

## **TIMOTHY C. TODD**

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### **Education**

Rogers State College, Claremore, OK	Biology	A.S. 1978
Northeastern Oklahoma State Univ., Tahlequah, OK	Biology	B.S. 1980
Oklahoma State Univ., Stillwater, OK	Plant Pathology	M.S. 1982

### **Professional Experience**

1990-present Instructor and Research Scientist, Department of Plant Pathology, Kansas State University, Manhattan.  
1984-1990 Assistant Instructor, Department of Plant Pathology, Kansas State University, Manhattan.  
1982-1984 Research Assistant, Department of Plant Pathology, Kansas State University, Manhattan.  
1980-1982 Graduate Research Assistant, Department of Plant Pathology, Oklahoma State University, Stillwater.

### **Research Interests**

Strategies for durable resistance in soybean to *Heterodera glycines*; management of nematode diseases in corn and wheat; population and community ecology of soil nematodes; soil biodiversity; sentinel taxa of ecosystem disturbance.

### **Professional and Honorary Society Membership**

- Society of Nematologists
- Soil Ecology Society
- Gama Sigma Delta

### **Publications (past 4 years)**

- Antony, R.M., M.B. Kirkham, T.C. Todd, S.R. Bean, J.D. Wilson, P.R. Armstrong, E. Maghirang & D.L. Brabec. 2019. Low-temperature tolerance of maize and sorghum seedlings grown under the same environmental conditions. *Journal of Crop Improvement*; doi.org/10.1080/15427528.2019.1579139.
- Brungardt, J., T.C. Todd, T.R. Oakley, and H.N. Trick. 2019. Assessment of insecticides/miticides treatments on soybean cyst nematode bioassays under greenhouse conditions. *Plant Health Progress*; <https://doi.org/10.1094/PHP-10-18-0058-BR>.

- Cruppe, G., C.D. Cruz, G. Peterson, K. Pedley, M. Asif, A. Fritz, L. Calderon, C.L. da Silva, T. Todd, P. Kuhnem, P.K. Singh, R.P. Singh, H-J. Braun, N.C.D. Barma, and B. Valent. 2019. Novel sources of wheat head blast resistance in modern breeding lines and wheat wild relatives. *Plant Disease*; <https://doi.org/10.1094/PDIS-05-19-0985-RE>.
- Gongora-Canul, C., Salgado, J.D., Singh, D., Cruz, A.P., Cotrozzi, L., Couture, J., Rivadeneira, M.G., Cruppe, G., Valent, B., Todd, T., Poland, J., and Cruz, C.D. 2019. Temporal dynamics of wheat blast epidemics and agreement between remotely sensed data measurements and visual estimations of wheat spike blast (WSB) under field conditions. *Phytopathology*; <https://doi.org/10.1094/PHYTO-08-19-0297-R>.
- Liu, J., P. Shrestha, L.R. Skabelund, T. Todd, A. Decker, M.B. Kirkham. 2019. Growth of prairie plants and sedums in different substrates on an experimental green roof in Mid-Continental USA. *Science of the Total Environment*; <https://doi.org/10.1016/j.scitotenv.2019.134089>.
- Ozbayrak, M., T. Todd, T. Harris, R. Higgins, K. Powers, P. Mullin, L. Sutton and T. Powers. 2019. A CO1 DNA Barcoding Survey of *Pratylenchus* Species in the Great Plains Region of North America. *Journal of Nematology* e2019-81 | Vol. 51; DOI: 10.21307/jofnem-2019-081.
- Peiris, K. H. S., R. L. Bowden, T.C. Todd, W. W. Bockus, M. A. Davis, and F. E. Dowell. Effects of Barley Yellow Dwarf Disease on Wheat Grain Quality Traits. *Cereal Chemistry*; <https://onlinelibrary.wiley.com/doi/epdf/10.1002/cche.10177>.
- Powers, T., A. Skantar, T. Harris, R. Higgins, P. Mullin, S. Hafez, Z. Handoo, T. Todd, K. Powers. 2019. DNA barcoding evidence for the North American presence of alfalfa cyst nematode, *Heterodera medicaginis*. *Journal of Nematology* e2019-16 | Vol. 51, DOI: 10.21307/jofnem-2019-016.
- Reyes Gaige, A., M. Giraldo, T. Todd and J. Stack. 2019. Growth and colonization of organic matter in soil by *Fusarium proliferatum*. *Canadian Journal of Plant Pathology* 41:242-250; DOI: 10.1080/07060661.2018.1522374.
- Tian, B., J. Li, L.O. Vodkin, T.C. Todd, J.J. Finer, and H.N. Trick. 2019. Host-derived gene silencing of parasite fitness genes improves resistance to soybean cyst nematodes in stable transgenic soybean. *Theoretical and Applied Genetics*; <https://doi.org/10.1007/s00122-019-03379-0>.
- Reyes Gaige, A., T. Todd and J. Stack. 2020. Interspecific competition for colonization of maize plants between *Fusarium proliferatum* and *Fusarium verticillioides*. *Plant Disease* 104:2102-2110. <https://doi.org/10.1094/PDIS-09-19-1964-RE>.
- Alasmary, Z., T. Todd, G.M. Hettiarachchi, T. Stefanovska, V. Pidlisnyuk, K. Roozeboom, L. Erickson, L. Davis and O. Zhukov. 2020. Effect of soil treatments and amendments on the nematode community under *Miscanthus* growing in a lead contaminated military site. *Agronomy* 10:1727; doi:10.3390/agronomy10111727.

- Powers, T., T. Todd, T. Harris, R. Higgins, A. MacGuidwin, P. Mullin, M. Ozbayrak, K. Powers, and K. Sakai. 2021. *Pratylenchus smoliki*, a new Nematode Species (Pratylenchidae: Tylenchomorpha) from the Great Plains Region of North America. *Journal of Nematology* e2021-100 | Vol. 53; DOI: 10.21307/jofnem-2021-100.

### **Courses Taught/Co-Taught**

- PLPTH 730 Plant Nematology (1985–present)
- PLPTH 732 Introduction to Plant Resistance to Pests (2006–present)
- PLPTH 755 Plant Resistance to Diseases (2002–present)
- PLPTH 905 Ecology and Epidemiology of Plant Pathogens (2018-present)