Zhiqiang Cheng

College of Tropical Agriculture and Human Resources

Department of Plant and Environmental Protection Sciences

FTE Distribution: 25% I; 15% R; 60% E

Education

Degree	University	<u>wajor</u>
Bachelors, 2000	Nanjing University, China	Environmental Biology

PhD, 2007 The Ohio State University Environmental Science

Professional Appointments

<u>Title</u>	Employer	Dates Employed
Extension Specialist	University of Hawaii at Manoa	2023-Present
Associate Extension Specialist	University of Hawaii at Manoa	2018 to 2023
Assistant Extension Specialist	University of Hawaii at Manoa	2013 to 2018
Post-Doctoral Researcher	The Ohio State University	2007 to 2013

Courses Taught

Course Number and Title (credits)

Spring 2014: PEPS 491, Special Topics: Turfgrass Pest Management, 2 credits

Spring 2014: PEPS 660, Seminar in Plant Pathology, 1 credit

Spring 2014: PEPS 691, Special Topics: Current Topics in Nematology, 1 credit

Fall 2014: PEPS/TPSS 418, Turfgrass Pest Management, 4 credits

Fall 2014: PEPS 691, Special Topics: Current Topics in Nematology, 1 credit

Spring 2015: PEPS 691, Special Topics: Current Topics in Nematology, 1 credit

Fall 2015: PEPS/TPSS 418, Turfgrass Pest Management, 4 credits

Fall 2015: PEPS 691, Special Topics: Current Topics in Nematology, 1 credit

Spring 2016: PEPS 691, Special Topics: Current Topics in Nematology, 1 credit

Summer 2016: PEPS 615L, Diagnosis and Management of Tropical Plant Diseases Laboratory, 2 credits

Fall 2016: PEPS 491, Special Topics: Turfgrass Pest Management, 3 credits

Fall 2016: PEPS 691, Special Topics: Current Topics in Nematology, 1 credit

Spring 2017: PEPS 691, Special Topics: Current Topics in Nematology, 1 credit

Fall 2017: PEPS 491, Special Topics: Turfgrass Pest Management, 3 credits

Fall 2017: PEPS 691, Special Topics: Current Topics in Nematology, 1 credit

Spring 2018: PEPS 691, Special Topics: Current Topics in Nematology, 1 credit

Fall 2018: PEPS 405, Plant Pathogens and Diseases, 2 credits (4-credit course, co-taught with Dr. Stephen Ferreira)

Fall 2018: PEPS 660, Tropical Plant Pathology Seminar, 1 credit

Fall 2018: PEPS 691, Special Topics: Current Topics in Nematology, 1 credit

Fall 2019: PEPS 405, Plant Pathogens and Diseases, 4 credits

Fall 2019: PEPS 691, Special Topics: Current Topics in Nematology, 1 credit

Spring 2020: PEPS 421, Foundations of Pest Management, 1 credit (4-credit course, co-taught with 3 other instructors)

Fall 2020: PEPS 405, Plant Pathogens and Diseases, 4 credits

Fall 2020: PEPS 691, Special Topics: Current Topics in Nematology, 1 credit

Spring 2021: PEPS 421, Foundations of Pest Management, 1 credit (4-credit course, co-taught with 3 other instructors)

Fall 2021: PEPS 405, Plant Pathogens and Diseases, 4 credits

Fall 2021: PEPS 691, Special Topics: Current Topics in Nematology, 1 credit

Spring 2022: PEPS 421, Foundations of Pest Management, 1 credit (4-credit course, co-taught with 3 other instructors)

Spring 2022: PEPS 660, Seminar in Plant Pathology, 1 credit

Fall 2022: PEPS 405, Plant Pathogens and Diseases, 4 credits

Fall 2022: PEPS 691, Special Topics: Current Topics in Nematology, 1 credit

Spring 2023: PEPS 421, Foundations of Pest Management, 1 credit (4-credit course, co-taught with 3 other

instructors)

Fall 2023: PEPS 405, Plant Pathogens and Diseases, 4 credits

Fall 2023: PEPS 691, Special Topics: Current Topics in Nematology, 1 credit

Awards

2019 Award of Arboricultural Research, Western Chapter of the International Society of Arboriculture, 2020. https://wcisa.net/membership/awards

Publications (reverse chronological order)

Conference Proceedings

Cheng, Z., Douglas S. Richmond, John Cardina, Seppo O. Salminen, and Parwinder S. Grewal. Influence of management intensity on the ecology of urban lawns. Conference Proceedings: Emerging Issues – along urban/rural interfaces 2, pp. 304-305. April 9-12, 2007. Atlanta, GA.

Cheng, Z., Parwinder S. Grewal, and Benjamin R. Stinner. Effects of lawn management practices on soil nematode community and nutrient pools. Conference Proceedings: The First International Conference on Environmental Science and Technology (2005), American Academy of Sciences, Vol. 2, pp. 244. January 23-26, 2005. New Orleans, LA.

Refereed Journal Publications

Russo, M., M. Kellar, and **Z. Cheng.** 2023. The Implementation of Systemic Insecticides and Increased Irrigation against Gall Wasp and Scale Insect Pests Attacking *Ficus* Trees in Hawaii. Florida Entomologist, 106(4): 244-247.

Russo, M., P. Waisen, H. Lutgen, and **Z. Cheng**. 2023. Field evaluation of organic and synthetic insecticides against the hala scale, *Thysanococcus pandani* (Hemiptera: Halimococcidae), on Maui, Hawaii. Journal of Economic Entomology, 116(6): 2070–2075.

Waisen, P., **Z. Cheng**, and R. Criley. 2023. Effects of *Pseudomonas chlororaphis* strain AFS009 and *Beauveria bassiana* strain GHA against plumeria rust in Hawaii. Plant Protection Science, 59: 202–207. (short communication)

Xu, H., J. Pang, J. Li, and **Z. Cheng**. 2022. A newly-recorded species of the genus *Rhodotritoma* Arrow, 1925 (Coleoptera, Erotylidae) from China. Biodiversity Data Journal 10: e96740. doi: 10.3897/BDJ.10.e96740

Waisen, P., **Z. Cheng**, B.S. Sipes, and K.-H. Wang. 2022. Biofumigation effects of Brassicaceous cover crops on soil health in cucurbit agroecosystems in Hawaii. Pedosphere, 32(4): 521–531.

Cheng, Z. 2021. Management of leaf and sheath spot (mini ring) on hybrid bermudagrass in Hawaii. International Turfgrass Society Research Journal, 2021: 1–4. https://doi.org/10.1002/its2.66 (short communication)

Lindsey, A.J., J. DeFrank, and **Z. Cheng**. 2020. Bermudagrass suppression and goosegrass control in seashore paspalum turf. Journal of Applied Horticulture, 22(2): 92-96.

Waisen, P., **Z. Cheng**, B.S. Sipes, J. DeFrank, S.P. Marahatta, and K.-H. Wang. 2020. Effects of biofumigant crop termination methods on suppression of plant-parasitic nematodes. Applied Soil Ecology, 154, Article 103595.

Manandhar, M., J. Li, and **Z. Cheng**. 2020. Survey of entomopathogenic nematodes in various landscape systems on Oahu, Hawaii, and their pathogenicity against coconut rhinoceros beetle (Coleoptera: Scarabaeidae). Nematropica, 50(1): 36-44.

Lindsey, A.J., J. DeFrank, and **Z. Cheng**. 2019. Seashore Paspalum and Bermudagrass Response to Spray Applications of Postemergence Herbicides. HortTechnology 29 (3), 251-257.

- **Cheng, Z.**, H. Melakeberhan, S. Mennan, and P. S. Grewal. 2018. Relationship between soybean cyst nematode, *Heterodera glycines*, and soil nematode communities under long-term tillage and crop rotation systems. Nematropica, 48(1): 101-115.
- Michalski, J., and **Z. Cheng**. 2018. Effects of "lights out" turfgrass renovation on plants, soil arthropod and nematode communities. Applied Soil Ecology, 127: 144–154.
- **Cheng, Z.**, M. Kellar, N. Nagata, B. Bhandari, and R. Manandhar. 2018. Lobate lac scale (*Paratachardina pseudolobata* Kundo and Gullan) invades from Oahu into neighbor islands: state-wide survey in Hawaii. Proceedings of the Hawaiian Entomological Society, 50: 1–8.
- Zhao, Y., G. Ren, **Z. Cheng**, G. Huang, and J. Li. 2018. Taxonomy of *Aulacochilus*Chevrolat (Coleoptera: Erotylidae:Erotylinae) From China, With aKey Based on Adult Characters. Journal of Insect Science, 18(2): 27; 1–5.
- Bhandari, B. P., and **Z. Cheng**. 2018. Lobate lac scale, *Paratachardina pseudolobata* (Hemiptera: Keriidae), in Hawaii's urban landscape: hosts and management. International Journal of Tropical Insect Science, 38(1): 71-76. (co-first author)
- Bal, H., N. Acosta, **Z. Cheng**, P. S. Grewal, and C. Hoy. 2017. Effect of habitat and soil management on dispersal and distribution patterns of entomopathogenic nematodes. Applied Soil Ecology, 121: 48-59.
- Li, J., Y.-C. Zhao, G.-D. Ren, and **Z. Cheng**. 2017. Taxonomic study on specimens of the genus *Micrencaustes* deposited in the Bernice P. Bishop Museum (Coleoptera, Erotylidae). ZooKeys, 645: 27-35.
- Moore, A., R. Quitugua, I. Iriarte, M. Melzer, S. Watanabe, **Z. Cheng**, and J.M. Barnes. 2016. Movement of Packaged Soil Products as a Dispersal Pathway for Coconut Rhinoceros Beetle, *Oryctes rhinoceros* (Coleoptera: Scarabaeidae) and Other Invasive Species. Proceedings of the Hawaiian Entomological Society, 48: 21-22.
- Bhandari, B. P., and **Z. Cheng**. 2016. Trunk injection of systemic insecticides to control stem and leaf gall wasps, *Josephiella* species (Hymenoptera: Agaonidae), on Chinese banyan (Rosales: Moraceae) in Hawaii. Florida Entomologist, 99(2): 172-177.
- Sharma, K., **Z. Cheng**, and P. S. Grewal. 2015. Relationship between soil heavy metal contamination and soil food web health in vacant lots slated for urban agriculture in two post-industrial cities. Urban Ecosystems, 18: 835-855.
- Wang, K.-H., T. Radovich, A. Pant, and **Z. Cheng**. 2014. Evaluating soil and plant health improvement effects of cover crops and vermicompost water extract in a short-term vegetable cropping system. Applied Soil Ecology, 82: 26-37.
- Bal, H. K., N. Acosta, **Z. Cheng**, H. Whitehead, P. S. Grewal, and C. W. Hoy. 2014. Effect of soil management on *Heterorhabditis bacteriophora* GPS11 persistence and biological control in a vegetable production system. Biological Control, 79: 75-83.
- **Cheng, Z.**, E. L. McCoy, and P. S. Grewal. 2014. Water, sediment, and nutrient runoff from urban lawns established on subsoil or topsoil and managed with inorganic or organic fertilizers. Urban Ecosystems, 17: 277-289.
- Reeves, J., **Z. Cheng**, J. Kovach, M. D. Kleinhenz, and P. S. Grewal. 2014. Quantifying soil health and tomato crop productivity in urban community and market gardens. Urban Ecosystems, 17: 221-238.
- Knight, A., **Z. Cheng**, S. S. Grewal, K. R. Islam, M. D. Kleinhenz, P. S. Grewal. 2013. Soil health as a predictor of lettuce productivity and quality: A case study of urban vacant lots. Urban Ecosystems, 16: 637-656.
- Grewal, S. S., **Z. Cheng**, S. Masih, M. Wolboldt, N. Huda, A. Knight, and P. S. Grewal. 2011. An assessment of soil nematode food webs and nutrient pools in community gardens and vacant lots in two post-industrial American cities. Urban Ecosystems, 14: 181-194.

- **Cheng, Z.**, S. O. Salminen, and P. S. Grewal. 2010. Effect of organic fertilizers on the greening quality, shoot and root growth, and shoot nutrient and alkaloid contents of turf-type endophytic tall fescue, *Festuca arundinacea*. Annals of Applied Biology, 156: 25-37.
- Park, S., **Z. Cheng**, B. B. McSpadden Gardener, and P. S. Grewal. 2010. Are nematodes effective bioindicators of soil conditions and processes along distance from roads and age of development in urban areas? Journal of Environmental Indicators, 5: 28-47.
- Park, S., **Z. Cheng**, H. Yang, E. E. Morris, M. Sutherland, B. B. McSpadden Gardener, and P. S. Grewal. 2010. Differences in soil chemical properties with distance to roads and age of development in urban areas. Urban Ecosystems, 13: 483-497.
- **Cheng, Z.**, and P. S. Grewal. 2009. Dynamics of the soil nematode food web and nutrient pools under tall fescue lawns established on soil matrices resulting from common urban development activities. Applied Soil Ecology, 42: 107–117.
- **Cheng, Z.**, D. S. Richmond, S. O. Salminen, and P. S. Grewal. 2008. Ecology of urban lawns under three common management programs. Urban Ecosystems, 11: 177-195.
- Cheng, Z., P. S. Grewal, B. R. Stinner, K. A. Hurto, and H. B. Hamza. 2008. Effects of long-term turfgrass management practices on soil nematode community and nutrient pools. Applied Soil Ecology, 38: 174-184.
- Briar, S. S., G. B. Jagdale, **Z. Cheng**, C. W. Hoy, S. A. Miller, and P.S. Grewal. 2007. Indicative value of soil nematode food web indices and trophic group abundance in differentiating habitats with a gradient of anthropogenic impact. Environmental Bioindicators, 2: 146-160.
- Long, C., Q. Zhang, Z. Xu, A. Li, J. Chen, and **Z. Cheng**. 2002. Treatment of DSD acid manufacturing wastewater on macroporous resin.Ion Exchange and Adsorption, 18(1): 45-50.
- **Cheng, Z.** 2001. Distribution and comparison of heavy metal Cu and radioactive nuclein ³H in crucian body. Jiangsu Environmental Science and Technology, 14(3): 5-6.
- Long, C., Q. Zhang, Z. Xu, J. Chen, A. Li, and **Z. Cheng**. 2001. Adsorption and desorption of DSD acid manufacturing wastewater on macroporous resin. Chinese Journal of Reactive Polymers, 10(1): 37-44.

Extension Publications

- Lutgen, H., R. Galanti, **Z.** Cheng, and J. Bloese. 2023. Ornamental Pests of Hawai'i: Disease Management of *Protea* and *Leucospermum* spp. CTAHR Extension, Ornamentals and Flowers, September 2023, OF-61.
- Lutgen, H., R. Galanti, L. Sugiyama, B. Bushe, E. Brill, B. Luiz, L. Keith, C. Mello, R. Myers, **Z. Cheng**, and J. Bloese. 2023. Ornamental Pests of Hawai'i: Fungal and Nematode Associations and Symptoms on *Protea* and *Leucospermum* spp. CTAHR Extension, Ornamentals and Flowers, August 2023, OF-60.
- **Cheng, Z.** 2023. 2022 Hawaii Golf Course Superintendent of the Year: Mr. Chad Higaki. Landscape Hawaii, March/April 2023: 5-6.
- Russo, M., and **Z.** Cheng, 2022. Current Distribution of the Hala Scale, *Thysanococcus pandani*, in Hawaii. Landscape Hawaii, January/February 2022: 17-19.
- **Cheng, Z.** 2020. Research update on management of turfgrass fungal disease take-all patch in Hawaii. Landscape Hawaii, November/December 2020: 26-29.
- **Cheng, Z.** 2020. Research update on management of turfgrass fungal disease leaf and sheath spot in Hawaii. Landscape Hawaii, July/August 2020: 18-19.

Cheng, Z. 2020. Turfgrass and Landscape Pest Management in Hawaii. Cooperative Extension Impact Statement, June 2020. https://gms.ctahr.hawaii.edu/gs/handler/getmedia.ashx?moid=67127&dt=3&g=12

Cheng, Z. 2020. The care and feeding of your lawn. CTAHR News, June 22, 2020. https://cms.ctahr.hawaii.edu/NewsLetter/ArtMID/52574/ArticleID/1726/The-Care-and-Feeding-of-Your-Lawn

Cheng, Z., M. Kellar, and M. Russo. 2019. Research update on management of new invasive pests of *Ficus* trees in Hawaii's urban landscapes. Western Arborist, Fall 2019, Volume 45, Number 3: 46-48.

Fu, Z., S. Chavoshi, H. Mojtahedi, S. Sathuvalli, K.S. Grimm, I. Zasada, and **Z. Cheng**. 2019. Stubby root nematodes and associated corky ringspot disease. Potato Progress, February 2019, Volume XIX, Number 1.

Cheng, Z., and N. Nagata. 2019. Research update on management of frit fly, a challenging turfgrass pest in Hawaii. Landscape Hawaii, January/February 2019: 24-25.

Cheng, Z. 2018. Nematodes associated with turfgrass in Hawaii. Landscape Hawaii, March/April 2018: 22-23.

Lindsey, A., J. DeFrank, and **Z. Cheng**. 2017. Incorporating goose grass and Bermuda grass management with renovation of seashore paspalum greens. Landscape Hawaii, November/December 2017: 8-11.

Cheng, Z. 2017. Current and recent research projects in Turfgrass and Landscape pest management Lab at University of Hawaii at Manoa. Landscape Hawaii, July/August 2017: 24-26.

DeFrank, J., **Z. Cheng**, and A.J. Lindsey. 2017. Research update on Bermuda grass treatment. Landscape Hawaii, May/June 2017: 16-17.

Cheng, Z. 2017. Frit fly: A challenging turfgrass pest in Hawaii. Landscape Hawaii, March/April 2017: 28.

Cheng, Z., and J. DeFrank. 2016. Suppressing bermudagrass in seashore paspalum turf. Landscape Hawaii, September/October 2016: 30.

Cheng, Z. 2016. Fungal disease take-all patch of turfgrass in Hawaii. Landscape Hawaii, March/April 2016: 12-13.

Cheng, Z. 2015. Leaf and sheath spot of turfgrass in Hawaii. Landscape Hawaii, September/October 2015: 25.

Cheng, Z., and B.P. Bhandari. 2015. Lobate Lac Scale (*Paratachardina pseudolobata*): Invasive plant insect pest invades Oahu's urban landscape. Landscape Hawaii, March/April 2015: 16-17.

Cheng, Z., E. Sanders, and G. Nakashima. 2015. Rover ant control in Hawaii. Golf Course Management Magazine, April 2015: 95.

Cheng, Z. 2015. Benefits of turf to the environment. Landscape Hawaii, January/February 2015: 23-24.

Cheng, Z., and B.P. Bhandari. 2015. Biology, Management, and Updated Host Range of the Lobate Lac Scale (*Paratachardina pseudolobata*) in Hawai'i's Urban Landscapes. CTAHR Extension, Insect Pests, January 2015, IP-34.

Cheng, Z., and J. DeFrank. 2014. "Lights Out" – A pesticide-free way for turf restoration and weed control.Landscape Hawaii, September/October 2014: 10-11.

Cheng, Z. 2014. Soil food web: The foundation of turfgrass growth and health. Landscape Hawaii, May/June 2014: 24-25.

Cheng, Z. 2013. Turfgrass integrated pest management. Hānai 'Ai (CTAHR Sustainable and Organic Agriculture Program Newsletter), December 2013 l January/February 2014.

Cheng, Z. 2013. Brief introduction on turfgrass IPM, Part II. Landscape Hawaii, September/October 2013: 25.

Cheng, Z. 2013. Brief introduction on turfgrass IPM, Part I. Landscape Hawaii, July/August 2013: 25-27.

Cheng, Z., S. O. Salminen, and P. S. Grewal. 2009. Effect of organic fertilizers on the quality and shoot alkaloid contents of endophytic tall fescue. TurfNews, September 2009: 1-2.

Cheng, Z., P. S. Grewal, B. R. Stinner, K. A. Hurto, and H. B. Hamza. 2009. How do long-term organic and chemical turfgrass management practices influence soil microbial biomass, organic matter and the food web? News from Ohio Lawn Care Association, Spring 2009: 15-19.

Cheng, Z., D. S. Richmond, S. O. Salminen, and P. S. Grewal. 2008. Effectiveness of professional and do-it-yourself (DYI) approaches to lawn care: A survey of home lawns. TurfNews, September 2008: 1-2.

Cheng, Z., E. McCoy, D. Gardener, and P. S. Grewal. 2008. Assessing nutrient runoff from turfgrass lawns established on subsoil and topsoil: a preliminary report. News from Ohio Lawn Care Association, Summer 2008: 16-18.

Grewal, P. S., **Z. Cheng**, and E. L. McCoy.2005. Turfgrass is an effective means of controling soil erosion and run-off. TPI Turf News, May/June 2005: 44.

<u>Creative Works (i.e., Extension Videos, Websites, Blogs, Creative Designs and Exhibitions, etc.)</u>
University of Hawaii Turfgrass Management Extension Program website:
http://turfgrass.ctahr.hawaii.edu/index.shtml

University of Hawaii at Manoa Turfgrass and Landscape Pest Management Lab website: https://cms.ctahr.hawaii.edu/cheng/

Leadership Roles (Committees, Boards, Advisory, etc.)

Search committee chair for PEPS tenure-track Assistant Extension Agent Position for Pesticide Safety Education (2023-2024);

Search committee member for PEPS tenure-track Assistant Specialist Position for Entomology in Hilo (2023-2024);

PEPS DPC Chair (2023-2024 cycle);

TAE curriculum committee member (2023 to 2025);

UH Manoa Tenure and Promotion Review Committee, 2022-2023 cycle;

Faculty advisor, Hawaii Golf Course Superintendents Association Board of Directors. 2022 to present

CTAHR Faculty Senate (2021 to 2024). Extension Committee chair (2021 - 2022); Senate Executive Committee member (2022 – 2024);

CTAHR-CAFNRM (UH Hilo) collaboration committee member (2020);

President, Hawaiian Entomological Society (2020-2021);

Search committee member for TPSS tenure-track Assistant Researcher in Urban Horticulture and Landscape Management position (2019. Position is frozen due to COVID pandemic);

Search committee chair for Pesticide Training APT position (2019. Position is frozen due to COVID pandemic);

Search committee member for tenure-track Assistant/Junior Extension Agent Position for Floriculture and Nursery Industry in Hilo (2019. Position is frozen due to COVID pandemic);

CTAHR Faculty Senate (2019 to 2021), and Instruction Committee chair (2019 - 2020);

Search committee member for CTAHR ADSC Manager position (2019);

UH System-wide agriculture panel (2019);

IR-4 Program PI and coordinator (April 2018 – present);

Steering committee member and chapter author, Hawaii Golf Course Best Management Practice Handbook. 2018 to 2019;

Pest Control Board member, State of Hawaii Department of Commerce and Consumer Affairs. January 2018 to September 2019;

CTAHR Instruction workload committee member (2018);

TAE curriculum committee member (2018 to present), and committee chair (November 2020 – present);

PEPS DPC member (2018 to present);

Co- Chief Judge and Coordinating Committee member, 2018 CTAHR/COE Student Research Symposium. April 2018. Honolulu, HI;

Organizer and Chair of the symposium "Palm Pests" in the 2017 Pacific Entomology Conference in Honolulu, HI, December 2017;

ad hoc review committee member for CTAHR State-wide IPM project proposals administered by Dr. Mark Wright (PEPS) (2017);

Co- Chief Judge and Coordinating Committee member, 2017 CTAHR/COE Student Research Symposium. April 2017. Honolulu, HI;

Organizer and host, 2016 Western Regional Turfgrass Research Group (WERA-011) meeting in Honolulu, July 24 to 27, 2016. Seventeen turfgrass professors and scientists from nine U.S. states and territory attended this meeting;

Organizer and Chair of the symposium "Nematode Adaptation to Extreme Environments" in The Society of Nematologists and Organization of Nematologists of Tropical America joint meeting in Montreal, Canada, July 2016:

Chair, Ecology Committee of the Society of Nematologists, 2016;

Chair of Search Committee for the tenure-track Assistant/Junior Extension Agent Position for Floriculture and Nursery Industry in Hilo (January 2016 – August 2017);

PEPS representative for multi-departmental Magoon greenhouse committee (May 2016 – present);

PEPS mediation committee (2016);

Co- Chief Judge and Coordinating Committee member, 2016 CTAHR/COE Student Research Symposium. April 2016. Honolulu, HI;

Chief Judge and Coordinating Committee member, 2015 CTAHR/COE Student Research Symposium. April 2015. Honolulu, HI;

Co-manage Sui Shan & Easton Scholarship (February 2015 - present);

CTAHR Faculty Senate (2014 - 2016), and Elections Committee member (2015 - 2016);

CTAHR's Revenue Generation Sub-Committee (2014-2015);

Judge and Coordinating Committee member, 2014 CTAHR/COE Student Research Symposium. April 2014. Honolulu, HI:

Hawaii representative for the Western Regional Turfgrass Research Group (WERA-011), 2014 to present;

Member of CTAHR Strategic Planning Revenue Generation team (2013-2014);

Initiator and coordinator of "Turf Column" in a professional magazine "Landscape Hawaii", published by Landscape Industry Council of Hawaii (LICH). 2013 to present.

Search Committee member for tenure-track AgroSecurity Assistant Researcher Position (2013);

Judge and member of the Awards Committee for 2013 Association for Environmental Studies and Sciences (AESS) Conference Student Award. June 2013. Pittsburgh, PA.

Graduate Students

<u>Category</u>	Current Number of Students	Number Graduated (Career)
Chair of Master's Committees	3	8
Chair of PhD Committees	1	0
Member of Master's Committees	2	15
Member of PhD Committees	0	3

Grant Support

Active Grants as of December 2023, as PI:

Cheng, Z. 2023-2024. Management of hala scale in Hawaii, and survey of its potential biological control agents in its native range. USDA APHIS Farm Bill, \$51,225.

Kalsi, M., and **Z. Cheng**. 2023-2024. A biological alternative to chemical pesticides to control corn earworm in Hawaii. USDA-NIFA Small Business Innovation Research Grants Program. \$87,499 (sub-award amount to UH Cheng's Program).

Cheng, Z. 2023-2024. Continuation of American Pacific Island Workgroup. Western IPM Center. \$29,958.

Cheng, Z. 2022-2024. IR-4 Minor Crop Pest Management FY22. University of California, Davis (through USDA NIFA). \$120,555.

Cheng, Z. 2022-2025. Coordinated Approach to Coffee Leaf Rust, Objective 3A: Field and laboratory research to identify effective and safe fungicides. Synergistic Hawaii Agriculture Council (through USDA SCRI). \$262,488.

Cheng, Z., and M. Melzer. 2019-2024. Biological and Chemical Control of Oriental Flower Beetle, *Protaetia Orientalis* (Phase 2). CTAHR Competitive Supplemental Grant Program (through USDA-ARS). \$40,000.

Grants received in 2022 and before: information available upon request.

Career Total as Principal Investigator (PI) = \$2,031,339 Career Total as Co-PI = \$20,198,362 Career Total as PI and Co-PI = \$22,229,701

Presentations at Conferences

- * First author of presentation is the presenter, unless otherwise noted.
- Cheng, Z., M. Russo, J. Li., and R. Manandhar. Research update on management of coconut rhinoceros beetle (*Oryctes rhinoceros*) in Hawaii. 2023 Pacific Entomological and Botanical Meeting. December 6-8, 2023. Honolulu, HI.
- Russo, M., **Z. Cheng**, and T. Ticktin. Evaluating the impacts of the hala scale, *Thysanococcus pandani* Stickney on native hala forest, *Pandanus tectorius*, regeneration in the Hawaiian Islands. 2023 Pacific Entomological and Botanical Meeting. December 6-8, 2023. Honolulu, HI.
- Cheng, Z., M. Russo, J. Li., and M. Kellar. Management of coconut rhinoceros beetle (*Oryctes rhinoceros*) in Hawaii. 2023 Annual Entomological Society of America (ESA) meeting. November 5-8, 2023. National Harbor, MD.
- Russo, M., **Z. Cheng**, P. Waisen, and H. Lutgen. Research updates for the geographical distribution and chemical control of the hala scale, *Thysanococcus pandani* Stickney, throughout the Hawaiian Islands. 2023 Annual Entomological Society of America (ESA) meeting. November 5-8, 2023. National Harbor, MD.
- **Cheng, Z.**, M. Russo, and J. Li. Potential of using entomopathogenic nematodes and entomopathogenic fungi as biological control agents against coconut rhinoceros beetle, a key pest of coconut palms in Hawaii. 53rd Organization of Nematologists of Tropical America (ONTA) Annual Meeting. September 24-29, 2023. Cairo, Egypt.
- **Cheng, Z.** Research updates on several important landscape pests in Hawaii: coconut rhinoceros beetle, oriental flower beetle, and hala scale. 2023 Annual Landscape Industry Council of Hawaii (LICH) Green Industry Conference and Trade Show. September 14, 2023. Honolulu, HI.
- Cheng, Z., M. Russo, J. Li, and M. Kellar. Biological and chemical control of coconut rhinoceros beetle (Oryctes rhinoceros), a key pest of coconut palms in Hawaii. The 4th Asian Horticultural Congress. August 28-31, 2023. Tokyo, Japan.
- Cheng, Z., J. Coughlin, E. Buchholz, and J. Kam. Field Efficacy of Various Systemic and Biological Fungicides against Coffee Leaf Rust in Hawaii (poster). 12th International Congress of Plant Pathology. August 20-25, 2023. Lyon, France.
- Cheng, Z., E. Buchholz, J. Coughlin, and J. Kam. Research update on management of Coffee Leaf Rust in Hawaii using systemic and biological fungicides. 2023 CTAHR Invasive Pest Conference. August 9-10, 2023. Honolulu,
- Russo, M., **Z. Cheng**, and T. Ticktin. Evaluating the impacts of the hala scale, *Thysanococcus pandani* Stickney on native hala forest regeneration in the Hawaiian Islands. 2023 Society of Island Biology Conference. July 2-7, 2023. Lipari, Italy.
- **Cheng, Z.** Research update on management of frit fly, a challenging turfgrass pest in Hawaii. 2023 Annual ESA Pacific Branch meeting. April 02-05, 2023. Seattle, WA.
- **Cheng, Z.**, K. Choi, P. Waisen, and M. Russo. Effects of Low-Risk Insecticides Against Oriental Flower Beetle, *Protaetia orientalis*, in Lab Assays. 2022 Annual Entomological Society of America (ESA) meeting. November 13-16, 2022. Vancouver, BC, Canada.
- Russo, M., and **Z. Cheng**. Evaluation of commercial and locally occurring entomopathogenic fungi as a potential tool to control the coconut rhinoceros beetle, *Oryctes rhinoceros* on Oahu, Hawaii. 2022 Annual Entomological Society of America (ESA) meeting. November 13-16, 2022. Vancouver, BC, Canada.
- Cheng, Z., and K. Mitsuda. Foliar nematode control on ornamental fern with reduced risk nematicides and cross

- check on phytotoxicity risk of several new nematicides. 2022 Annual Society of Nematologists Meeting. September 26-29, 2022, Anchorage, AK.
- **Cheng Z.**, M. Russo, J. Li, and M. Kellar. Biological and chemical control of coconut rhinoceros beetle (*Oryctes rhinoceros*), a recent invasive pest on Oahu, Hawaii. XXVI International Congress of Entomology. July 17-22, 2022. Helsinki, Finland.
- Russo, M., **Z.** Cheng, p. Waisen, and H. Lutgen. Chemical control of Hala Scale, *Thysanococcus pandani*, and its current geographic distribution on the Hawaiian Islands. XXVI International Congress of Entomology. July 17-22, 2022. Helsinki, Finland.
- **Cheng, Z.** Management of turfgrass fungal disease leaf and sheath spot (mini ring) on Bermuda grass in Hawaii. 14th International Turfgrass Research Conference. July 10-15, 2022. Copenhagen, Denmark.
- **Cheng Z.**, M. Russo, and P. Waisen. Research updates on hala scale management and its statewide distribution in Hawaii. 2022 Annual ESA Pacific Branch meeting. April 10-13, 2022. Santa Rosa, CA & Virtual.
- Russo, M., **Z. Cheng**, K. Choi, and P. Waisen. Field evaluation of systemic insecticides against the coconut rhinoceros beetle, *Oryctes rhinoceros*, on Oahu Hawai'i. 2022 Annual ESA Pacific Branch meeting. April 10-13, 2022. Santa Rosa, CA & Virtual.
- **Cheng, Z.** M. Russo, and P. Waisen. Updates on hala scale management research and its statewide distribution in Hawaii. 2022 CTAHR Invasive Pest Mini-Conference Series. March 23, 2022. Distantly presented to attendees statewide.
- Cheng, Z., M. Kellar, M. Russo, and B. Bhandari. Modern chemical approaches in management of several key landscape pests in Hawaii. Pacifichem 2021 Congress (virtual). December 16-21, 2021.
- Choi, K., P. Waisen, and **Z. Cheng**. Laboratory Efficacy of Low-Risk Insecticides and Entomopathogenic Fungi on the Oriental Flower Beetle Larvae, *Protaetia orientalis* (poster). 2021 Annual Entomological Society of America (ESA) meeting. October 31 November 03, 2021. Denver, CO & Virtual.
- **Cheng, Z.**, and M. Russo. Research update on biological and chemical control of coconut rhinoceros beetle in Hawaii. 2021 Hawaii Conservation Conference (virtual). July 27-29, 2021.
- **Cheng, Z.**Management of several key landscape pests in Hawaii. 2020 Annual Britton Fund Conference. December 17, 2020. Virtual via Zoom.
- **Cheng. Z.**, M. Russo, P. Waisen, and K. Choi. Research update on control of coconut rhinoceros beetle (*Oryctes rhinoceros*)in Hawaii. 2020 Annual Entomological Society of America (ESA) meeting (virtual). November 11-25, 2020.
- Waisen, P., and **Z. Cheng**. Evaluating the effects of insecticides against lobate lac scale, *Paratachardina peudolobata* (Hemiptera: Kerriidae) on hibiscus. 2020 Annual Entomological Society of America (ESA) meeting (virtual). November 11-25, 2020.
- Choi, K., P. Waisen, and **Z. Cheng**. Laboratory Efficacy of Low-Risk Insecticides on the Oriental Flower Beetle Larvae, *Protaetia orientalis* (virtual poster). 2020 Annual Entomological Society of America (ESA) meeting (virtual). November 11-25, 2020.
- **Cheng, Z.** Management of some important landscape and turfgrass pests in Hawaii. 2020 CTAHR Invasive Pest Mini-Conference Series. August 20, 2020. Distantly presented to attendees statewide.
- Russo, M., **Z. Cheng**, K. Mitsuda, J. Li, and M. Kellar. Potential use of local strains of entomopathogenic fungus to control the coconut rhinoceros beetle, *Oryctes rhinoceros*, on Oahu, Hawai'i(virtual poster). 2019 Annual Entomological Society of America (ESA) meeting. November 17-20, 2019. St. Louis, MO.

- Cheng, Z. Invasive species in Hawaii (panel discussion presentation). 2019 Hawaii Agriculture Conference. October 15-16, 2019. Honolulu, HI.
- **Cheng, Z.** Research updates on management of several important landscape and turfgrass pests in Hawaii. 2019 Annual Landscape Industry Council of Hawaii (LICH) Green Industry Conference and Trade Show. October 14, 2019. Honolulu, HI.
- **Cheng, Z.** Research updates on management of several landscape pests in Hawaii –Coconut Rhinoceros Beetle, Lobate Lac Scale, Ficus Stem and Leaf Gall Wasps. 2019 CTAHR Invasive Pest Conference. August 22-23, 2019.Hilo, HI.
- **Cheng, Z.** Effectiveness of fungicide programs against turfgrass fungal disease leaf and sheath spot (mini ring) on Bermuda grass in Hawaii. 2019 American Phytopathological Society (APS) annual meeting. August 3-7, 2019. Cleveland, OH.
- **Cheng, Z.** Management of several key invasive landscape pests in Hawaii. 85th Annual Western Chapter International Society of Arboriculture Conference & Trade Show. April 29 May 2, 2019. Honolulu, HI.
- Russo, M., **Z. Cheng**, K. Mitsuda, J. Li, and M. Kellar. Potential use of local strains of entomopathogenic fungus to control the coconut rhinoceros beetle, *Oryctes rhinoceros*, on Oahu, Hawai'I (virtual poster). 2019 Entomological Society of America (ESA) International Branch annual meeting. April 8-10, 2019. Virtual Symposium.
- Cheng, Z., M. Kellar, B. Bhandari, and M. Russo. Hosts, distribution, and management of lobate lac scale, a recently established landscape pest in Hawaii. 2018 Annual Entomological Society of America (ESA) meeting. November 11-14, 2018. Vancouver, BC, Canada.
- Russo, M., **Z. Cheng**, J. Li, M. Kellar, and K. Mitsuda. Potential use of local strains of entomopathogenic fungus to control the coconut rhinoceros beetle, *Oryctes rhinoceros*, on Oahu, Hawaii. 2018 Annual Entomological Society of America (ESA) meeting. November 11-14, 2018. Vancouver, BC, Canada.
- **Cheng, Z.** Research updates on management of several important landscape and turfgrass pests in Hawaii. 2018 Annual Landscape Industry Council of Hawaii (LICH) Green Industry Conference and Trade Show. October 10, 2018. Honolulu, HI.
- Coughlin, J., J. Kam, M. Kawate, and **Z.Cheng**. Minor Crop Registration (IR4) Pesticide Updates. Research-based Support for Oahu's Fast-Paced Edible Crop Industry. 2018 Hawaii Growers Conference. August 01, 2018. Pearl City, HI.
- Cheng, Z. Application of principal component analysis in ecological nematology research: A hands-on demonstration. 2018 Annual Society of Nematologists Meeting. July 22-25, 2018. Albuquerque, NM.
- Waisen, P., K.-H. Wang, **Z. Cheng**, and B. Sipes. Managing plant-parasitic nematodes and soil health through ecological based biofumigation using brown mustard and oil radish. 2018 Annual Society of Nematologists Meeting. July 22-25, 2018. Albuquerque, NM.
- Alhussaini, A., B. Sipes, K.-H. Wang, and **Z. Cheng**. Identification of the bacterial symbiont from entomopathogenic nematode (*Oscheius*) and its biological control potential (poster). 2018 Annual Society of Nematologists Meeting. July 22-25, 2018. Albuquerque, NM.
- **Cheng, Z.**, M. Kellar, K. Mitsuda, R. Manandhar, and J. Li. Research updates on chemical and biological control of coconut rhinoceros beetle (*Oryctes rhinoceros*) in Hawaii. XVI Pacific Entomology Conference. December 5-7, 2017. Honolulu, HI.
- **Cheng, Z.**, B. Bhandari, and M. Kellar. Management of key pests attacking *Ficus* trees in Hawaii's urban landscapes. XVI Pacific Entomology Conference. December 5-7, 2017. Honolulu, HI.

- **Cheng, Z.**, M. Kellar, and B. Bhandari. Management of key insect pests of *Ficus* trees in Hawaii. 2017 Annual Entomological Society of America (ESA) meeting. November 5-8, 2017. Denver, CO.
- Kellar, M., and **Z. Cheng**. Efficacy of Systemic Insecticides against Coconut Rhinoceros Beetle (Oryctes rhinoceros) in Lab Assays (poster). 2017 Annual ESA meeting. November 5-8, 2017. Denver, CO.
- **Cheng, Z.** Research updates on management of several important landscape and turfgrass pests in Hawaii. 2017 Annual Landscape Industry Council of Hawaii (LICH) Green Industry Conference and Trade Show. October 05, 2017. Honolulu, HI.
- DeFrank, J., A. Lindsey, **Z. Cheng**, L. Jeremiah, I. Hunt, D. Kira, and R. Ito. Incorporating goose grass & Bermuda grass control with renovation of seashore paspalum greens. 2017 Annual Landscape Industry Council of Hawaii (LICH) Green Industry Conference and Trade Show. October 05, 2017. Honolulu, HI.
- **Cheng, Z.**, B. Bhandari, and M. Kellar. Management of stem and leaf gall wasps and lobate lac scale on *Ficus* in Hawaii. 2017 American Society for Horticultural Science (ASHS) Annual Conference. September 19-22, 2017. Waikoloa, HI.
- Lindsey, A., J. DeFrank, and **Z. Cheng**. Response of seashore paspalum (*Paspalum vaginatum*), Bermudagrass (*Cynodon dactylon*), and goosegrass (*Eleusine indica*) to post-emergence herbicides (poster).2017 ASHS Annual Conference. September 19-22, 2017. Waikoloa, HI.
- Marquez, J., K.-H.Wang, B. S. Sipes, and **Z. Cheng**. Improving soil conditions for entomopathogenic nematodes with no-till cover cropping. 2017 The Society of Nematologists Conference. August 13-16, 2017. Williamsburg, VA.
- Waisen, P., K.-H. Wang, **Z. Cheng**, and B. S. Sipes. Effective termination methods of Brassica cover crops for suppression of plant-parasiticnematodes while enhancing soil health. 2017 The Society of Nematologists Conference. August 13-16, 2017. Williamsburg, VA.
- **Cheng, Z.** Management of coconut rhinoceros beetle and lobate lac scale, two new landscape pests in Hawaii. 14th Annual Landscape Industry Council of Hawaii (LICH) Green Industry Conference and Trade Show. October 06, 2016. Honolulu, HI.
- Cheng, Z., M. Kellar, A. Hara, and R. Manandhar. Coconut rhinoceros beetle (*Oryctes rhinoceros*) and its management effort on Oahu in Hawaii. 2016 XXV International Congress of Entomology. September 25-30, 2016. Orlando, FL.
- Wang, K.-H., S. Ching, J. Marquez, S. Mishra, P. Waisen, and **Z. Cheng**. Relationships between cover crop plant available nitrogen mineralization rate and nematode soil health indicators (poster). 2016 Joint Meeting of The Society of Nematologists (SON) and The Organization of Nematologists of Tropical America (ONTA). July 17-22, 2016. Montreal, Canada.
- Waisen, P., K.-H. Wang, **Z. Cheng**, and B.S. Sipes. Developing effective management strategies against plant-parasitic nematodes using oil radish in Hawaii. 2016 Joint Meeting of The Society of Nematologists (SON) and The Organization of Nematologists of Tropical America (ONTA). July 17-22, 2016. Montreal, Canada.
- Marquez, J., K.-H.Wang, B.S. Sipes, and **Z. Cheng**. Understanding the roles of soil water conservation on indigenous entomopathogenic nematodes and entomopathogenic fungi in a no-till organic mulching system (poster). 2016 Joint Meeting of The Society of Nematologists (SON) and The Organization of Nematologists of Tropical America (ONTA). July 17-22, 2016. Montreal, Canada.
- **Cheng, Z.**Management of new invasive landscape pests in Hawaii.2016 Kauai Landscape Conference. July 14, 2016. Lihue, HI.

- Cheng, Z. Turfgrass maintenance and pest management. 2016 Kauai Landscape Conference. July 14, 2016. Lihue, HI.
- **Cheng, Z.**, B. Bhandari, A. Hara, and M. Kellar. Research updates on several important landscape pests in Hawaii: Management of coconut rhinoceros beetle, lobate lac scale, and banyan gall wasps. 2016 Annual ESA Pacific Branch meeting. April 03-06, 2016. Honolulu, HI.
- Kellar, M., and **Z.** Cheng. Lab assay of systemic insecticides on the coconut rhinoceros beetle (*Oryctes rhinoceros*) (poster). 2016 Annual ESA Pacific Branch meeting. April 03-06, 2016. Honolulu, HI.
- Manandhar, R., M. Kellar, and **Z. Cheng**. Survey of entomaopathogenic nematodes on Oahu: potential for the biological control of coconut rhinoceros beetle (poster). 2016 Annual ESA Pacific Branch meeting. April 03-06, 2016. Honolulu, HI.
- **Cheng, Z.** Management effort on Brachymyrmex spp., a nuisance pest in Hawaii's golf courses. 2015 Annual ESA meeting. November 15-18, 2015. Minneapolis, MN.
- **Cheng, Z.**, B.P. Bhandari, P.S. Grewal, and D.S. Richmond. Turf management and the structure of the urban soil food web. 2015 Annual ESA meeting. November 15-18, 2015. Minneapolis, MN.
- Bhandari, B.P., and **Z. Cheng**. Evaluation of trunk injected systemic insecticides to control stem and leaf gall wasps, *Josephiella* species (Agaonidae, Hymenoptera) on *Ficus microcarpa* in Hawai'i. 2015 Annual ESA meeting. November 15-18, 2015. Minneapolis, MN.
- Bhandari, B.P., and **Z. Cheng**. Hosts and management of lobate lac scale, *Paratachardina pseudolobata* Kundo and Gullan, in Hawaii's urban landscape (poster). 13th Annual Landscape Industry Council of Hawaii (LICH) Green Industry Conference and Trade Show. October 08, 2015. Honolulu, HI.
- Wang, K.-H., G. Chen, **Z. Cheng**, M. Quitanilla-Tornel, and C.R.R. Hooks. Contribution of no-till cover cropping to greenhouse gas remediation: Can nematodes tell the tale? 2015 The Society of Nematologists Conference. July 19-24, 2015. East Lansing, MI.
- **Cheng, Z.**, and B.P. Bhandari. Research updates on management of brachymyrmex spp. and lobate lac scale, two challenging pests of Hawaii's turfgrass and landscape plants, respectively. XV Pacific Entomology Conference. April 1-3, 2015. Honolulu, HI.
- Bhandari, B.P., and **Z. Cheng**. Management of stem and leaf gall wasps, *Josephiella* species, on *Ficus microcarpa* in Hawaii using systemic insecticides. XV Pacific Entomology Conference. April 1-3, 2015. Honolulu, HI.
- **Cheng, Z.**, and B. Bhandari. Management of invasive insect pests attacking *Ficus* tree species in Hawaii. 2014 Annual ESA meeting. November 15-19, 2014. Portland, OR.
- **Cheng, Z.** Research updates on controlling new pests of Ficus trees in Hawaii. 12th Annual Landscape Industry Council of Hawaii (LICH) Green Industry Conference and Trade Show. October 09, 2014. Honolulu, HI.
- Bhandari, B. and **Z. Cheng**. Trunk Injection of Systemic Insecticides to control stem and leaf gall wasps, *Josephiella species* (Agaonidae, Hymenoptera) on *Ficus microcarpa* in Hawaii (poster). 12th Annual Landscape Industry Council of Hawaii (LICH) Green Industry Conference and Trade Show. October 09, 2014. Honolulu, HI.
- **Cheng, Z.**, and B. Bhandari. Controlling stem and leaf galling wasps on Chinese banyan in Hawaii. 2014 Annual ESA Pacific Branch meeting. April 06-09, 2014. Tucson, AZ.
- **Cheng, Z.**Sustainable Turfgrass Management in Hawaii. 4th Annual Hawaii Island Landscape Association (HILA) Landscape Management Conference. November 23, 2013. Big Island, HI.
- Cheng, Z. Trunk injections of systemic insecticides and phosphorous fertilizer for treatment of stem and leaf gall

wasps on Chinese banyan. 11th Annual Landscape Industry Council of Hawaii (LICH) Green Industry Conference and Trade Show, October 10, 2013, Honolulu, HI.

Bal, H.K., N. Acosta, **Z. Cheng**, P.S. Grewal, and C.W. Hoy. Dispersal and spatial distribution of entomopathogenic nematodes in an agroecosystem with a modified soil management system. 2013 The Society of Nematologists Conference. July 14-17, 2013. Knoxville, TN.

2012 The Society of Nematologists Conference. Oral presentation titled "A comparison between urban and agricultural soils using soil nematode community and other key soil parameters". Zhiqiang Cheng, R. Islam, S.S. Briar, and P.S. Grewal. August 12-15, 2012. Savannah, GA.

2012 The Society of Nematologists Conference. Oral presentation titled "Effects of long-term tillage and rotation on the relationships between *Heterodera Glycines* and soil nematode community". Zhiqiang Cheng, S. Mennan, P.S. Grewal, and H. Melakeberhan. August 12-15, 2012. Savannah, GA.

2012 The Society of Nematologists Conference. Oral presentation titled "An assessment of soil health and productivity in community and market gardens". Jennifer Reeves, Z. Cheng, M.T. Kleinhenz and P.S. Grewal. August 12-15, 2012. Savannah, GA.

2012 The Society of Nematologists Conference. Oral presentation titled "Comparative analyses of nematode community and ecosystem services in agricultural and natural ecosystems of selected Michigan soil groups". S. Mennan, J. van Ravansway, Z. Cheng, H.K. Bal, P.S. Grewal, A.J.M. Smucker, A. Adelaja, J. Warbach, J. Qi, and H. Melakeberhan. August 12-15, 2012. Savannah, GA.

2012 OARDC Annual Conference. Poster presentation titled "Heavy metal contamination in two post-industrial cities". Kuhuk Sharma, Priyanka Yadav, Zhiqiang Cheng, Nicholas Basta, and Parwinder S. Grewal. April 26, 2012. Wooster, OH.

2012 OARDC Annual Conference. Poster presentation titled "An Assessment of Soil Health and Productivity in Community and Market Gardens". Jennifer Reeves, Zhiqiang Cheng, Matthew T. Kleinhenz and Parwinder S. Grewal. April 26, 2012. Wooster, OH.

2011 The Society of Nematologists Conference. Oral presentation titled "Assessing soil nematode food webs and soil physical and chemical properties in urban vacant lots in a post-industrial American city". Zhiqiang Cheng, A. Knight, R. Glover, K. Quaye, V. Roman, P. Yadav, K. Sharma, S.S. Grewal, R. Islam, and P.S. Grewal. July 17-20, 2011. Corvallis, OR.

2011 OARDC Annual Conference. Poster presentation titled "Predicting food production potential of urban vacant lots through soil quality". Zhiqiang Cheng, Alexandra Knight, Rachael Glover, Kobina Quaye, Victoria Roman, Priyanka Yadav, Kuhuk Sharma, Sharanbir S. Grewal, Rafiq Islam, Matthew Kleinhenz, and Parwinder S. Grewal. April 28, 2011. Columbus, OH.

2011 Ohio Natural History Conference. Poster presentation titled "Active carbon as a useful predictor of urban soil quality and plant growth". Alexandra Knight, Zhiqiang Cheng, Sharanbir S. Grewal, Rafiq Islam, Matthew Kleinhenz, and Parwinder S. Grewal. February 19, 2011. Sunbury, OH.

2010 The Society of Nematologists Conference. Oral presentation titled "Are urban vacant lots suitable for food production? An assessment of soil nematode food webs and nutrient pools in community gardens and vacant lots". Sharanbir S. Grewal, Zhiqiang Cheng, Sonia Masih, Melinda Wolboldt, Naureen Huda, Alexandra Knight, and Parwinder S. Grewal. July 11-14, 2010. Boise, ID.

Ecological Landscaping: enhancing self-reliance and resilience of cities (national conference). Oral presentation titled "Effect of organic fertilizers on the greening quality, shoot and root growth, and shoot nutrient and alkaloid contents of endophytic tall fescue". Zhiqiang Cheng, Seppo O. Salminen, and Parwinder S. Grewal.December 1-3, 2009. Cleveland, OH.

Ecological Landscaping: enhancing self-reliance and resilience of cities (national conference). Oral presentation titled "Soil food webs and nutrient pools in community gardens and vacant lots". Sharanbir Grewal, Zhiqiang Cheng, Sonia Masih, Melinda Wolboldt, Naureen Huda, Alexandra Knight, and Parwinder S. Grewal.December 1-3, 2009. Cleveland, OH.

Ecological Landscaping: enhancing self-reliance and resilience of cities (national conference). Oral presentation titled "Do soil nematode communities reflect altered urban soil chemical properties?" Sunjeong Park, Zhiqiang Cheng, Brian McSpadden-Gardner, and Parwinder S. Grewal.December 1-3, 2009. Cleveland, OH.

2009 The Society of Nematologists and Soil Ecology Society Conference. Oral presentation titled "How do tall fescue lawns established on common urban soil matrices influence the nematode food web and nutrient pools?". Zhiqiang Cheng and Parwinder S. Grewal. July 12-15, 2009. Burlington, VT.

2009 The Society of Nematologists and Soil Ecology Society Conference. Oral presentation titled "Do soil nematode community reflect altered urban soil chemical properties?". Park, Sun-Jeong, Z. Cheng, H. Yang, E.E. Morris, M. Sutherland, B.B. McSpadden Gardener, and P.S. Grewal. July 12-15, 2009. Burlington, VT.

2008 Ohio Turfgrass Conference. Oral presentation titled "What is subsoil and how it affects turfgrass management and water quality?". Parwinder S. Grewal and Zhiqiang Cheng. December 8-11, 2008. Columbus, OH.

Ecological Landscaping: from scientific principles to public practices and policies (international conference). Poster presentation titled "Turfgrass lawn establishment: Effect of subsoil, topsoil, compost amendment, and nitrogen fertilization on stand establishment, weed invasion, soil foodweb, and nutrient pools". Zhiqiang Cheng and Parwinder S. Grewal. October 28-31, 2007. Cleveland, OH.

2007 OARDC Annual Conference. Poster presentation titled "Effect of compost amendment on turfgrass establishment, soil nutrient pools, and nematode community in tall fescue lawns established on topsoil and subsoil". Zhiqiang Cheng and Parwinder S. Grewal. April 20, 2007. Columbus, OH.

Emerging Issues – along urban/rural interfaces II (international conference). Oral presentation titled "Influence of management intensity on the ecology of urban lawns". Zhiqiang Cheng, Douglas S. Richmond, John Cardina, Seppo O. Salminen, and Parwinder S. Grewal. April 9-12, 2007. Atlanta, GA.

2007 National Turfgrass Entomology Workshop. Oral presentation titled "Do turf management practices influence ecosystem function?" Zhiqiang Cheng, Douglas S. Richmond, Seppo O. Salminen, John Cardina, and Parwinder S. Grewal. March 12-13, 2007. Wooster, OH.

27th Annual Midwest Ecology & Evolution Conference. Oral presentation titled "Influence of management intensity on the ecology of urban lawns". Zhiqiang Cheng, Douglas S. Richmond, John Cardina, Seppo O. Salminen, and Parwinder S. Grewal. March 9-11, 2007. Kent, OH.

2006 National Turfgrass Entomology Workshop. Oral presentation titled "Effects of long-term turf management practices on soil nutrient pools and nematode community". Zhiqiang Cheng. February 20-21, 2006. Clayton, NC.

The First International Conference on Environmental Science and Technology, American Academy of Sciences. Poster presentation titled "Effects of lawn management practices on soil nematode community and nutrient pools". Zhiqiang Cheng, Parwinder S. Grewal, and Benjamin R. Stinner. January 23-26, 2005. New Orleans, LA.

2004 OARDC Annual Conference. Poster presentation titled "Effects of lawn management practices on soil nematode community and nutrient pools". Zhiqiang Cheng,Parwinder S. Grewal, and Benjamin R. Stinner. April 29, 2004. Wooster, OH.