

Younghwan Kwak

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EDUCATION

University of California, Riverside

Ph.D, Entomology

Advisor: Allison K. Hansen

Riverside, CA

Sep 2019-present

Chungnam National University

M.S., Entomology

Advisors: Young Nam Yoon and Hyoun-sub Lim

Thesis: "Functional analysis of tyrosine hydroxylase and dopa decarboxylase associated with melanin pigmentation in the multicolored Asian lady beetle, *Harmonia axyridis*"

B.Ag in Applied Biology, Chungnam National University

Graduated with Highest Honors, converted GPA 3.93

Daejeon, South Korea

Aug 2019

Aug 2017

RESEARCH EXPERIENCE

University of California, Riverside

Graduate Student Researcher

Dr. Allison K. Hansen Laboratory

- Studying the evolutionary relationship of psyllid-endosymbionts using genomic approaches

Riverside, CA

Sep 2019-present

Chungnam National University

Graduate Student Researcher

Dr. Young Nam Yoon Laboratory

- Optimized molecular tools (e.g., gene cloning, qPCR, larval injection, RNAi) and live imaging microscopy to characterize gene function related to elytra pigmentation in *Harmonia axyridis*

Dr. Hyoun-sub Lim Laboratory

- Developed plant viral vectors that express insect antimicrobial genes in *Nicotiana benthamiana*.
- Participated in constructing full-length infectious clones from TuMV isolates collected from Jeju Island in 2017.

Daejeon, South Korea

Sep 2017-Aug 2019

TEACHING AND OTHER EXPERIENCE

University of California, Riverside

Teaching Assistant

- ENTM010: Natural History of Insects (Winter 2021)

Undergraduate Research Volunteer

Dr. A.L.N. Rao Laboratory

- Assisted in basic molecular biology experiments (e.g., bacterial transformation and culture, gel electrophoresis, and agrobacterium infiltration)

Riverside, CA

Jan-Jun 2015

PRESENTATIONS AND POSTERS

Heon Yoon, **Younghwan Kwak**, Hyeri Kwon, Young Nam Yoon, Yong Man Yu

“Difference of insect pest occurrence patterns between in smart farm and conventional type of greenhouse for tomato,” Poster presentation delivered at the 2017 KSAE Fall Meeting and International Symposium, Hoengseong, South Korea, October 2017

Younghwan Kwak, Sang Eun Park, Hye Ri Kwon, Heon Yoon, Seo Young Bae, Yong Man Yu and Young Nam Yoon

“RNAi applied to the analysis of gene function in Multicolored Asian Ladybeetle, *Harmonia axyridis*” Poster presentation delivered at the 2018 Spring International Conference of KSAE, Mokpo, South Korea, April 2018

Younghwan Kwak and Young Nam Yoon

“Functional analysis and characterization of Tyrosine Hydroxylase and Dopa decarboxylase associated with melanin pigmentation in *Harmonia axyridis*” Oral presentation delivered at the 8th Joint symposium between Shenyang Agriculture University and Chungnaoum National University, May 2018

Younghwan Kwak, Sang Eun Park, Heon Yoon, Seo Young Bae, Yong Man Yu and Young Nam Yoon

“Analysis of Gene Function using RNAi in Multicolored Asian Ladybeetle, *Harmonia axyridis*” Oral presentation delivered at the 11th Japan-China-Korea Graduate Student Forum, September 2018

Younghwan Kwak, Heon Yoon, Seo Young Bae, Yong Man Yu and Young Nam Yoon

“Functional analysis of genes associated with melanin pigmentation in *Harmonia axyridis*” Oral presentation presented at the 2018 ESA, ESC, and ESBC Joint Annual Meeting, November 2018

PUBLICATION

Hu, W. X.*, Kim, B. J.*, **Kwak, Y.***, Seo, E. Y., Kim, J. K., Han, J. Y., ... & Lim, H. S. (2019). Five newly collected turnip mosaic virus (Tumv) isolates from jeju island, korea are closely related to previously reported korean tumv isolates but show distinctive symptom development. *The plant pathology journal*, 35(4), 381.

*These authors contributed equally to this work

HONORS AND AWARDS

- 2019** Dean’s Distinguished Fellowship, University of California, Riverside
- 2018** The Best Oral Presentation Award, the 11th Japan-China-Korea Graduate Student Forum, University of Tsukuba
- 2015** Scholarship, selected as a global competent student for study abroad program (\$6500), Chungnam National University
- 2013-2017** Academic Achievement Scholarship, scholarships for students with the highest distinction, Chungnam National University