List of Refereed Journal Articles

(*graduate student or postdoctoral associate, while project director name in boldface)

Project Year 1 (September 1, 2020 to August 31, 2021)

1. Becker, L. E., Adhikari, U., May, T., **Shishkoff, N.**, **Crouch, J. A.**, and Cubeta, M. A. 2021. Evaluation of boxwood cultivars for resistance to boxwood blight, 2020. Plant Disease Management Reports 15:OT008. Access at: https://www.plantmanagementnetwork.org/pub/trial/pdmr/volume15/abstracts/ot008.asp.
2. Bika, R.*, Copes, W., and **Baysal-Gurel, F.** 2021. Comparative performance of sanitizers in managing plant-to-plant transfer and postharvest infection of *Calonectria pseudonaviculata* and *Pseudonectria foliicola* on boxwood. Plant Disease 105:2809-2821. Open access at: https://doi.org/10.1094/PDIS-03-21-0481-RE.
3. **Baysal-Gurel, F.**, Jennings, C., and Simmons, T. 2021. Evaluation of fungicides for the control of boxwood blight, 2020. Plant Disease Management Reports 15:OT002. Access at: https://www.plantmanagementnetwork.org/pub/trial/pdmr/volume15/abstracts/ot002.asp.
4. Castroagudín, V. L.*, **Shishkoff, N.**, Stanley, O., Whitesell, R., Olson, T., and **Crouch, J. A.** 2021. First report: Co-infection of *Sarcococca hookeriana* (sweetbox) by *Coccinonectria pachysandricola* and *Calonectria pseudonaviculata* causes a foliar disease of sweetbox in Pennsylvania. Plant Disease 105:1568. Open access at: https://doi.org/10.1094/PDIS-06-20-1198-PDN.
5. Castroagudín, V. L.*, **Weiland, J. E.**, **Baysal-Gurel, F.**, Cubeta, M. A., **Daughtrey, M. L.**, Gauthier, N. W., **LaMondia, J.**, **Luster, D. G.**, Hand, F. P., **Shishkoff, N.**, Williams-Woodward. J., Yang, X.*, LeBlanc, N., and **Crouch, J. A.** 2020. One clonal lineage of *Calonectria pseudonaviculata* is primarily responsible for the boxwood blight epidemic in the United States. Phytopathology 110:1845–1853. Open access at: https://doi.org/10.1094/phyto-04-20-0130-r.
6. Castroagudín, V. L.*, Yang, X.*, **Daughtrey M. L.**, **Luster, D. G.**, **Pscheidt, J. W.**, **Weiland, J. E.**, and **Crouch, J. A.** 2020. Boxwood blight disease: A diagnostic guide. Plant Health Progress 21:291–300. Open access at: https://doi.org/10.1094/PHP-06-20-0053-DG.
7. **Gouker, F. E.**, Guo, Y. H., and Pooler, M. R. 2020. Using acetone for rapid PCR-amplifiable DNA extraction from recalcitrant woody plant taxa. Applications in Plant Sciences 8(12):e11403. Open access at: https://doi.org/10.1002/aps3.11403.
8. **Hall, C. R.**, Hodges, A. W., Khachatryan, H., and Palma, M. A. 2020. Economic contributions of the green industry in the United States in 2018. Journal of Environmental Horticulture 38(3):73–79. Open access at: https://doi.org/10.24266/0738-2898-38.3.73.
9. **Hall, C.**, **Hong, C. X.**, **Gouker, F. E.**, and **Daughtrey, M. L.** 2021. Analyzing the structural shifts in U.S. boxwood production due to boxwood blight. Journal of Environmental Horticulture 31(3):91-99. Open access at: https://doi.org/10.24266/0738-2898-39.3.91.
10. **Hall, C. R.**, and Knuth, M. J. 2020. An update of the literature supporting the well-being benefits of plants: Part 4 – available resources and usage of plant benefits information. Journal of Environmental Horticulture 38(2):68–72. Open access at: https://doi.org/10.24266/0738-2898-38.2.68.

11. **Kong, P.**, Richardson, P., and **Hong, C. X.** 2020. *Burkholderia* sp. SSG is a broad-spectrum antagonist against plant diseases caused by diverse pathogens. Biological Control 151:104380. Open access at: https://doi.org/10.1016/j.biocontrol.2020.104380.
12. **LaMondia, J. A.** 2020. Curative fungicide activity against *Calonectria pseudonaviculata*, the boxwood blight pathogen. Journal of Environmental Horticulture 38(2):44–49. Open access at: https://doi.org/10.24266/0738-2898-38.2.44.
13. **LaMondia, J. A.**, and Maurer, K. 2020. *Calonectria pseudonaviculata* conidia dispersal and implications for boxwood blight management. Plant Health Progress 21(4):232–237. Open access at: https://doi.org/10.1094/PHP-04-20-0024-RS.
14. LeBlanc, N., Cubeta, M. A., and **Crouch, J. A.** 2021. Population genomics trace clonal diversification and intercontinental migration of an emerging fungal pathogen of boxwood. Phytopathology 111:184–193. Open access at: https://doi.org/10.1094/phyto-06-20-0219-fi.
15. Sacher, G. O.*, **Weiland, J. E.**, Putnam, M. L., **Crouch, J. A.**, and Castroagudín, V. L.* 2020. Confirmation of *Calonectria pseudonaviculata* causing boxwood blight of *Buxus* cultivars in Oregon. Plant Disease 104:1862. Open access at: https://doi.org/10.1094/pdis-01-20-0078-pdn.
16. **Shishkoff, N.**, Miller, M. E., and Cubeta, M. A. 2021. Rooting response of boxwood cultivars to hot water treatment and thermal sensitivity of *Calonectria henricotiae* and *C. pseudonaviculata* in diseased boxwood (*Buxus* spp.). Journal of Environmental Horticulture 39(1):1–10. Open access at: https://doi.org/10.24266/0738-2898-39.1.1.
17. Stravoravdis, S., Marra, R.E., LeBlanc, N. R., **Crouch, J. A**., and Hulvey, J. P. 2021. Evidence for the role of CYP51A and xenobiotic detoxification in differential sensitivity to azole fungicides in boxwood blight pathogens. International Journal of Molecular Sciences 22(17):9255. Open access at: https://doi.org/10.3390/ijms22179255.
18. Yang, X.*, Castroagudín, V. L.*, **Daughtrey, M. L.**, Loyd, A., **Weiland, J. E.**, **Shishkoff, N.**, **Baysal-Gurel, F.**, **Santamaria, L.**, Salgado-Salazar, C., **LaMondia, J. A.**, **Crouch, J. A.**, and **Luster, D. G.** 2021. A diagnostic guide for Volutella blight affecting *Buxaceae*. Plant Health Progress 22:578-590. Open access at: https://doi.org/10.1094/PHP-02-21-0052-DG.
19. Yang, X.*, McMahon, M. B., Ramachandran, S. R., Garrett, W. M., LeBlanc, N., **Crouch, J. A.**, **Shishkoff, N.**, and **Luster, D. G.** 2021. Comparative analysis of extracellular proteomes reveals putative effectors of the boxwood blight pathogens, *Calonectria henricotiae* and *C. pseudonaviculata*. Bioscience Reports 41(3):BSR20203544. Open access at: https://doi.org/10.1042/BSR20203544.

Project Year 2 (September 1, 2021 to August 31, 2022)

20. Aliello, D., Guarnaccia, V., Vitale, A., LeBlanc, N., **Shishkoff, N.**, and Polizzi, G. 2022. Impact of Calonectria diseases on ornamental horticulture: diagnosis and control strategies. Plant Disease 106:1773-1787. Open access at: https://doi.org/10.1094/PDIS-11-21-2610-FE.
21. Avenot, H. F., Baudoin, A. B., and **Hong, C. X.** 2022. Conidial production and viability of *Calonectria pseudonaviculata* on infected boxwood leaves and twigs as affected by temperature, wetness and dryness periods. Plant Pathology 71:696-701. Open access at: http://doi.org/10.1111/ppa.13500.

22. Barker, B. S., Coop, L., and **Hong, C. X.** 2022. Potential distribution of invasive boxwood blight pathogen (*Calonectria pseudonaviculata*) as predicted by process-based and correlative models. Biology 11, 849. Open access at: https://pmc.ncbi.nlm.nih.gov/articles/PMC9220671/.
23. **Baysal-Gurel, F.**, Simmons, T., and Jennings, C. 2022. Evaluation of fungicides for the control of boxwood blight, 2021. Plant Disease Management Reports 16:OT010. Access at: https://www.plantmanagementnetwork.org/pub/trial/pdmr/volume16/abstracts/OT010.asp.
24. **Baysal-Gurel, F.**, Simmons, T., and Jennings, C. 2022. Evaluation of fungicides for the control of boxwood blight, 2021. Plant Disease Management Reports 16:OT021. Access at: https://www.plantmanagementnetwork.org/pub/trial/pdmr/volume16/abstracts/OT021.asp.
25. Behe, B. K., Huddleston, P. T., and **Hall, C.** 2022. Gardening motivations of U.S. plant purchasers during COVID-19 pandemic. Journal of Environmental Horticulture (2022) 40 (1):10-17. Open access at: https://doi.org/10.24266/0738-2898-40.1.10.
26. Brand, T., Beltz, H., Ehsen, B., Adhikari, U.*, **Daughtrey, M. L.**, **Luster, D. G.**, **Kong, P.**, and **Hong, C. X.** 2022. Multi-year field plantings evaluating boxwood cultivars for susceptibility to the blight pathogens (*Calonectria* spp.) in northern Germany. Plant Disease 107:713-719. Open access at: https://doi.org/10.1094/PDIS-05-22-1102-RE.
27. Dhakal, K., Bika, R.*, Ghimire, B.*, Parajuli, M., Neupane, S., Neupane, K., Addesso, K. M., and **Baysal-Gurel, F.** 2022. Arthropod and disease management in boxwood production. Journal of Integrated Pest Management 13(1):18. Open access at: https://doi.org/10.1093/jipm/pmac013.
28. **Gouker, F.**, Guo, Y., and Pooler, M. 2022. High-Resolution Melting analysis enables efficient detection and differentiation of two boxwood blight pathogens by *q*PCR assays. PhytoFrontiers 2(3): 176-180. Open access at: https://doi.org/10.1094/PHYTOFR-09-21-0066-SC.
29. **Hong, C. X.**, **Daughtrey, M.**, Howle, M., Schirmer, S., Kosta, K., **Kong, P.**, Likins, M., and Suslow, K. 2022. Rapid decline of *Calonectria pseudonaviculata* soil population in selected gardens across the United States. Plant Disease 106:2831-2838. Open access at: https://doi.org/10.1094/pdis-02-22-0443-re.
30. Kodati, S.*, Allan-Perkins, E., Cowles, R.S., and **LaMondia, J.** 2022. Effect of temperature, leaf wetness period, and cultivar susceptibility on boxwood blight disease development and sporulation. Plant Disease 107:142-148. Open access at: https://doi.org/10.1094/PDIS-05-22-1022-RE.
31. Kodati S.*, Cowles R., and **LaMondia J.** 2022. Survival of conidia of the boxwood blight pathogen *Calonectria pseudonaviculata* under different relative humidity condition. Plant Health Progress 106:317-320. Open access at: https://doi.org/10.1094/PHP-12-21-0142-RS.
32. **Kong, P.** 2021. Survival of SSG, an endophytic Burkholderia biocontrol agent, on boxwood leaf surface. Journal of Environmental Horticulture 39 (4):138-142. Open access at:https://doi.org/10.24266/0738-2898-39.4.138.
33. **Kong, P.**, Li, X. P.*, **Gouker, F.**, and **Hong, C. X.** 2022. cDNA transcriptome of *Arabidopsis* reveals various defense priming induced by a broad-spectrum biocontrol agent *Burkholderia* sp. SSG. International Journal of Molecular Sciences 23(6):3151. Open access at: https://doi.org/10.3390/ijms23063151.

34. **Kong, P.**, Sharifi, M., Bordas, A., and **Hong, C. X.** 2021. Differential tolerance to *Calonectria pseudonaviculata* of English boxwood plants associated with the complexity of culturable fungal and bacterial endophyte communities. Plants. 10:2244. Open access at: https://doi.org/10.3390/plants10112244.
35. **LaMondia, J. A.**, Allan-Perkins, E., Kodati, S.* 2021. Factors affecting boxwood blight spread under landscape conditions. Journal of Environmental Horticulture 39(3):100-107. Open access at: https://doi.org/10.24266/0738-2898-39.3.100
36. Li, X. P.*, **Kong, P.**, **Daughtrey, M. L.**, Kosta, K., Schirmer, S., Howle, M., Likins, M., and **Hong, C. X.** 2022. Characterization of the soil bacterial community in selected boxwood gardens across the United States. Microorganisms 10(8):1514. Open access at: https://doi.org/10.3390/microorganisms10081514.
37. Rogers, L. W., Koehler, A. M., **Crouch, J. A.**, Cubeta, M. A. and LeBlanc, N. R. 2022. Comparative genomic analysis reveals contraction of gene families with putative roles in pathogenesis in the fungal boxwood pathogens *Calonectria henricotiae* and *C. pseudonaviculata*. BMC Ecology and Evolution 22:79. Open access at: https://doi.org/10.1186/s12862-022-02035-4.
38. **Weiland, J. E.**, Ohkura, M.*, Scagel, C. F., Davis, E. A., and Beck, B. R. 2022. Cool temperatures favor growth of Oregon isolates of *Calonectria pseudonaviculata* and increase severity of boxwood blight on two *Buxus* cultivars. Plant Disease 106:3100-3108. Open access at: https://doi.org/10.1094/PDIS-04-22-0769-RE.

Project Year 3 (September 1, 2022 to August 31, 2023)

39. Brand, T., Beltz, H., Adhikari, U*., **Daughtrey, M., Luster, D. G., Kong, P., and Hong, C. X.** 2022. Evaluation of fungicides for management of boxwood blight caused by *Calonectria* spp. under field conditions in northern Germany. Journal of Plant Diseases and Protection 130:325-335. Open access at: https://link.springer.com/article/10.1007/s41348-022-00691-8.
40. Ghimire, B.*, Liyanage, K. H. E., **Hall, C.**, and **Baysal-Gurel, F. 2023**. A modified Delphi study on boxwood blight disease management in the US nursery industry. HortScience 58:898-906. Open access at: https://journals.ashs.org/hortsci/view/journals/hortsci/58/8/article-p898.xml?tab_body=fulltext.
41. Ghimire, B.*, Parajuli, M., Liyanapathiranage, P.*, Simmons, T., and **Baysal-Gurel, F.** 2023. Evaluation of fungicides and antitranspirant for the control of boxwood blight, 2022. Plant Disease Management Reports 17:OT018. Open access at: https://www.plantmanagementnetwork.org/pub/trial/pdmr/reports/2023/OT018.pdf.
42. **Hong, C. X.** 2023. Building health into new boxwood crops and plantings by making informed cultivar selection. Plant Health Progress 24:298-302. Open access at: https://doi.org/10.1094/PHP-01-23-0002-RV.
43. **Kong, P.**, **Daughtrey, M. L.**, and **Hong, C. X.** 2023. Differential adaptation has resulted in aggressiveness variation of *Calonectria pseudonaviculata* on hosts *Buxus*, *Pachysandra* and *Sarcococca.* Journal of Fungi 9(2):181. Open access at: https://www.mdpi.com/2309-608X/9/2/181.
44. **Kong, P.**, Li, X. P.*, Sharifi, M., Bordas, A., and **Hong, C. X.** 2023. Leaf endophyte community composition and network structures differ between tolerant and susceptible

English boxwood. Phytobiomes Journal 7(2):160-171. Open access at: https://apsjournals.apsnet.org/doi/abs/10.1094/PBIOMES-02-23-0009-FI.

45. Li, X. P.*, Omolehin, O*., Hemmings, G., Tseng, H. T., Taylor, A., Taylor, C., **Kong, P.**, **Daughtrey, M.**, **Luster, D.**, **Gouker, F.**, and **Hong, C. X. 2023**. Boxwood phyllosphere fungal and bacterial communities and their differential responses to film-forming anti-desiccants. BMC Microbiology 23:219. Open access at: https://link.springer.com/article/10.1186/s12866-023-02956-0.
46. Li, X. P.*, Tseng, H. T., Omolehin, O.*, Hemmings, G., Taylor, C., Taylor, A., **Kong, P.**, **Daughtrey, M. L.**, **Gouker, F.**, and **Hong, C. X. 2023**. Characterization of boxwood shoot bacterial communities and potential impact from fungicide treatments. Microbiology Spectrum 11(2):e04163-22. Open access at: https://journals.asm.org/doi/epub/10.1128/spectrum.04163-22.
47. Ohkura, M.*, Scagel, C. F., and **Weiland, J. E.** 2023. Rapid and scalable DNA extraction and real-time PCR assay from boxwood tissue for the detection of *Calonectria pseudonaviculata*, causal agent of boxwood blight. Plant Disease 107:1279-1283. Open access at: https://doi.org/10.1094/PDIS-06-22-1453-SR.
48. Omolehin, O.*, Keller, J., **Gouker, F.**, **Daughtrey, M.**, **Luster, D. G.**, **Pscheidt, J.**, and **Hong, C. X.** 2023. Combating an invasive boxwood pathogen – *Calonectria pseudonaviculata* – in the United States by shifting production to less susceptible cultivars. Plant Disease 107:2185-2196. Open access at: https://doi.org/10.1094/PDIS-09-22-2124-RE.
49. Yoder, K. S., Dunn, R. A., Saunders, J. B., Mays, T. E., Yanny, M. D., **Hong, C. X.**, and Scoggins, H. L. 2022. Field performance of *Buxus* cultivars and selections against boxwood leafminer and boxwood blight. Journal of Environmental Horticulture 40(4): 129-142. Open access at: https://doi.org/10.24266/2573-5586-40.4.129.

Project Year 4 (September 1, 2023 to August 31, 2024)

50. **Baysal-Gurel, F.**, Ghimire, B.*, and Simmons, T. 2024. Evaluation of fungicides and biorational products for the control of boxwood blight, 2023. Plant Disease Management Reports 18:OT015. Access at: https://www.plantmanagementnetwork.org/pub/trial/pdmr/volume18/abstracts/OT015.asp.
51. Ghimire, B.*, Pendyala, B., Patras, A., and **Baysal-Gurel, F.** 2024. Evaluating UV-C sensitivity of *Calonectria pseudonaviculata* in model buffer solution using UV-C light emitting-diode system. Plant Disease 108:2663-2667. Open access at: https://doi.org/10.1094/PDIS-03-24-0618-SC.
52. **Kong, P.**, Ioos, R., and **Hong, C. X.** 2024. First report of *Calonectria henricotiae* causing box blight in Spain. New Disease Reports 49(2):e12278. Open access at: https://doi.org/10.1002/ndr2.12278.
53. Khaliq, I.*, Brand, T., **Daughtrey, M.**, **Kong, P.**, and **Hong, C. X.** 2024. Investigating weather variables driving boxwood blight epidemics: insights from field trials with *Buxus sempervirens* 'Suffruticosa' in northern Germany between 2006 and 2020. Plant Pathology 73:2043-2055. Open access at: http://doi.org/10.1111/ppa.13969.
54. Li, X. P.*, **Weiland, J. E.**, Ohkura, M.*, **Luster, D. G.**, **Daughtrey, M. L.**, **Gouker, F. E.**, Chen, G., **Kong, P.**, and **Hong, C. X. 2024**. Cultivars and production environments shape shoot endophyte profiles of boxwood with different blight resistance.

PhytoFrontiers 4:602-615. Open access at: https://doi.org/10.1094/PHYTOFR-03-24-0023-R.

55. Ohkura, M.*, Beck, B. R., Scagel, C. F., and **Weiland, J. E.** 2024. The effect of boxwood leaf volatiles on conidial germination of *Calonectria pseudonaviculata*, the causal agent of boxwood blight. Phytopathology 114:1596-1602. Open access at: https://doi.org/10.1094/PHYTO-12-23-0507-R.

Project Year 5 (September 1, 2024 to present)

56. **Daughtrey, M.**, Gray, J., Calabro, J., and **Hong, C. X.** 2025. Fighting against invasive species through global and stakeholder partnerships - a case study of boxwood blight. Plant Disease: First Look at https://apsjournals.apsnet.org/doi/10.1094/PDIS-01-25-0210-SC.
57. Ghimire, B.*, Parajuli, M., Simmons, T., Liyanapathiranage, P.*, and **Baysal-Gurel, F.** 2025. Evaluation of fungicides, host-plant defense inducer, and anti-transpirant in management of boxwood blight. HortTechnology 35:101-115. Open access at: https://doi.org/10.21273/HORTTECH05541-24.
58. **Hall, C.** 2024. Costs Associated With Mitigating Boxwood Blight During Nursery Production in the U.S. Journal of Environmental Horticulture 42(2):165-172, Open access at: https://doi.org/10.24266/0738-2898-42.4.165).
59. Khaliq, I.*, Avenot, H. F., Baudoin, A., Coop, L., and **Hong, C. X.** 2024. Epidemiology of boxwood blight in western North Carolina and Virginia and evaluation of the boxwood blight infection risk model. Scientific Reports 14:26829. Open access at: https://www.nature.com/articles/s41598-024-76443-5.
60. **Kong, P.**, Guarnaccia, V., Carter, C., and **Hong, C. X.** 2024. First report of *Calonectria henricotiae* causing boxwood blight in Switzerland and Italy. New Disease Reports 50(2): e70006. Open access at: https://DOI.org/10.1002/ndr2.70006.
61. **Kong, P.**, and **Hong, C. X.** 2024. Evaluation of 1021Bp, a close relative of *Pseudomonas eucalypticola*, for potential of plant growth promotion, fungal pathogen suppression and boxwood blight control. BMC Microbiology 24:346. Open access at: https://doi.org/10.1186/s12866-024-03497-w.
62. **Kong, P.**, Li, X. P., and **Hong, C. X.** 2025. Sporulation dynamics among US Calonectria pseudonaviculata isolates on infected boxwood leaves. Plant Pathology First Look at https://doi.org/10.1111/ppa.70019.
63. **LaMondia, J. A.**, Cowles, R. S., and **Shishkoff, N.** 2025. The effects of sanitizers on *Calonectria pseudonaviculata* and *C. henricotiae* conidia and microsclerotia viability. Journal of Environmental Horticulture 43(2):83–90 open access at https://doi.org/10.24266/0738-2898-43.2.83.
64. Li, X.*, and **Hong, C. X.** 2025. Evaluation of biochar liquid extract for control of boxwood blight. Plant Health Progress Published Open access at: https://doi.org/10.1094/PHP-12-24-0143-PDMR.
65. Likins T., Davis B., Anderson P., Gillis B., and **Hong C. X.** 2025. Flutriafol drench provides season-long protection of boxwood plantings pre-infected by *Calonectria pseudonaviculata* in the Mid-Atlantic. Plant Disease. Abstract available at: https://doi.org/10.1094/PDIS-12-24-2731-SC.

66. Sacher, G.*, and **Pscheidt, J.** 2025. Detached leaf assays reveal long-term efficacy of the systemic fungicide flutriafol against boxwood blight. Plant Disease: First Look at https://apsjournals.apsnet.org/doi/abs/10.1094/PDIS-11-24-2508-RE.