

Biographical Sketch

James Correll

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A. Education and training.

Pennsylvania State University	Plant Science/Plant Pathology	B.S. 1980
University of California, Berkeley	Plant Pathology	M.S. 1982
University of California, Berkeley	Plant Pathology	PhD 1986

B. Employment history.

University of Arkansas	Plant Pathology	Distinguished Professor, 2018-
University of Arkansas	Plant Pathology	Professor, 1998 - 2018
University of Arkansas	Plant Pathology	Assoc. Prof. 1993-1998
University of Arkansas	Plant Pathology	Assistant Prof. 1989-1993

C. Professional activities, honors, and awards (past 5 years)

- 2010 Bill and Melinda Gates Foundation Workshop (invited). Nairobi, Kenya
- 2010 Bill and Melinda Gates Foundation BBSRC Workshop (invited). Nairobi, Kenya
- 2010-2012 Senior Editor, Plant Disease
- 2011 Outstanding M.S. and PhD student Advisor Award
- 2011 Organizer of the 2011 International Spinach Conference, Amsterdam, Netherlands
- 2012 Panel Manager for the Common Bean Productivity Research for Global Food Security, USDA/NIFA
- 2012 Appointed Scientific Advisor Board Member for USDA/NIFA Grant on Blast Disease of Rice and Wheat
- 2013 Elected APS Fellow
- 2013 Organizer of the International Spinach Conference, Guangzhou, China
- 2011-2013 Editor-in-Chief, Crop Protection (2011-2013)
- 2013 The Presidents' Bronze Volunteer Service Award, President's Council on Service and Civic Participation, USA Freedom Corps

D. Total grant funding - >\$16 M USD.

E. Selected Relevant Publications (Past 3 years) (Total = 134)

Feng, C., Lamour, K. H., Bluhm, B. H., Sharma, S. Shrestha, S., Dhillon, B. D. S., and Correll, J. C. 2018. Genome sequences resources of three races of *Peronospora effusa*: a resource for studying the evolution of the spinach downy mildew pathogen. *Molecular Plant Molecular Interactions*. *Molecular Plant-Microbe Interactions* <https://doi.org/10.1094/MPMI-04-18-0085-A>

Feng, C., B.H. Bluhm, A. Shi, J.C. Correll. 2018. Molecular markers linked to three spinach downy mildew disease resistance loci. *Euphytica* 214: 174.

Feng, C., Bluhm, B. H., Shi, A., and J. C. Correll. 2018. Development of molecular markers linked to three spinach downy mildew resistance loci. *Euphytica* 214: 174. <https://doi.org/10.1007/s10681-018-2258-4>

Liu, B., Stein, L. Cochran, K., du Toit, L. J., Feng, C., Dhillon, B., and J. C. Correll. 2020. Three new fungal leaf spot diseases of spinach and the evaluation of fungicide efficacy for disease management. *Plant Disease* <https://doi.org/10.1094/PDIS-04-20-0918-RE>

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- Bhattacharai, G., Feng, C., Dhillon, B., Shi, A., Villarroel-Zeballos, M., Klosterman, S. J. and J. C. Correll. 2020. Detached leaf inoculation assay for evaluating resistance to the spinach downy mildew pathogen. *European Journal of Plant Pathology* 158:511–520. <https://doi.org/10.1007/s10658-020-02096-5>
- Dhillon, B., Feng, C., Villarroel-Zeballos, M. I., Castroagudin, V. L., Bhattacharai, G., Klosterman, S. J., and J. C. Correll. 2020. Sporangiospore viability and oospore production in the spinach downy mildew pathogen, *Peronospora effusa* *Plant Disease* 104:2634–2641. <https://doi.org/10.1094/PDIS-02-20-0334-RE>
- Bhattacharai, G., Shi, A., Feng, C., Dhillon, B., Mou, B., & Correll, J. C. (2021). Genome Wide Association Studies in Multiple Spinach Breeding Populations Refine Downy Mildew Race 13 Resistance Genes. *Frontiers in plant science*, 11, 563187. <https://doi.org/10.3389/fpls.2020.563187>
- Liu, Z., Lu, T., Feng, C., Zhang, H., Li, G., Xu, Z., Correll, J. C., Qian, W., 2021. Fine mapping and molecular marker development of the Fs gene controlling fruit spines in spinach (*Spinacia oleracea* L. *Theoretical and Applied Genetics* 134:1319-1328. <https://doi.org/10.1007/s00122-021-03772-8>
- Lee, D-Y., Jeon, J., Kim, K-T., Cheong, K., Song, H., Gobong, S., Choi, H., Ko, J., Opiyo, S. O., Correll, J. C., Zuo, S., Madhav, S. Wang, G. L., and Lee, Y.H. 2021. Comparative genome analyses of four rice-infecting *Rhizoctonia solani* isolates reveal extensive enrichment of homogalacturonan modification genes *BMC Genomics* 22:306. <https://doi.org/10.1186/s12864-021-07549-7>
- Bhattacharai, G., Yang, W., Shi, A., Feng, C., Dhillon, B., Correll, J. C., and Mou, B. 2021. High resolution mapping and candidate gene identification of downy mildew race 16 resistance in spinach. *BMC Genomics* 22, 478 (2021). <https://doi.org/10.1186/s12864-021-07788-8>
- Clark, K. J., Feng, C., Zima, H. V., Poudel-Ward, B., Slinski, S. L., Porchas, P., Klosterman, S. J., and J.C. Correll. 2021. Evaluation of spinach cultivars for downy mildew resistance in Yuma, AZ 2021. *Plant Disease Management Reports*. Report No. 15:V112. <https://www.plantmanagementnetwork.org/pub/trial/pdmr/volume15/abstracts/v112.asp>
- Mutiga, S. K., Rotich, F., Were, V. W., Kimani, J. M., Mwangera, D., Onaga, G., Konaté, K., Razanaboahirana, C., Bigirimana, J., Ndayiragije, A., Yanoria, M. J., Wasilwa, L., Ouedraogo, I., Mitchell, T., Wang, G.L. Correll, J. C., Talbot, N. J. 2021. Integrated strategies for durable rice blast resistance in sub-Saharan Africa. *Plant Disease (Feature Article)* <https://doi.org/10.1094/PDIS-03-21-0593-FE>
- Clark, K.J., Anchieta, A.G., da Silva, M.B., Kandel, S.L., Choi, Y.-J., Martin, F.N., Correll, J.C., Van Deynze, A., Brummer, E.C., and Klosterman, S.J. 2022. Early detection of the spinach downy mildew pathogen in leaves by recombinase polymerase amplification. *Plant Disease*. 2022 <https://doi.org/10.1094/PDIS-11-21-2398-RE>.
- Shi, A., Bhattacharai, G., Xiong, H., Avila, C., Feng, C., Liu, B., Joshi, V., Stein, L., Mou, B., du Toit, L. J., and J. C. Correll. 2022. Genome-wide association study and genomic prediction of white rust resistance in USDA GRIN spinach germplasm. *Horticulture Research* <https://doi.org/10.1093/hr/uhac069>.
- Fletcher, K., Shin, O. H., Clark, K. J., Feng, C., Putman, A.I., Correll, J. C., Klosterman, S. J., Van Deynze, A., Michelmore, R. 2022. A telomere-to-telomere reference genome assembly for the *Peronosporaceae*. *Molecular Plant Microbe Interactions*. <https://doi.org/10.1094/MPMI-09-21-0227-R>
- Bhattacharai, G., A. Shi*, B. Mou, and J. Correll. 2022. Resequencing worldwide spinach germplasm identifies downy mildew field tolerance QTLs and genomic prediction tools. *Horticulture Research*, Published: 13 September 2022, uhac205. <https://doi.org/10.1093/hr/uhac205>
- Bhattacharai, G. *, A. Shi*, B. Mou*, and J. Correll*. 2023. Skim resequencing of progeny population of Lazio and Whale crossed with Viroflay finely mapped downy mildew locus and identified resistance genes in spinach *Horticulture Research*, uhac076, <https://doi.org/10.1093/hr/uhac076>