murray, F. Solano-Campos, S. Hanson, and J.D. Eisenback. 2015. Host status of a new *Meloidogyne* species found parasitizing yellow and purple nutsedges. Journal of Nematology 47:223.

Thomas, S., J. Beacham, L. Holland, E. Morris, N. E. Schmidt, L. Murray, F. Solano-Campos, S.F. Hanson, J. Eisenback. 2013. Observations regarding a recently-undescribed *Meloidogyne* species parasitizing yellow and purple nutsedges. Journal of Nematology 45: 320-321.

Solano, F., J. Beacham, S. Thomas, Y. Steinberger, S. Hanson. 2013. Assessment of soil nematode biodiversity in preserved soil samples. Phytopathology 103:S2.136.

Thomas, S.H., J.M. Beacham, and P.W. Bosland. 2012. Use of propagated plant cuttings to accelerate screening cayenne pepper for resistance to *Meloidogyne incognita*. Journal of Nematology 44:494.

Beacham, J., S.H. Thomas, and E.C. Bernard. 2012. Inventory of the soil nematode fauna at White Sands National Monument, New Mexico. Journal of Nematology 44:451.

Bernard, E.C., J.M. Trojan, and S.H. Thomas. 2011. Nematode biodiversity at Otero Mesa, New Mexico, a pristine desert grassland. Journal of Nematology 43:228-229.

Thomas, S.H., J.M. Trojan, and R. Heerema. 2011. *Meloidogyne partityla*-induced changes in pecan growth and nutrient sequestration. Journal of Nematology 43:288-289.

Thomas, S.H., J.M. Trojan, J. Schroeder, C. Fiore, S. Sanogo, L. Liess, N. Schmidt and L.W. Murray. 2010. Suitability of annual weeds as hosts of *Meloidogyne incognita* is unaffected by coinfection with *Verticillium dahliae*. Journal of Nematology 42:273.

Thomas, S. H., J. M. Trojan, J. Schroeder, C. Fiore, S. Sanogo, L. Liess, and L. W. Murray. 2009. Interactions among *Meloidogyne incognita*, annual weeds, and *Verticillium dahliae*: implications for enhancement of pathogen and weed populations in chile pepper production. Journal of Nematology 41:386.

Trojan, J. M., S. H. Thomas, J. Schroeder, L. W. Murray, and N. Schmidt. 2009. Soil nematode community structure in an alfalfa, chile and cotton crop sequence. *Journal of Nematology* 41:390.

Trojan, J. M., 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* 39:97

Thomas, S.H., J. M. Trojan, and J.A. Couch. 2006. Survey of plant-parasitic nematodes in New Mexico pecan orchards using an ATV-mounted hydraulic soil auger. *Journal of Nematology* 38:298.

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* 38:299

Thomas, S. H. and J. M. Trojan. 2005. Seasonal population dynamics and host suitability of *Meloidogyne partityla* on pecan in New Mexico. *Journal of Nematology* 37:399

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

Thomas, S.H., J. M. Fuchs, J. Schroeder, and L.W. Murray. 2004. The effect of previous host on subsequent virulence of *Meloidogyne incognita* on chile pepper and nutsedges. *Journal of Nematology* 36:348-349

Fuchs, J.M., S.H. Thomas, J. Schroeder, and L.W. Murray. 2004. Characterization of the effects of chile pepper, yellow nutsedge and purple nutsedge on *Meloidogyne incognita* reproduction. *Journal of Nematology* 36:318

Thomas, S. H., J. Fuchs and A.L. Jacobson. 2001. *Meloidogyne partityla*: an emerging pest of pecan in New Mexico. *Phytopathology* 91:5144.