

Kent D. Kobayashi
College of Tropical Agriculture and Human Resilience
Department of Tropical Plant and Soil Sciences
FTE Distribution: 15%I; 70%R; 15%E

I. Education

<u>Degree</u>	<u>University</u>	<u>Major</u>
PhD	Oregon State University	Horticulture
BS	Oregon State University	Horticulture
MAg	Oregon State University	Agronomic Crop Science
BS	University of Hawaii	Entomology

II. Professional Appointments

<u>Title</u>	<u>Employer</u>	<u>Dates Employed</u>
Associate Professor	University of Hawaii	1987 to Present
Assistant Professor	University of Hawaii	1982-1987

III. Courses Taught

TPSS 300	Tropical Production Systems (4)
TPSS 491	Experimental Topics (variable)
TPSS 601	Crop Modeling (3)
TPSS 654	Communications in the Sciences (1)
TPSS 667	Graduate Seminar (1)
TPSS 674	Plant Growth and Development (co-taught) (3)
TPSS 711	Special Topics (variable)

IV. Publications

Books

Book Chapters

Conference Proceedings

- Kobayashi, K.D. and L. Flores. 2025. Enhancing student learning using one-to-one mentoring in a graduate scientific communications course. 2025 Hawaii International Conference on Education-Conference Proceedings, p. 368-370.
- Kobayashi, K.D. and C. Wright. 2025. Modifications to a tropical crop production systems course to enhance student learning. 2025 Hawaii International Conference on Education-Conference Proceedings, p. 371-374.
- Nelson, B. and Kobayashi, K.D. 2023. A mentee-mentor research relationship in a lab on the edge of tomorrow. 2023 Hawaii International Conference on Education-Conference Proceedings, p. 616-622.
- Kobayashi, K.D. and H. Reed. 2023. An individualized mentored course to supplement a graduate scientific communications course. 2023 Hawaii International Conference on Education-Conference Proceedings, p. 72-76.
- Kobayashi, K.D. 2023. Helping students and the public engage in Hawaii's self-sufficiency in food production. 2023 Hawaii International Conference on Education-Conference Proceedings, p. 1083-1092.

- Kobayashi, K.D. 2021. Tomorrow is yesterday—Transmuting a tropical crop production course due to COVID-19. 2021 Hawaii International Conference on Education-Conference Proceedings, p. 470-481.
- Kobayashi, K.D. and K. Perez. 2021. Attending an inaugural virtual horticulture conference: Experiences and lessons learned. 2021 Hawaii International Conference on Education-Conference Proceedings, p. 532-544.
- Perez, K. and K.D. Kobayashi. 2021. Planting the seeds: Recruiting strategies for agricultural students of the 21st century. 2021 Hawaii International Conference on Education-Conference Proceedings, p. 458-469.

Refereed Journal Publications

- Cox, J.A., N.V. Hue, A. Ahmad, and K.D. Kobayashi. 2021. Surface-applied or incorporated biochar and compost combination improves soil fertility, Chinese cabbage and papaya biomass. Biochar 3:213-227.

Extension Publications

- Kurasaki, R., Byrd, M., and K. Kobayashi. 2023. Low-cost light sensors for indoor agriculture. Extension Publications FST-68, 7 pp. College of Tropical Agriculture and Human Resources, University of Hawaii at Manoa.
- Nelson, B. and K. Kobayashi. 2022. Controlled environment agriculture for homeowners. Hanai’Ai Vol. 45 Jan/Feb/March 2022.
- Kobayashi, K. 2021. Controlled environment agriculture and artificial lighting to grow plants. Hawaii Landscape May/June 2021, p. 14-16.

Creative Works

Websites

- Virtual Field Trips and Enhanced Student Learning. (with K. Perez).
< <http://twominuteteachingtips.weebly.com/virtual-field-trips.html> >.
- Micro-Hydroponics.
< <http://microhydroponics.weebly.com> >.

Videos

- Controlled Environment Agriculture in Hawaii.
< <https://www.youtube.com/watch?v=P0hVJwX8hIU> >.

V. Leadership Roles

American Society for Horticultural Science

Activity: Membership Committee

BeginDate: 7/24/1991

EndDate: 7/10/1994

Chair 1993-1994

--

Activity: Professional Interest Group--Computer Applications in Horticulture

BeginDate: 7/24/2008

EndDate: 7/28/2009

Chair 2008-2009

Chair 2004-2005

Chair 2012-2013

Chair: 8/2013-8/2014

Secretary: 8/2015-8/2016

Chair Elect: 8/2016-9/2017

Chair: 9/2017-8/2018
Secretary: 8/2018-7/2019
Chair-elect: 7/2019-8/2020
Chair: 8/2020-8/2021

Activity: Production and Harvest Mechanization
BeginDate: 7/20/2004
EndDate: 7/30/2006
Chair-elect 2004-2005

Activity: Nominations and Elections Committee
BeginDate: 7/30/2006
EndDate: 7/24/2008
Education Division

Activity: Selection Committee for Career Awards / Outstanding Graduate Educator Award
BeginDate: 07/19/2007
EndDate: 9/25/2014

Activity: Plant Nutrient Management (Mineral Nutrition)
BeginDate: 7/24/2008
EndDate: 9/28/2011
Chair 2010-2011
Chair-elect 2009-2010
Secretary 2008-2009

Activity: Annual Conference Technical Program Committee
BeginDate: 7/28/2009
EndDate: 7/25/2013
Chair 2005-2006

Activity: Outstanding Undergraduate Educator Award Committee
BeginDate: 8/5/2010
EndDate: 8/2014

--

Activity: Collegiate Activities Committee (CAC)
BeginDate: 9/28/2011
EndDate: 8/2015
Chair 8/2013-8/2014
Begin: 8/2016
End: 8/2020

Activity: Graduate Student Activities Committee
BeginDate: 9/28/2011
EndDate: 7/25/2013
Begin: 8/2019-8/2025

Activity: ASHS Membership Representative
Start Date: 3/2015
End Date:

Working Group Teaching Methods
Secretary: 2013-2014
Chair Elect: 2014-2015
Chair: 8/2015-8/2016

--

ASHS Fellow 2016

--

Activity: ASHS Media Communications Committee

Begin: 9/2017

End: 8/2020

Chair: 9/2017-8/2020

--

Activity: Professional Interest Group -- Plant Nutrient Management

Chair: 9/2017-7/2019

--

Activity: Selection Committee for Career Awards / Outstanding Graduate Educator Award

BeginDate: 8/2015

EndDate: 8/2018

Begin: 8/2021

End: 8/2024

Activity: Education Planning Committee

7/2019-8/2022

--

Activity: Screening Committee for Publication Award / Education Publication Award Selection

Begin: 8/2020

End: 8/2023

Chair: 8/2022-8/2023

--

Activity: Interest Group - Teaching Methods

Secretary: 8/2020-8/2021

Chair-elect: 8/2021-8/2022

Chair: 8/2022 - 8/2023

Activity: Interest Group - Growth Chambers and Controlled Environments

Secretary: 8/2021-8/2023

Chair-elect: 8/2023-9/2024

Chair: 9/2024-1/2025

Activity: Fellows Screening Committee

Begin: 2/2022

End: 8/2024

Activity: ASHS Mentor

Begin: 8/2022

Activity: Interest Group - Plasticulture

Chair-elect: 9/2024-8/2025

Activity: Interest Group: Tropical Horticultural Crops

Secretary: 9/2024-8/2025

--

Activity: Outstanding Undergraduate Educator Award Committee

Begin: 9/2024

End: 8/2027

VI. Graduate Students

Category

Current Number of Students

Number Graduated (Career)

Chair of Master Committees

0

7

Chair of PhD Committees
Member of Master Committees
Member of PhD Committees

0

0

VII. Grant Support

CTAHR (College of Tropical Agriculture and Human Resources) Internal Funding Opportunity FY2024. \$25,908. (Graduate Assistantship). University of Hawaii at Manoa. (PI).

CTAHR Internal Funding Opportunity FY2023. \$16,966 (Graduate Assistantship). \$4,000 (Operations). University of Hawaii at Manoa. (PI).

University of Hawaii Women's Campus Club Grant. Purchase instruments to measure light, temperature, and relative humidity for student use in TPSS courses and their independent research projects. \$318. 2021. (PI).

Travel Grants

Travel Award from UHM OVPRS, University of Hawaii. \$575. 2024. Funding to attend the American Society for Horticultural Science Annual Conference in Honolulu, HI.

Travel Award from UHM OVPRS, University of Hawaii. \$1,400. 2023. Funding to attend the American Society for Horticultural Science Annual Conference in Orlando, FL.

Travel Award from UHM OVPRS, University of Hawaii. \$1,500. 2022. Funding to attend the American Society for Horticultural Science Annual Conference in Chicago, IL.

VIII. Presentations at Conferences

Kobayashi, K.* 2025. Controlled environment agriculture and protected cultivation. CTAHR Conference. April 10-11, 2025. Honolulu, HI.

Kobayashi, K.D.* 2025. TPSS 300 Tropical production systems: The course on the edge of forever. CTAHR Conference. April 10-11, 2025. Honolulu, HI.

Kurasaki, R.* and **K. Kobayashi**. 2025. Controlled environment agriculture in Hawaii's climate. CTAHR Conference. April 10-11, 2025. Honolulu, HI.

Kobayashi, K.D.* and L. Flores. 2025. Enhancing student learning using one-to-one mentoring in a graduate scientific communications course. 2025 Hawaii International Conference on Education. January 4-7, 2025. Honolulu, HI.

Kobayashi, K.D.* and C. Wright. 2025. Modifications to a tropical crop production systems course to enhance student learning. 2025 Hawaii International Conference on Education. January 4-7, 2025. Honolulu, HI.

Kobayashi, K.* and R. Kurasaki. 2024. Controlled environment agriculture, environmental remote sensing, and automated processes in Hawaii's Agriculture. AG2024 Hawaii Agriculture Conference. November 7-8, 2024. Honolulu, HI.

Kobayashi, K.D.* 2024. Evolution of an undergraduate tropical crop production systems course. American Society for Horticultural Science Annual Conference. September 23-27, 2024. Honolulu, HI.

Kobayashi, K.D.*, D. Yamagata-Santos, and K. Grabar. 2024. A mentor-mentee undergraduate scientific communications course. American Society for Horticultural Science Annual Conference. September 23-27, 2024. Honolulu, HI.

Kobayashi, K.D.*, B. Nelson, and J. Kobayashi. 2024. Promoting controlled environment agriculture activities at campus-wide events. American Society for Horticultural Science Annual Conference. September 23-27, 2024. Honolulu, HI.

Kobayashi, K.D.* and B. Nelson. 2024. Red and blue LED lighting effects on hydroponically grown 'Koba' green onion. American Society for Horticultural Science Annual Conference. September 23-27, 2024. Honolulu, HI.

- Kobayashi, K.D.*** and G. Rodriguez. 2024. Mentor-mentee perspectives and experiences in a graduate scientific communications course. American Society for Horticultural Science Annual Conference. September 23-27, 2024. Honolulu, HI.
- Kobayashi, K.D.*** and B. Nelson. 2023. LED and fluorescent lighting effects on hydroponically grown 'UH Manoa' lettuce and 'Hirayama' kai choy. American Society for Horticultural Science Annual Conference. July 31-August 4, 2023. Orlando FL.
- Kobayashi, K.D.***, K. Gaughen, and E.R. Kirk. 2023. A mentor-mentee graduate scientific communications course. American Society for Horticultural Science Annual Conference. July 31-August 4, 2023. Orlando FL.
- Kobayashi, K.D.***, J. Kobayashi, and B. Nelson. 2023. Using table displays and physical models to promote controlled environment agriculture. American Society for Horticultural Science Annual Conference. July 31-August 4, 2023. Orlando FL.
- Nelson, B. and **Kobayashi, K.D.*** 2023. A mentee-mentor research relationship in a lab on the edge of tomorrow. 2023 Hawaii International Conference on Education. January 3-6, 2023. Honolulu, HI.
- Kobayashi, K.D.*** and H. Reed. 2023. An individualized mentored course to supplement a graduate scientific communications course. 2023 Hawaii International Conference on Education. January 3-6, 2023. Honolulu, HI.
- Kobayashi, K.D.*** 2023. Helping students and the public engage in Hawaii's self-sufficiency in food production. 2023 Hawaii International Conference on Education. January 3-6, 2023. Honolulu, HI.
- Kobayashi, K.D.*** and B. Nelson. 2022. LED lighting effects on hydroponically grown 'UH Manoa' lettuce. American Society for Horticultural Science Annual Conference. July 30-August 3, 2022. Chicago, IL.
- Nelson, B. and **K.D. Kobayashi***. 2022. Effects of simulated Martian soils on the growth and development of kale, tomato, and radish. American Society for Horticultural Science Annual Conference. July 30-August 3, 2022. Chicago, IL.
- Kobayashi, K.D.*** and M. Russo. 2022. Evolution of an in-person horticulture graduate scientific communications course going online. American Society for Horticultural Science Annual Conference. July 30-August 3, 2022. Chicago, IL.
- Kobayashi, K.D.*** and T.D. Amore. 2021. LED and fluorescent lighting effects on hydroponically grown watercress. 2021 American Society for Horticultural Science Annual Conference. August 5-9, 2021. Denver, CO. HortScience 56(9):S188-S189.
- Kobayashi, K.D.*** and T.D. Amore. 2021. Red LED and fluorescent lighting effects on hydroponically grown 'Koba' green onion. 2021 American Society for Horticultural Science Annual Conference. August 5-9, 2021. Denver, CO. HortScience 56(9):S83.
- Kobayashi, K.D.*** and K. Perez. 2021. Adaptation of a tropical crop production systems course: Lessons learned. 2021 American Society for Horticultural Science Annual Conference. August 5-9, 2021. Denver, CO. HortScience 56(9):S235-236.
- Ritchie, M.T.* and **K.D. Kobayashi**. 2021. Student and instructor perspectives of an in-person graduate scientific communications course going virtual. 2021 American Society for Horticultural Science Annual Conference. August 5-9, 2021. Denver, CO. HortScience 56(9):S234-S235.
- Kobayashi, K.D.*** 2021. Tomorrow is yesterday—Transmuting a tropical crop production course due to Covid-19. 2021 Hawaii International Conference on Education-Conference. January 4-7, 2021. Honolulu, HI.
- Kobayashi, K.D.*** and K. Perez. 2021. Attending an inaugural virtual horticulture conference: Experiences and lessons learned. 2021 Hawaii International Conference on Education-Conference. January 4-7, 2021. Honolulu, HI.
- Perez, K.* and **K.D. Kobayashi**. 2021. Planting the seeds: Recruiting strategies for agricultural students of the 21st century. 2021 Hawaii International Conference on Education-Conference. January 4-7, 2021. Honolulu, HI.

IX. Awards

Invited interview for HortLegends at the American Society for Horticultural Science Conference, Orlando, FL. 2023. HortLegends is a video series of interviews in which longtime ASHS members reflect on their careers, what being a member of ASHS has meant to them, their advice for the next generation, and what excites them most about the future of horticulture.

Consulting Editor for Urban Horticulture and Controlled Environments for the *HortTechnology* peer-reviewed journal. American Society for the Horticulture Society. 2023-2025. Appointed unanimously by the *HortTechnology* Editorial Board.

Peer Review Award, American Society for Horticultural Science. 2020. Outstanding contributions to the *HortTechnology* journal as a peer reviewer of manuscripts.

Ka Pouhana (Mentor) Award, College of Tropical Agriculture and Human Resources, University of Hawaii at Manoa. 2017. Recognizes a CTAHR faculty member for outstanding support of student learning and development through co-curricular activities. Awardee receives \$1,500 for instruction-related activities.

Fellow. American Society for Horticultural Science. 2016. Election as a Fellow of the Society is the highest honor that ASHS can bestow on its members, in recognition of truly outstanding contributions to horticulture and the Society.