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Education

2010	Ph.D., Department of Entomology, National Taiwan University
2006	M.S., Department of Entomology, National Taiwan University
2004	B.S., Department of Entomology, National Taiwan University

Professional Appointments

2021.Mar-present	Assistant Professor I Department of Entomology, Virginia Polytechnic Institute and State University
2020.Sep-2021.Feb	Visiting Associate Professor I Department of Entomology, National Chung Hsing University, Taiwan
2020.Apr-2020.Feb	Adjunct Assistant Professor of Entomology I Department of Entomology, Virginia Polytechnic Institute and State University
2016-2020.Aug	Junior Associate Professor I Research Institute for Sustainable Humanosphere, Kyoto University
2011-2016	Assistant Professor I Master Program for Plant Medicine, College of Agriculture, National Taiwan University
2010-2011	Postdoctoral Research Fellow I Biodiversity Research Center, Academia Sinica, Taiwan
2009-2010	Visiting Scientist I Center for Medical, Agricultural and Veterinary Entomology (CMAVE), ARS, USDA
2006-2008	Visiting Scientist I CMAVE, ARS, USDA (2 terms, each for 2 months)
2004-2007	Teaching Assistant I Department of Entomology, National Taiwan University

Referred Journal Publications

Yasudai R, Matsubara A, Hsu PW, Lee CC, Lin CC, [Yang CCS](#). 2021. Laboratory and field evaluations of two bait formulations against the invasive fire ant, *Solenopsis invicta* (Hymenoptera: Formicidae). **Journal of Economic Entomology** (Published ahead-of-print)

Lee CY, [Yang CCS](#). 2022. Biology, ecology, and management of the invasive longlegged ant, *Anoplolepis gracilipes*. **Annual Review of Entomology**, 67, 43-63.

Kamiyama MT, Matsuura K, Hata T, Yoshimura T, [Yang CCS](#). 2021. Seasonal parasitism of native egg parasitoids of brown marmorated stink bug (*Halyomorpha halys*) in Japan. **Journal of Pest Science** (Published ahead-of-print)

- Chang JC, Chang ZT, Ko CY, [Yang CCS](#), Chen YW, Nai YS. 2021. Sacbrood viruses cross-infection between *Apis cerana* and *Apis mellifera*: rapid detection, viral dynamics, evolution and spillover risk assessment. **Journal of Invertebrate Pathology**, 186, 107687.
- Idogawa N, Lee CC, [Yang CCS](#), Shigeto D. 2021. The complete genome of a parthenogenetic ant, *Monomorium triviale* (Hymenoptera: Formicidae). **Mitochondrial DNA Part B: Resources**, 6, 2793-2795.
- Kamiyama MT, Matsuura K, Yoshimura T, [Yang CCS](#). 2021. Improving invasive species management using predictive phenology models: an example from brown marmorated stink bug (*Halyomorpha halys*) in Japan. **Pest Management Science**, 77, 2948-2954.
- Kamimura Y, Matsumura Y, [Yang CCS](#), Gorb SN. 2021. Random or handedness? Use of laterally paired penises in *Nala* earwigs (Insecta: Dermaptera: Labiduridae). **Biological Journal of the Linnean Society**, 134, 716-731
- Hung YT, [Yang CCS](#), Saska P, Tuan SJ. 2021. Comparison of artificial diets and natural prey for mass rearing of *Orius strigicollis* (Hemiptera: Anthocoridae) using demographic characteristics to optimize cost-efficiency. **Journal of Economic Entomology**, 114, 1523-1532.
- Lee CC, Chiu MC, Shih CH, [Yang CCS](#), Liu HC, Lin CC. 2021. The role of anthropogenic disturbance and invasion of yellow crazy ant in a recent decline of land crab population. **Scientific Reports**, 11, 12234.
- Kamiyama MT, Matsuura K, Yoshimura T, [Yang CCS](#). 2021. Predation of the brown marmorated stink bug *Halyomorpha halys*, by the Japanese acrobat ants, *Crematogaster matsumurai* and *Crematogaster osakensis*. **Biological Control**, 157, 104570.
- Lin CY, Lee CC, Nai YS, Hsu HW, Lee CY, Tsuji K, [Yang CCS](#). 2020. Deformed wing virus in two widespread invasive ants: geographical distribution, prevalence, and phylogeny. **Viruses**, 12, 1309.
- Lee CC, Lin CY, Tseng SP, Matsuura K, [Yang CCS](#). 2020 Ongoing coevolution of *Wolbachia* and a widespread invasive ant, *Anoplolepis gracilipes*. **Microorganisms**, 8, 1569.
- Wu YH, Kamiyama MT, Chung CC, Tzeng HY, Hsieh CH, [Yang CCS](#). 2020. Population monitoring, egg parasitoids and genetic structure of the invasive litchi stink bug, *Tessaratoma papillosa* in Taiwan. **Insects**, 11, 690.
- Lee CC, Lin CY, Hsu HW, [Yang CCS](#). 2020. Complete genome sequence of two novel dicistroviruses detected in the yellow crazy ant, *Anoplolepis gracilipes*. **Archives of Virology**, 165, 2715-2719.
- Lee CC, Weng YM, Lai LC, Suarez AV, Wu WJ, Lin CC, [Yang CCS](#). 2020. Analysis of recent interception records reveals that wood/wood-product trade could lead to a new wave of ant invasion. **Insects**, 11, 356.
- Tseng SP, Hsu PW, Lee CC, Wetterer JK, Hugel S, Wu LH, Lee CY, Yoshimura T, [Yang CCS](#). 2020. Evidence for common horizontal transmission of *Wolbachia* among ants and ant crickets: kleptoparasitism added to the list. **Microorganisms**, 8, 805.
- Hsu PW, Hugel S, Wetterer JK, Tseng SP, Ooi M, Lee CY, [Yang CCS](#). 2020. Ant-loving crickets associated with the invasive yellow crazy ant *Anoplolepis gracilipes* (Hymenoptera: Formicidae): distribution, molecular phylogeny and cryptic species. **Myrmecological News**, 30, 103-129.
- Wylie R, [Yang CCS](#), Tsuji K. 2020. Invader at the gate: the status of red imported fire ant in Australia and Asia. **Ecological Research**, 35, 6-16.
- Lin YH, Laio YC, [Yang CCS](#), Billen J, Yang MM, Hsu YF. 2019. Vibrational communication between a myrmecophilous butterfly *Spindasis lohita* (Lepidoptera: Lycaenidae) and its host ant *Crematogaster rogenhoferi* (Hymenoptera: Formicidae). **Scientific Reports**, 9, 18548.
- Hsu HW, Chiu MC, Lee CC, Lee CY, [Yang CCS](#). 2019. The association between virus prevalence and intercolonial aggression levels in the yellow crazy ant, *Anoplolepis gracilipes* (Jerdon). **Insects**, 10, 436.
- Tseng SP, Wetterer JK, Suarez AV, Lee CY, Yoshimura T, Shoemaker D, [Yang CCS](#). 2019. Genetic diversity and *Wolbachia* infection patterns in a globally distributed invasive ant. **Frontiers in Genetics**, 10, 838.

- Tseng SP, Darras H, Lee CY, Yoshimura T, Keller L, Yang CCS. 2019. Isolation and characterization of novel microsatellite markers for a globally distributed invasive ant *Paratrechina longicornis*. **European Journal of Entomology**, 116, 253-257.
- Kamimura Y, Yang CCS, Lee CY. 2019. Fitness advantages of the biased use of paired laterally symmetrical penises in an insect. **Journal of Evolutionary Biology**, 32, 844-855.
- Hsu HW, Chiu MC, Shih CJ, Matsuura K, Yang CCS. 2019. Apoptosis as a primary defense mechanism in response to viral infection in invasive fire ant *Solenopsis invicta*. **Virology**, 531, 255-259.
- Hsu HW, Chiu MC, Shoemaker DD, Yang CCS. 2018. Viral infections in fire ants lead to reduced foraging activity and dietary changes. **Scientific Reports**, 8, 13498.
- Lee CH, Wang J, Matsuura K, Yang CCS. 2018. The complete mitochondrial genome of yellow crazy ant, *Anoplolepis gracilipes* (Hymenoptera: Formicidae). **Mitochondrial DNA Part B: Resources**, 2, 622-623.
- Guswenrivo I, Tseng SP, Yang CCS, Yoshimura T. 2018. Development of multiplex nested PCR for simultaneous detection of ectoparasitic fungi *Laboulbeniopsis termitarius* and *Antennopsis gallica* on *Reticulitermes speratus*. **Journal of Economic Entomology**, 111, 1330-1336.
- Lee CC, Hsu SF, Yang CCS, Lin CC. 2018. Thelytokous parthenogenesis in the exotic dacetine ant *Strumigenys rogeri* (Hymenoptera: Formicidae) in Taiwan. **Entomological Science**, 21, 28-33.
- Tseng SP, Yang CCS. 2017. Letter to Editor: Comment on Seri Masran and Ab Majid 2017. **Journal of Medical Entomology**, 54, 1107-1108.
- Lee CC, Nakao H, Tseng SP, Hsu HW, Lin GL, Tay JW, Billen J, Ito F, Lee CY, Lin CC, Yang CCS. 2017. Worker reproduction of the invasive yellow crazy ant *Anoplolepis gracilipes*. **Frontiers in Zoology**, 14, 24.
- Chen YC, Lai MH, Wu CY, Lin TC, Cheng AH, Yang CC et al. 2016. The genetic structure, virulence, and fungicide sensitivity of *Fusarium fujikuroi* in Taiwan. **Phytopathology**, 106, 624-635.
- Chung CL, Huang SY, Huang YC, Tzean SS, Ann PJ, Tsai JN, Yang CC et al. 2015. The genetic structure of *Phellinus noxius* and dissemination pattern of brown root rot disease in Taiwan. **PLoS One**, 10(10): e0139445.
- Yang CC, Ascunce MS, Luo LZ, Shao JG, Shih CJ, Shoemaker DD. 2012. Propagule pressure and colony social organization are associated with the successful invasion and rapid range expansion of invasive fire ants in China. **Molecular Ecology**, 21, 817-833.
- Wurm Y, Wang J, Riba-Grognuz O, Corona M, Nygaard S, Hunt B, Ingram K, Falquet L, Nipitwattanaphon M, Gotzek D, Dijkstra M, Oettler J, Shih CJ, Wu WJ, Yang CC, et al. 2011. The genome of fire ant *Solenopsis invicta*. **Proceedings of the National Academy of Sciences of the United States of America**, 108, 5679-5684.
- Ascunce MS#, Yang CC#, Oakey J, Calcaterra L, Wu WJ, Shih CJ, Goudet J, Ross KG, Shoemaker DD. 2011. Global invasion history of the fire ant *Solenopsis invicta*. **Science**, 331, 1066-1088. (#equal contribution)
- Yang CC, Yu YC, Valles SM, Oi DH, Chen YC, Shoemaker DD, Wu WJ, Shih CJ. 2010. Loss of microbial (pathogen) infections associated with recent invasions of the red imported fire ant *Solenopsis invicta*. **Biological Invasions**, 12, 3307-3318.
- Lai LC, Hua KH, Yang CCS, Huang RN, Wu WJ. 2009. Secretion profiles of venom alkaloids in *Solenopsis geminata* (Hymenoptera: Formicidae) in Taiwan. **Environmental Entomology**, 38, 879-884.
- Yang CCS, Shoemaker DD, Wu JC, Lin YK, Lin CC, Wu WJ, Shih CJ. 2009. Successful establishment of the invasive fire ant *Solenopsis invicta* in Taiwan: Insights into interactions of alternate social forms. **Diversity and Distributions**, 15, 709-719.
- Ascunce MS, Yang CC, Geden C, Shoemaker DD. 2008. Twenty-three new microsatellite loci in the stable fly, *Stomoxys calcitrans* (L.) (Diptera: Muscidae). **Molecular Ecology Resources**, 9, 271-273.
- Yang CC, Shoemaker DD, Wu WJ, Shih CJ. 2008. Population genetic structure of the red imported fire ant, *Solenopsis invicta*, in Taiwan. **Insectes Sociaux**, 55, 54-65.