

TANIA N. KIM

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EDUCATION AND AFFILIATION

- Assistant Professor Kansas State University 2018-present
- Visiting Assistant Professor Swarthmore College 2017 - 2018
- Post-doc. University of Wisconsin (mentor: Claudio Gratton) 2013-2017
- Ph.D. Florida State University (mentor: Nora Underwood) 2006-2012
- M.Sc. University of Florida (mentor: Bob Holt) 2003-2006
- B.Sc. McGill University (Montreal, Canada) 1995-1999

PEER-REVIEWED PUBLICATIONS (*Undergraduate, †graduate student, ‡ postdoc authors)

1. †H. E. Stowe, J.P. Michaud, and **T. N. Kim** Floral Resources Enhance Fecundity, but not Flight Activity in a Specialized Aphid Predator, *Hippodamia convergens* (Coleoptera: Coccinellidae). *Accepted Invited Review Paper for Frontiers in Ecology and Evolution*.
2. *T. Van Winkle, †M. Ponce, †H. Quellhorst, A. Bruce. *C. Albin, **T. N. Kim**, K. Y. Zhu, W. R. Morrison III. 2021. Microbial volatile organic compounds mediate attraction by a primary but not secondary stored product insect pest in wheat. *Accepted in Journal of Chemical Ecology*.
3. †M. Ponce, **T. N. Kim**, and W. R. Morrison III. 2021. A systematic review of the behavioral responses by stored product arthropods to individual or blends of microbially-produced cues. *Accepted in Insects*.
4. †Cates, A. M., Wills, B. D., **Kim, T. N.**, Landis, D. A, Gratton, C., Read, H. W., and R. D. Jackson. 2020. No evidence of top-down effects by ants on litter decomposition in a temperate grassland. *Accepted in Ecosphere*.
5. †Stowe, H., Michaud, J.P., and **T. N. Kim**. 2020. The Benefits of Omnivory for Reproduction and Life History of a Specialized Aphid Predator, *Hippodamia convergens* (Coleoptera: Coccinellidae). *Environmental Entomology* 50-69-75.
6. Tamburini, G., Santoiemma, G., O'Rourke, M. Bommarco, R., Chaplin-Kramer, R., Dainese, M., Karp, D. S., **Kim, T. N.**, Martin, E. A., and L. Marini. 2020. Species traits elucidate crop pest response to landscape composition. *Proceedings of the Royal Society B*. <https://doi.org/10.1098/rspb.2020.2116>
7. Wills, B.D., **Kim, T.N.**, Fox, A. F., Gratton, C. and D. A. Landis. 2019. Reducing native ant abundance decreases predation rates in Midwestern grasslands. *Environmental Entomology*. 48(6):1360-1368 (2019). <https://doi.org/10.1093/ee/nvz127>
8. Halpern, S.L, Ohgushi, T., Utsumi, S. and **T.N. Kim**. 2019. Enemy reduction and release on *Solanum carolinense* in introduced populations in Japan. *Accepted in the American Journal of Botany*.
9. Dainese, M., Martin, E. A., [+85 authors including **Kim, T. N.**]. 2019. A global synthesis reveals biodiversity-mediated benefits for crop production. *Accepted at Science Advances*
10. **Kim, T. N.**, *Bartel, S., and C. Gratton. 2019. Grassland harvesting alters ant community trophic structure: an isotopic study in tallgrass prairies. *Accepted at Ecology and Evolution*.
11. **Kim, T. N.**, *Bartel, S., Wills, B. D., Landis, D. A., and C. Gratton. 2018. Harvesting differentially affects alpha and beta diversity of ant communities in prairie grasslands. *Ecosphere* 9 (10) e02399.
12. Karp, D. S, Chaplin-Kramer, R, Meehan, T.D. Martin, E. A., DeClerck, F., Grab, H. Gratton, C., Hunt, L., Larsen, A., Martinez-Salinas, A. O'Rourke, M., Rusch, A., Poveda,

- K., Jonsson, M., Rosenheim, J. A., Schellhorn, N., Tscharrntke, T., Wratten, S. D., Zhang, W., Iverson, A. L., [+137 authors including **Kim, T.N.**]. 2018. Crop pests and predators exhibit inconsistent responses to surrounding landscape composition. *Proceedings from the National Academy of Sciences* 115:E7863–E7870.
13. **Kim, T. N.** 2017. Neighborhood composition influences damage to plants and four mechanisms of associational resistance and susceptibility. *PlosOne* 12(5): e0176499. <https://doi.org/10.1371/journal.pone.0176499>.
 14. **Kim, T. N.**, Fox, A. F., Wills, B. D., Meehan, T. M, Landis, D. A., and C. Gratton. 2017. Annual harvesting of biofuel grasslands has mixed effects on natural enemy communities and no effect on biocontrol services. *Journal of Applied Ecology*. DOI: 10.1111/1365-2664.12901.
 15. Fox, A. F., **T. N. Kim**, C. A. Bahlai, J. M. Woltz, C. Gratton, and D. A. Landis. 2016. Cover crops have neutral effects on predator communities and biological control services in annual cellulosic bioenergy cropping systems. *Agriculture, Ecosystems & Environment*. 232: 101–109.
 16. *Wenninger, A., **T.N. Kim**, B. J. Spiesman, and C. Gratton. 2016. Contrasting foraging patterns: testing resource-concentration and dilution effects with pollinators and seed predators. *Insects*. 7:23.
 17. Gratton, C, M. Casler, R. Groves, and **T. N. Kim**. 2015. Insecticide applications have minor effects on switchgrass biomass yield. *Agronomy Journal*. 107: 2031–2037.
 18. **Kim, T.N.**, B.J. Spiesman, A.L. Buchanan, A. Hakes, S. Halpern, B.D. Inouye, A. Kilanowski, N. Kortessis, D.W. McNutt, A.C. Merwin, and N. Underwood. 2015. Selective manipulation of a non-dominant plant and its herbivores affects an old-field plant community. *Plant Ecology*. 216:1029–1045.
 19. **Kim, T.N.** and N. Underwood. 2015. Plant neighborhood effects on herbivory: Damage is both density and frequency dependent. *Ecology*. 96: 1431–1437.
 20. Liere, H., **T.N. Kim**, B.P. Werling, T.D. Meehan, D.A. Landis, C. Gratton. 2015. Trophic cascades in agricultural landscapes: indirect effects of landscape composition on crop yield. *Ecological Applications*. 25: 652–661.
 21. Skevas, T., S.M. Swinton, T.D. Meehan, **T.N. Kim**, C. Gratton and A. Egbendewe-Mondzozo. 2014. Integrating agricultural pest biocontrol into forecasts of energy biomass production. *Ecological Economics* 106:195–203.
 22. **Kim, T.N.** 2014. Plant damage and herbivore performance change with latitude for two old-field plant species, but rarely as predicted. *Oikos* 123: 886-896.
 23. **Kim, T.N.**, N. Underwood, and B.D. Inouye 2013. Insect herbivores change the outcome of plant competition through effects on inter- and intraspecific processes. *Ecology* 94: 1753-1763.
 24. **Kim, T.N.**, and R.D. Holt. 2012. The direct and indirect effects of fire on the assembly of insect herbivore communities: examples from the Florida scrub habitat. *Oecologia*. 168:997-1012.

Manuscripts in pipeline:

1. **Kim, T. N.**, Y. V. Bukhman, M. Jusino, E. D. Scully, B. J. Spiesman, and C. Gratton. Using Next Generation Sequencing to Determine Diet of Generalist Lady Beetles in Agricultural Landscapes. *In review at Biological Control*.
2. †Harman R., and **T. N. Kim**. Cross-habitat movement of arthropods in the landscape; a review of spillover concepts in agroecology. *In prep for Frontier in Ecology and Environment*.
3. †H. E. Stowe, J.P. Michaud, and **T. N. Kim**. Resource variability and amount influence reproduction and flight behavior of *Hippodamia convergens* (Coleoptera: Coccinellidae). *In prep for Ecosphere*.
4. †Butters, J., E. Murrell, B. J. Spiesman, and **T. N. Kim**. Native flowering border crops attract high pollinator abundance and diversity, providing growers the opportunity to enhance pollination services. *In review at Environmental Entomology*.

5. †Butters, J., B. J. Spiesman, and **T. N. Kim** Fire rotation and bison presence have indirect below- and above-ground effects on specific pollinator communities. *In prep for Insect Conservation and Biodiversity*.
6. †Ponce, M. A., *Lizarraga, S, Bruce, A, **Kim, T. N.** and W. R. Morrison III. I Linking changes in headspace volatiles from grain inoculated with different growth stages of the fungus, *Aspergillus flavus*, to the foraging behavioral response by a primary stored product pest, *Sitophilus oryzae* (Coleoptera: Curculionidae). *In review at Chemical Senses*.

NON-PEER REVIEWED PUBLICATIONS

1. Wagner, C., Bohon, W., McCullagh, E., **Kim, T.**, Zelikova, J., Goldman, G., Metcalf, J., and Gallery R. 2019. Infertility and the Leaky Pipeline: Difficulty in conceiving a baby should not be allowed to wreck a woman's scientific career. Op-Ed in Scientific American.
2. Dixon, K., Brown, G., Underwood, N., Winn, A., Moscarella, R., Garcia, B., **Kim, T.**, McNutt, D., Strimaitis, A., Pearson, V., and A. Landry. 2015. BSC 2011L Investigations in Biology; Biological Science II Laboratory Manual. Department of Biological Science, Florida State University. Hayden-McNeil Publishing, Plymouth MI.
3. Diffendorfer, J.E., **T.N. Kim**, and B.J. Spiesman 2003. Small Mammal Monitoring and Inventory at Chino Hills State Park. California State Parks. Lake Perris, California.

PRESENTATIONS (past three years only, †graduate student author)

2021

1. †Stowe, H., J. P. Michaud, and **T. N. Kim**. Oral Presentation at the Ecological Society of America Annual Conference (Online)
2. †Stowe, H., J. P. Michaud, and **T. N. Kim**. Plant Resources Mediate Reproduction and Flight in a Specialized Aphid Predator *Hippodamia convergens* (Coleoptera: Coccinellidae). KSU Graduate Research, Arts, and Discovery (KGRAD).
3. Harman, R and **T. N. Kim**. Spillover: A specific movement process. Oral Presentation at the Ecological Society of America Annual Conference (Online).
4. **Kim, T. N.** The Landscape Ecology of Insects. KSU Summer Soybean Institute.
5. †Ponce, M. **Kim, T. N.**, and R. Morrison III. Interactions between the microbial and insect community affect grain quality in the post-harvest environment. Oral Presentation at the North Central Branch Entomological Society of America Annual Conference (Online).
6. †Ponce, M. **Kim, T. N.**, and R. Morrison III. The behavioral response of two cosmopolitan stored product beetles to microbial-produced volatiles. Oral Presentation at the North Central Branch Entomological Society of America Annual Conference (Online).

2020

1. **Kim, T. N.**, †Butters, J., Murrell, E., Spiesman, B. J., Van Tassel, D., and B. Schlautman. Living on the edge: Determining the potential of multipurpose perennial crops as habitat for native pollinators and natural enemies. Invited talk at the Entomological Society of America Annual Conference (Online)
2. †Butters, J., Spiesman, B. J. and **Kim, T. N.** Providing for pollinators: conserving natural habitat through fire and grazing. Oral presentation at the North Central Branch Entomological Society of America Annual Conference (Online)
3. †Stowe, H., J. P. Michaud, and **T. N. Kim**. Does *Hippodamia convergens* life history benefit from omnivory compared to a monotypic diet of suitable prey? Poster at the North Central Branch Entomological Society of America Annual Conference (Online)
4. †Ponce, M. **Kim, T. N.**, and R. Morrison III. Interactions between the microbial and insect community affect grain quality in the post-harvest environment. Poster at the North Central Branch Entomological Society of America Annual Conference (Online).

2019

1. **Kim, T.N.**, Marshall, J.L., McCornack, B. and K. Silver. Let's discuss! Promoting,

assessing, and evaluating classroom discussions in large and small classes. Invited talk at the Entomological Society of America Annual Conference, St. Louis, MO.

2. †Butters, J., **Kim, T. N.**, Murrell, E., Spiesman, B. J., Van Tassel, D., and B. Schlautman. Living on the edge: Determining the potential of multipurpose perennial crops as habitat for native pollinators and natural enemies. Poster at the Entomological Society of America Annual Conference, St. Louis, MO.
3. †Stowe, H., J. P. Michaud, and **T. N. Kim**. Does *Hippodamia convergen* life history benefit from omnivory compared to a monotypic diet of suitable prey? Talk at the Entomological Society of America Annual Conference, St. Louis, MO
4. †Ponce, M. **Kim, T. N.**, and R. Morrison III. Interactions between the microbial and insect community affect grain quality in the post-harvest environment. Poster at the Entomological Society of America Annual Conference, St. Louis, MO.
5. **Kim, T.N.** Disturbance effects on insect biodiversity and ecosystem function in grasslands. Invited talk at Luther College (Biology). Decorah, IA.
6. **Kim, T.N.** Trophic cascades in agricultural landscapes: indirect effects of landscape composition on plant yield. Invited talk at Kansas State University (Plant Pathology). Manhattan, KS.
7. **Kim, T.N.** Disturbance effects on insect biodiversity and ecosystem function in grasslands. Invited talk at Kansas State University (Biology). Manhattan, KS.
8. **Kim, T.N.** Trophic cascades in agricultural landscapes: indirect effects of landscape composition on plant yield. Invited talk at the University of Kentucky. Lexington, KY.
9. **Kim, T.N.** Disturbance effects on insect biodiversity and ecosystem function in grasslands. Invited talk at the University of Kentucky. Lexington, KY.

2018

1. **Kim, T.N.**, Spiesman, B.J., Bukhman, Y., Jusino, M., and C. Gratton. Using Next Generation Sequencing to Determine Predator-Prey Associations. Poster at Entomological Society of America Annual Conference, Vancouver BC.
2. **Kim, T.N.** Using stable isotopes and next-generation sequencing to infer feeding relationships of insects in agricultural landscapes. Invited talk at Kansas State University. Manhattan, KS.
3. **Kim, T.N.** Trophic cascades in agricultural landscapes: indirect effects of landscape composition on plant yield. Invited talk at Lawrence University. Appleton, WI.

2016-2007: Posters: 16; Contributed talks: 5; Invited talks: 18

TEACHING EXPERIENCE

Kansas State University

- Economic Entomology (Faculty instructor) 2019-present
- Insect Ecology (Faculty instructor) 2019-present

Swarthmore College

- Organismal and Population Biology (Faculty instructor) 2018
- Ecology (Faculty instructor) 2017

University of Wisconsin

- Insect Ecology for grad students (Guest lecturer and lab instructor) 2013, 2015
- NSF Research Experience for Teachers (mentor for teachers) 2013, 2015

Florida State University

- Conservation Biology (Lecture and lab teaching assistant) 2012
- General Ecology (Lecture teaching assistant and guest lecturer) 2012
- Plant Biology (Lecturer and lab coordinator) 2011
- Insect Ecology Experimental Biology (Lab teaching assistant) 2011
- Plant Biology (Lab coordinator, lab instructor & lecture teaching assistant) 2007-2010
- Experimental Biology in Foraging Ecology (Lecture and lab teaching assistant) 2007
- General Biological Science Laboratory (Lab instructor) 2006

University of Florida

- Integrative Principles in Biology (lecturer, lab instructor) 2003-2004, 2006
- General Ecology (Lecture and lab teaching assistant) 2005

GRADUATE MENTORING

- Maggie Anderson -- Master's student, major advisor (2019-present)
- Marco Ponce – PhD student, co-advised with Dr. Rob Morrison (2019- present)
- Jessica Butters – Master's student, major advisor (2019-2021)
- Hannah Stowe – Master's student, major advisor (2019- 2021)
- Hannah Quellhorst – PhD student (Entomology), committee member (2018- present)
- Dee Roof – Master's student (Arts and Design), committee member (2018-2020)

UNDERGRADUATE MENTORING

Nora Bishop (2021); Ruby Newsom (2021); Caroline Gatchet (2020-2021); Savannah Piper (2018-2020); Paige Connor (2019); Weston Ahles (2019); Madison Lofing (2018); Ethan Chapman (2018); William Sandvold (2017); Savannah Bartel (2015-2016); Caitlin Bergstrom (2014); Alexandria Wenninger (2013); Arsalan Arshad (2011); Alexandra Marsh (2011); Jessica Stanfield (2009); Ordorm Huot (2009); Ryan Eckert (2008-2009)

GRANTS, FELLOWSHIPS, & AWARDS

- USDA Hatch Multistate in Monarch Conservation 2021-2023
 - USDA ARS NACA 2021-2023
 - USDA Agriculture Food and Research Initiative Grant 2018-2021
 - USDA Hatch Multistate in Bee Health 2019-2023
 - USDA NRCS Conservation Innovation Grant 2018-2021
 - Association of College and University Educators (ACUE) Teaching Training Fellowship 2019
 - Swarthmore College Faculty Research Award 2017
 - UW Madison Award for Undergraduates Mentoring Nomination 2016
 - USDA NRCS Conservation Innovation Grant 2014-2016
 - NSF Doctoral Dissertation Improvement Grant 2011
 - Florida State University Outstanding Teaching Assistant Nomination* 2011
- *not qualified to receive award because I won the previous year
- Florida State University (FSU) Outstanding Teaching Assistant Award 2010
 - Grants-in-aid of Research (FSU Graduate School) 2009
 - Robert K. Godfrey Endowment Award in Botany at FSU 2008, 2009
 - Frances Peacock Scholarship & Garden Club of USA grant 2005
 - Grinter Fellowship at University of Florida (UF) 2003-2006
 - Florida Native Plant Society Endowment Award 2004

JOURNAL REFEREE

Basic and Applied Ecology, Biotropica, Ecological Applications, Ecological Entomology, Ecology, Ecosphere, Evolutionary Ecology, Insects, Journal of Ecology, Journal of Economical Entomology, Journal of Insect Science, Journal of Pest Science, Journal of Vegetation Science, Oecologia, Oikos, PlosOne, Restoration Ecology, Trends in Ecology and Evolution

OUTREACH & PROFESSIONAL SERVICE

- USDA Research and Extension Experience for Undergraduates Mentor 2019
- USDA Disease Ecologist Scientist Search Committee 2019
- K-State University Committees (Seminar; Planning) 2018-2019
- K-State Advancement of Women in Science and Engineering mentor 2018-present

- Graduate Women in Science grant panel reviewer 2016-2018
- Mentor for NSF Research Experience for Teachers program (UW) 2013-2015
- Curriculum committee for Introductory Biology at Florida State University (FSU) 2012
- Created and maintained website for undergrad research opportunities (FSU) 2008-2012
(<http://www.bio.fsu.edu/undergrad/researchops.php>)
- Lead symposium organizer at the ESA Annual Conference 2010
- Co-organizer of an organized session at ESA Annual Conference 2010
- Middle-school instructor in marine and wetland ecology (FSU) 2009
- Treasurer for Ecology and Evolution graduate student group (FSU) 2009
- Union representative for Graduate Assistants United (FSU) 2009

WORKING GROUPS

- Lonsinger Sustainability Farm 2021
- K-State sustainability coalition: tallgrass restoration 2020-2021
- Bison Wallows at Konza LTER 2020
- Urban Food System 2019 -2020
- Trait-based Approach to Understanding Insect Biodiversity Loss 2018-2019
International Working Group (VI Tech (lead))
- HerbVar: a collaborative global project to quantify variability in plant-herbivore interactions (MSU (lead); KSU (co-lead for Entomology)) 2019-2021
- 500 Women Scientists (KS Group Organizer) 2019
- IPM4Bees Midwest Working Group 2019
- Strategic Disturbance for Integrated Pollinator Habitat Management Working Group 2019

PROFESSIONAL SOCIETY MEMBERSHIPS

Ecological Society of America, Entomological Society of America, Society for Conservation Biology, Garden Club of America, Wisconsin Ecology, Women in Science & Engineering Leadership Institute (WISELI) at UW Madison, K-State Advancement of Women in Science and Engineering (KAWSE) at Kansas State University