BIOGRAPHICAL SKETCH

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NAME: Beiquan Mou POSITION TITLE: Research Geneticist

EDUCATION & TRAINING *(Begin with baccalaureate or other initial professional education, such as nursing, include postdoctoral training and residency training if applicable. Add/delete rows as necessary.)*

INSTITUTION AND LOCATION	DEGREE *(if applicable)*	Completion Date MM/YYYY	FIELD OF STUDY
Shandong University of Agriculture	B. S.	02/1982	Agronomy
Oregon State University	M. S.	06/1986	Plant Breeding and Genetics
Oregon State University	Ph. D.	06/1992	Plant Breeding and Genetics
Iowa State University	Postdoctor	03/2001	Molecular Genetics

A. Research & Professional Experience

Research Specialist. Biochemistry Dept., University of Missouri-Columbia. 1993-1997. Research focused on the mechanism and inheritance of self- and interspecific-incompatibility in *Nicotiana*.
Research Geneticist. Crop Improvement and Protection Research Unit, Pacific West Area, Agricultural Research Service, USDA, Salinas, California. April, 2001-present. Breeding and genetic studies of lettuce and spinach for resistances to diseases, insects, and abiotic stresses, nutritional values, and horticultural traits.

B. Collaborators & Affiliations

Dr. Ainong Shi, Associate Professor, Dept. of Horticulture, University of Arkansas
Dr. James Correll, Distinguished Professor, Dept. of Plant Pathology, University of Arkansas
Dr. Steven Klosterman, Research Molecular Biologist, Crop Improvement and Protection Research Unit, USDA-ARS, Salinas, CA

C. Publications (last four years and relevant)

Bhattarai, G., D. Olaoye, **B. Mou**, J. Correll, and A. Shi. 2022. Mapping and selection of downy mildew resistance in spinach cv. Whale by low coverage whole genome sequencing. Frontiers in Plant Science 13:1012923. doi: 10.3389/fpls.2022.1012923

Bhattarai, G., A. Shi, **B. Mou**, and J. Correll. 2022. Resequencing worldwide spinach germplasm for identification of field resistance QTLs to downy mildew and assessment of genomic selection methods. Horticulture Research 9: uhac205. https://doi.org/10.1093/hr/uhac205

Shi, A., G. Bhattarai, H. Xiong, C. Avila, C. Feng, B. Liu, V. Joshi, L. Stein, **B. Mou**, L. du Toit, and J.C. Correll. 2022. Genome-wide association study and genomic prediction of white rust resistance in USDA GRIN spinach germplasm. Horticulture Research 9: uhac069. https://doi.org/10.1093/hr/uhac069

Kandel, S., A. P. Henry, P. Goldman, **B. Mou**, and S. Klosterman. 2022. Composition of the microbiomes from spinach seeds infested or non-infested with *Peronospora effusa* or *Verticillium dahliae*. Phytobiomes Journal. https://doi.org/10.1094/PBIOMES-05-21-0034-R

Bhattarai, G., W. Yang, A. Shi, C. Feng, B. Dhillon, J. C. Correll, and **B. Mou**, 2021. High resolution mapping and candidate gene identification of downy mildew race16 resistance in spinach. BMC Genetics 22: 478. https://doi.org/10.1186/s12864-021-07788-8

Clark, K.J., C. Feng, B. Dhillon, S.L. Kandel, B. Poudel, **B. Mou**, S.J. Klosterman, and J.C. Correll. 2020. Evaluation of spinach cultivars for downy mildew resistance in Yuma, AZ 2020. Plant Disease Management Reports 14: V146.

Bhattarai, G., A. Shi, C. Feng, B. Dhillon, **B. Mou**, and J. C. Correll. 2020. 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

Mou, B. 2019. 'USDA Red' spinach. HortScience 54: 2070-2072. https://doi.org/10.21273/HORTSCI14308-19 (Cover story)

Kandel, S.L., K.V. Subbarao, A. Shi, **B. Mou**, and S.J. Klosterman. 2019. Evaluation of biopesticides for managing downy mildew of spinach in organic production systems 2017 and 2018. Plant Disease Management Reports 13: V171.

Kandel, S., **B. Mou**, N. Shishkoff, A. Shi, K. Subbarao, S. Klosterman. 2019. Spinach downy mildew: Advances in our understanding of the disease cycle and prospects for disease management. Plant Disease 103: 791-803. https://doi.org/10.1094/PDIS-10-18-1720-FE (Cover story)

D. Synergistic Activities

Chair, Leafy Vegetable Crop Germplasm Committee, National Plant Germplasm System, U.S. Dept. of Agriculture, 2005 - present.
Chair, Genetics and Germplasm Working Group, American Society for Horticultural Science, 2006-08.
Chair, Working Group of Asian Horticulture, American Society for Horticultural Science, 2008-09.
Member, Endowment Fund Committee, American Society for Horticultural Science, 2008-13.
Chair, Vegetable Breeding Working Group, American Society for Horticultural Science, 2009-11.
Consulting Editor, HortScience journal, American Society for Horticultural Science, 2011-present.

Patents:

Mou, B., J. Jane, C. Jansson, and C. Sun. 2006. Transgenic corn plants having seeds with modified cornstarch characteristics and method of making the transgenic corn plants. U.S. utility patent number 7,009,092. Issue date March 7, 2006.

Complete list of published work in My Bibliography:

Refereed Papers (112)

Mou, B. 2023. Green leaf, red leaf, and romaine lettuce breeding lines with resistance to leafminer, corky root, and downy mildew. HortScience 58: 436-441. https://doi.org/10.21273/HORTSCI17069-22

Bhattarai, G., D. Olaoye, **B. Mou**, J. Correll, and A. Shi. 2022. Mapping and selection of downy mildew resistance in spinach cv. Whale by low coverage whole genome sequencing. Frontiers in Plant Science 13:1012923. doi: 10.3389/fpls.2022.1012923

Bhattarai, G., A. Shi, **B. Mou**, and J. Correll. 2022. Resequencing worldwide spinach germplasm for identification of field resistance QTLs to downy mildew and assessment of genomic selection methods. Horticulture Research 9: uhac205. https://doi.org/10.1093/hr/uhac205

Mou, B. (Ed.) 2022. Vegetable cultivar descriptions for North America, List 28. HortScience 57: 949-1040. https://doi.org/10.21273/HORTSCI.57.8.949

Kumar, P., R. Eriksen, I. Simko, A. Shi, and **B. Mou.** 2022. Insights into nitrogen metabolism in the wild and cultivated lettuce as revealed by transcriptome and weighted gene co-expression network analysis. Scientific Reports 12: 9852. https://doi.org/10.1038/s41598-022-13954-z

Shi, A., G. Bhattarai, H. Xiong, C. Avila, C. Feng, B. Liu, V. Joshi, L. Stein, **B. Mou**, L. du Toit, and J.C. Correll. 2022. Genome-wide association study and genomic prediction of white rust resistance in USDA GRIN spinach germplasm. Horticulture Research 9: uhac069. https://doi.org/10.1093/hr/uhac069

Guo, J., L. Dong, S. Kandel, Y. Jiao, L. Shi, Y. Yang, A. Shi, and **B. Mou**. 2022. Transcriptomic and metabolomic analysis provides insights into the fruit quality and yield improvement in tomato under soilless substrate-based cultivation. Agronomy 12: 923. https://doi.org/10.3390/agronomy12040923

Kandel, J. S., G. V. Sandoya, W. Zhou, Q. D. Read, **B. Mou**, and I. Simko. 2022. Identification of quantitative trait loci associated with bacterial leaf spot resistance in baby leaf lettuce. Plant Disease Mar 12. https://doi.org/10.1094/pdis-09-21-2087-re

Kandel, S., A. P. Henry, P. Goldman, **B. Mou**, and S. Klosterman. 2022. Composition of the microbiomes from spinach seeds infested or non-infested with *Peronospora effusa* or *Verticillium dahliae*. Phytobiomes Journal. https://doi.org/10.1094/PBIOMES-05-21-0034-R

Kandel, S., A. Anchieta, A. Shi, **B. Mou**, and S. Klosterman. 2022. Crustacean meal elicits expression of growth and defense-related genes in roots of lettuce and tomato. PhytoFrontiers 2: 10-20. https://doi.org/10.1094/PHYTOFR-03-21-0017-R

Bhattarai, G., W. Yang, A. Shi, C. Feng, B. Dhillon, J. C. Correll, and **B. Mou**, 2021. High resolution mapping and candidate gene identification of downy mildew race16 resistance in spinach. BMC Genetics 22: 478. https://doi.org/10.1186/s12864-021-07788-8

Nguyen, C.D., J. Li, **B. Mou,** H. Gong, and H. Huo. 2021. A case study of using an efficient CRISPR/Cas9 system to develop variegated lettuce. Vegetable Research 1: 4. https://doi.org/10.48130/VR-2021-0004

Zhou, W., Z. Li, J. Zhang, **B. Mou**, and W. Zhou. 2021. The *OsIME4* gene identified as a key to meiosis initiation by RNA *in situ* hybridization. Plant Biology 23(5): 861-873. https://doi.org/10.1111/plb.13274

Mamo, B.E., R.L. Eriksen, N.D. Adhikari, R. Hayes, **B. Mou**, and I. Simko. 2021. Epidemiological characterization of lettuce drop (*Sclerotinia* spp.) and biophysical features of the host identify soft stem as a susceptibility factor. PhytoFrontiers 1: 182-204. (Editor's Pick) https://doi.org/10.1094/PHYTOFR-12-20-0040-R

Kumar, P., R. Eriksen, I. Simko, and **B. Mou**. 2021. Molecular mapping of water-stress responsive genomic loci in lettuce (*Lactuca* spp.) using kinetics chlorophyll fluorescence, hyperspectral imaging and machine learning. Frontiers in Genetics 12:634554. https://doi.org/10.3389/fgene.2021.634554

Park, S., P. Kumar, A. Shi, and **B. Mou**. 2021. Population genetic and genome-wide association studies provide insights into the influence of selective breeding on genetic variation in lettuce. The Plant Genome 14: 1-12. https://doi.org/10.1002/tpg2.20086

Lafta, A., G. Sandoya, and **B. Mou**. 2021. Genetic variation and genotype by environment interaction for heat tolerance in crisphead lettuce. HortScience 56(2):126-135. https://doi.org/10.21273/HORTSCI15209-20

Zhou, W.Q., Y.Q. Zhou, C.Y. He, **B. Mou**, and W. Zhou. 2020. Over-expression of Oshox4 enhances drought and salinity tolerance in rice. Russian Journal of Plant Physiology 67: 1152-1162. https://doi.org/10.1134/S1021443720060205

Clark, K.J., C. Feng, B. Dhillon, S.L. Kandel, B. Poudel, **B. Mou**, S.J. Klosterman, and J.C. Correll. 2020. Evaluation of spinach cultivars for downy mildew resistance in Yuma, AZ 2020. Plant Disease Management Reports 14: V146.

Bhattarai, G., A. Shi, C. Feng, B. Dhillon, **B. Mou**, and J. C. Correll. 2020. 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

Waltram, R., A. Shi, S. Chen, H. Xiong, Y. Yang, Q. Cui, D. Olaoye, and **B. Mou**. 2020.

Evaluation of cowpea for drought tolerance at seedling stage. Euphytica 216:123. https://doi.org/10.1007/s10681-020-02660-4

Adhikari, N.D., R.L. Erikesen, A. Shi, and **B. Mou**. 2020. Proteomics analysis indicates greater abundance of proteins involved in major metabolic pathways in *Lactuca sativa* cv. Salinas than *Lactuca serriola* accession US96UC23. Proteomics 20: 1900420. https://doi.org/10.1002/pmic.201900420

Eriksen, R.L., N.D. Adhikari, and **B. Mou**. 2020. Comparative Photosynthesis Physiology of Cultivated and Wild Lettuce Under Control and Low-Water Stress. Crop Science 60(5): 2511-2526. https://doi.org/10.1002/csc2.20184

Park, S., A. Shi, and **B. Mou**. 2020. Genome-wide identification and expression analysis of the *CBF/DREB1* gene family in lettuce. Scientific Reports 10: 5733. https://doi.org/10.1038/s41598-020-62458-1

Kandel, S., A. Hulse-Kemp, K. Stoffel, S. Koike, A. Shi, **B. Mou**, A. van Deynze, and S. Klosterman. 2020. Transcriptional analyses of differential cultivars during resistant and susceptible interactions with *Peronospora effusa*, the causal agent of spinach downy mildew. Scientific Reports 10: 6719. https://doi.org/10.1038/s41598-020-63668-3

Kandel, J., H. Peng, R. Hayes, **B. Mou**, and I. Simko. 2020. Genome-wide association mapping reveals loci for shelf life and developmental rate of lettuce. Theoretical and Applied Genetics 133: 1947-1966. https://doi.org/10.1007/s00122-020-03568-2

Mou, B. 2019. 'USDA Red' spinach. HortScience 54: 2070-2072. https://doi.org/10.21273/HORTSCI14308-19 (Cover story)

Adhikari, N.D., I. Simko, and **B. Mou**. 2019. Phenomic and physiological analysis of salinity effects on lettuce. Sensors 19: 4814. http://dx.doi.org/10.3390/s19214814

Dong, L., W. Ravelombola, Y. Weng, J. Qin, W. Zhou, G. Bhattarai, B. Zia, Y. Wang, L. Shi, **B. Mou**, and A. Shi. 2019. Change in Chlorophyll content over time well-differentiated salt-tolerant, moderately salt-tolerant, and salt-susceptible cowpea genotypes. HortScience 54: 1477-1484. https://doi.org/10.21273/HORTSCI13889-19

Kandel, S.L., K.V. Subbarao, A. Shi, **B. Mou**, and S.J. Klosterman. 2019. Evaluation of biopesticides for managing downy mildew of spinach in organic production systems 2017 and 2018. Plant Disease Management Reports 13: V171.

Zhu, S., E. Niu, A. Shi, and **B. Mou**. 2019. Genetic diversity analysis of olive germplasm (*Olea europaea* L.) with genotyping-by-sequencing technology. Frontiers in Genetics 10:755. doi: 10.3389/fgene.2019.00755

Ravelombola, W., J. Qin, Y. Weng, **B. Mou**, and A. Shi. 2019. A simple and cost-effective approach for salt tolerance evaluation in cowpea (*Vigna unguiculate*) seedlings. HortScience 54: 1280-1287. https://doi.org/10.21273/HORTSCI14065-19

Kandel, S., **B. Mou**, N. Shishkoff, A. Shi, K. Subbarao, S. Klosterman. 2019. Spinach downy mildew: Advances in our understanding of the disease cycle and prospects for disease management. Plant Disease 103: 791-803. https://doi.org/10.1094/PDIS-10-18-1720-FE (Cover story)

Dong, L., W. Ravelombola, Y. Weng, J. Qin, G. Bhattarai, B. Zia, W. Zhou, Y. Wang, **B. Mou**, and A. Shi. 2019. Seedling salt tolerance for above ground-related traits in cowpea (*Vigna unguiculata* (L.) Walp). Euphytica 215: 53. https://doi.org/10.1007/s10681-019-2379-4

Ravelombola, W., A. Shi, J. Qin, Y. Weng, G. Bhattarai, B. Zia, W. Zhou, and **B. Mou**. 2018. Investigation on various aboveground traits to identify drought tolerance in cowpea seedlings. HortScience 53: 1757-1765. https://doi.org/10.21273/HORTSCI13278-18

Fletcher, K., S. Klosterman, L. Derevnina, F. Martin, S. Koike, S. Reyes-Chin-Wo, **B. Mou**, R. Michelmore. 2018. Comparative genomics of downy mildews reveals potential adaptations to biotrophy. BMC Genomics 19:851. https://doi.org/10.1186/s12864-018-5214-8

Weng, Y., W.S. Ravelombola, W. Yang, J. Qin, W. Zhou, Y.-J. Wang, **B. Mou**, and A. Shi. 2018. Screening of seed soluble sugar content in cowpea (*Vigna unguiculata* (L.) Walp). American Journal of Plant Sciences 9: 1455-1466. https://doi.org/10.4236/ajps.2018.97106

Xu, C. and **B. Mou**. 2018. Chitosan as soil amendments affects lettuce growth, photochemical efficiency and gas exchange. HortTechnology 28: 476-480. doi: https://doi.org/10.21273/HORTTECH04032-18

Hayes, R. J., G. Sandoya, **B. Mou**, I. Simko, and K. V. Subbarao. 2018. Release of three iceberg lettuce populations with combined resistance to two soilborne diseases. HortScience 53: 247–250. https://doi.org/10.21273/HORTSCI12559-17

Xiong, H., J. Qin, A. Shi, **B. Mou**, D. Wu, J. Sun, X. Shu, Z. Wang, W. Lu, J. Ma, Y. Weng, and W. Yang. 2018. Genetic differentiation and diversity upon genotype and phenotype in cowpea (*Vigna unguiculata* L. Walp.). Euphytica 214:4. https://doi.org/10.1007/s10681-017-2088-9

Ravelombola, W., A. Shi, Y. Weng, **B. Mou**, D. Motes, J. Clark, P. Chen, V. Srivastava, J. Qin, L. Dong, W. Yang, G. Bhattarai, and Y. Sugihara. 2018. Association analysis of salt tolerance in cowpea (*Vigna unguiculata* (L.) Walp) at germination and seedling stages. Theoretical and Applied Genetics 131: 79-91. doi:10.1007/s00122-017-2987-0

Qin, J., A. Shi, **B. Mou**, M.A. Grusak, Y. Weng, W. Ravelombola, G. Bhattarai, L. Dong, and W. Yang. 2017. Genetic diversity and association mapping of mineral element concentrations in spinach leaves. BMC Genomics 18: 941. DOI 10.1186/s12864-017-4297-y

Shi, A., J. Qin, **B. Mou**, J. Correll, Y. Weng, D. Brenner, C. Feng, D. Motes, W. Yang, L. Dong, G. Bhattarai, and W. Ravelombola. 2017. Genetic diversity and population structure analysis of spinach by single-nucleotide polymorphisms identified through genotyping-by-

sequencing. PLoS ONE 12(11): e0188745. https://doi.org/10.1371/journal.pone.0188745

Xu, C. and **B. Mou**. 2017. Drench application of fish-derived protein hydrolysates affects lettuce growth, chlorophyll content, and gas exchange. HortTechnology 27: 539-543.

Xu, C., C. Jiao, H. Sun, X. Cai, X. Wang, C. Ge, Y. Zheng, W. Liu, X. Sun, Y. Xu, J. Deng, Z. Zhang, S. Huang, S. Dai, **B. Mou**, Q. Wang, Z. Fei, and Q. Wang. 2017. Draft genome of spinach and transcriptome diversity of 120 *Spinacia* accessions. Nature Communications 8: 15275. https://doi.org/10.1038/ncomms15275

Qin, J., A. Shi, **B. Mou**, G. Bhattarai, W. Yang, Y. Weng, and D. Motes. 2017. Association mapping of aphid resistance in USDA cowpea (*Vigna unguiculata* L. Walp.) core collection using SNPs. Euphytica 213: 36. doi:10.1007/s10681-016-1830-z

Lafta, A., T. Turini, G. Sandoya, and **B. Mou**. 2017. Field evaluation of green and red leaf lettuce genotypes in the Imperial, San Joaquin, and Salinas Valleys of California for heat tolerance and extension of the growing seasons. HortScience 52: 40-48. https://doi.org/10.21273/HORTSCI10835-16

Xu, C. and **B. Mou**. 2016. Short-term effects of composted cattle manure or cotton burr on growth, physiology and phytochemical of spinach. HortScience 51: 1517-1523. doi: 10.21273/HORTSCI11099-16

Qin, J., H. Xiong, A. Shi, **B. Mou**, D. Motes, W. Lu, M. Creighton, D. Scheuring, M. Nzaramba, Y. Weng, and W. Yang. 2016. Population structure analysis and association mapping of seed antioxidant content in USDA cowpea (*Vigna unguiculata* L. Walp.) core collection using SNPs. Canadian Journal of Plant Science 96: 1026-1036. http://dx.doi.org/10.1139/cjps-2016-0090

Shi, A.N., **B. Mou**, J. Correll, D. Motes, Y. Weng, J. Qin, and W. Yang. 2016. SNP association analysis of resistance to Verticillium wilt (*Verticillium dahliae* Kleb.) in spinach. Australian Journal of Crop Science 10(8): 1188-1196.

Shi, A.N., **B. Mou**, J. Correll, S.T. Koike, D. Motes, J. Qin, Y.J. Weng, and W. Yang. 2016. Association analysis and identification of SNP markers for Stemphylium leaf spot (*Stemphylium botryosum f. sp. spinacia*) resistance in spinach (*Spinacia oleracea*). American Journal of Plant Sciences 7: 1600-1611. http://dx.doi.org/10.4236/ajps.2016.712151

Shi, A. and **B. Mou**. 2016. Genetic diversity and association analysis of leafminer (*Liriomyza langei*) resistance in spinach (*Spinacia oleracea*). Genome 59: 581-588. DOI: 10.1139/gen-2016-0075

Xu, C. and **B. Mou**. 2016. Vermicompost affects soil properties and spinach growth, physiology, and nutritional value. HortScience 51: 847-855.

Xiong, H, A. Shi, **B. Mou**, J. Qin, D. Motes, W. Lu, J. Ma, Y. Weng, W. Yang, and D. Wu. 2016. Genetic diversity and population structure of cowpea (*Vigna unguiculata* L. Walp). PLoS ONE 11(8): e0160941. DOI:10.1371/journal.pone.0160941

Shi, A., **B. Mou**, and J.C. Correll. 2016. Association analysis for oxalate concentration in spinach. Euphytica 212:17-28. DOI: 10.1007/s10681-016-1740-0

Eriksen, R.L., C. Knepper, M.D. Cahn, and **B. Mou**. 2016. Screening of lettuce germplasm for agronomic traits under low water conditions. HortScience 51: 669-679.

Chitwood, J., A. Shi, **B. Mou**, M. Evans, J. Clark, D. Motes, P. Chen, and D. Hensley. 2016. Population structure and association analysis of bolting, plant height, and leaf erectness in spinach. HortScience 51: 481-486.

Kim, M.J., Y. Moon, J. Tou, **B. Mou**, and N. Waterland. 2016. Nutritional value, bioactive compounds and health benefits of lettuce (*Lactuca sativa* L.). Journal of Food Composition and Analysis 49: 19-34. DOI: http://dx.doi.org/10.1016/j.jfca.2016.03.004

Ma, J., A. Shi, **B. Mou**, M. Evans, J. Clark, D. Motes, J. Correll, H. Xiong, J. Qin, J. Chitwood, and Y. Weng. 2016. Association mapping of leaf traits in spinach (*Spinacia oleracea* L.). Plant Breeding 135: 399-404. doi:10.1111/pbr.12369

Lati, R., **B. Mou**, J. Rachuy, and S. Fennimore. 2016. Evaluation of cycloate followed by evening two-leaf stage phenmedipham application in fresh market spinach. Weed Technology 30: 464-471.
DOI: http://dx.doi.org/10.1614/WT-D-15-00102.1

Xu, C. and **B. Mou**. 2016. Responses of spinach to salinity and nutrient deficiency in growth, physiology and nutritional value. Journal of the American Society for Horticultural Science 141: 12-21.

Lati, R. N., **B. Mou,** J. S. Rachuy, and S. A. Fennimore. 2016. Light intensity is a main factor affecting fresh market spinach tolerance for phenmedipham. Weed Science 64: 146-153. DOI: 10.1614/WS-D-15-00056.1

Shi, A., B. Buckley, **B. Mou**, D. Motes, B. Morris, J. Ma, H. Xiong, J. Qin, W. Yang, J. Chitwood, Y. Weng, and W. Lu. 2016. Association analysis of cowpea bacterial blight resistance in USDA cowpea germplasm. Euphytica 208: 143-155.

Xu, C., C. Jiao, Y. Zheng, H. Sun, W. Liu, X. Cai, X. Wang, S. Liu, Y. Xu, **B. Mou**, S. Dai, Z. Fei, and Q. Wang. 2015. *De novo* and comparative transcriptome analysis of cultivated and wild spinach. Scientific Reports 5: 17706. DOI: 10.1038/srep17706

Mou, B., S. J. Klosterman, A. Anchieta, E. Wood, and K. Subbarao. 2015. Characterization of spinach germplasm for resistance against two races of *Verticillium dahliae*. HortScience 50: 1631-1635.

Xu, C. and **B. Mou**. 2015. Evaluation of lettuce genotypes for salinity tolerance. HortScience 50: 1441-1446.

Lati, R. N., **B. Mou,** J. S. Rachuy, R. F. Smith, S. K. Dara, O. Daugovish, and S. A.

Fennimore. 2015. Weed management in transplanted lettuce with pendimethalin and *S*-metolachlor. Weed Technology 29: 827-834.

Knepper, C. and **B. Mou**. 2015. Semi-high throughput screening for potential drought-tolerance in lettuce (*Lactuca sativa*) germplasm collections. J. Vis. Exp. (98), e52492, doi:10.3791/52492

Mou, B. 2015. Red leaf lettuce breeding line with resistance to corky root, 06-810. HortScience 50: 143-144.

Simko, I., R. J. Hayes, C. T. Bull, **B. Mou**, Y. Luo, M. A. Trent, A. J. Atallah, E. J. Ryder, and R. G. Sideman. 2014. Characterization and performance of 16 new inbred lines of lettuce. HortScience 49: 679-687.

Simko, I., R. J. Hayes, **B. Mou**, J. D. McCreight. 2014. Chapter 4. Lettuce and Spinach. In: S. Smith, B. Diers, J. Specht, and B. Carver (Eds.) Yield Gains in Major U.S. Field Crops. CSSA Special Publications 33. p. 53-86. American Society of Agronomy, Inc., Crop Science Society of America, Inc., and Soil Science Society of America, Inc.

Samtani, J. B., J. S. Rachuy, **B. Mou**, S. A. Fennimore. 2014. Evaluation of tribenuron-methyl on sulfonylurea herbicide tolerant lettuce germplasm. Weed Technology 28(3): 510-517.

Hayes, R. J., M. A. Trent, **B. Mou**, I. Simko, S. J. Gebben, and C. Bull. 2014. Baby leaf lettuce germplasm enhancement: developing diverse populations with resistance to bacterial leaf spot caused by Xanthomonas campestris pv. Vitians. HortScience 49: 18-24.

Kwon, S. J., I. Simko, B. Hellier, **B. Mou**, M. Truco and J. Hu. 2013. Genome-wide association of 10 horticultural traits with expressed sequence tag-derived SNP markers in a collection of lettuce lines. The Crop Journal 1: 25-33.

Lafta, A. and **B. Mou**. 2013. Evaluation of lettuce genotypes for seed thermotolerance. HortScience 48: 708-714.

Mou, B. 2013. Lettuce. in: Wehner, T. C. and Mou, B. (Ed.) Vegetable cultivar descriptions for North America, List 27. HortScience 48: 252-257. https://doi.org/10.21273/HORTSCI.48.2.245

Mou, B. 2013. Spinach. in: Wehner, T. C. and Mou, B. (Ed.) Vegetable cultivar descriptions for North America, List 27. HortScience 48: 268-269. https://doi.org/10.21273/HORTSCI.48.2.245

Wehner, T. C. and **B. Mou**. (Ed.) 2013. Vegetable cultivar descriptions for North America, List 27. HortScience 48: 245-286. https://doi.org/10.21273/HORTSCI.48.2.245

Maruthachalam, K., S. J. Klosterman, A. G. Anchieta, **B. Mou**, K. V. Subbarao. 2013. Colonization of spinach by *Verticillium dahliae* and effects of pathogen localization on the efficacy of seed treatments. Phytopathology 103: 268-280. (Cover story)

Mou, B. 2012. Nutritional quality of lettuce. Current Nutrition & Food Science 8: 177-187.

Mou, B., K. Richardson, S. Benzen, and H.-Y. Liu. 2012. Effects of *Beet necrotic yellow vein virus* in spinach cultivars. Plant Disease 96: 618-622. https://doi.org/10.1094/PDIS-09-11-0748

Mou, B. and G. Wang. 2012. Asia's indigenous horticultural crops: an Introduction. HortScience 47: 819-820.

Duressa, D., G. Rauscher, S. T. Koike, **B. Mou**, R. J. Hayes, K. Maruthachalam, K. V. Subbarao, and S. J. Klosterman. 2012. A real-time PCR assay for detection and quantification of *Verticillium dahliae* in spinach seed. Phytopathology 102: 443-451.

Mou, B. 2011. Mutations in lettuce improvement. International Journal of Plant Genomics. Doi:10.1155/2011/723518.

Mou, B. 2011. Green leaf lettuce breeding lines with resistance to corky root, 06-831 and 06-833. HortScience 46: 1324-1325. (Cover story)

Mou, B. 2011. Improvement of horticultural crops for abiotic stress tolerance: an Introduction. HortScience 46: 1068-1069.

Mou, B. and R. Scorza (Ed.). 2011. Transgenic Horticultural Crops: Challenges and Opportunities. 342 pp. CRC Press, Boca Raton, FL. https://www.routledge.com/Transgenic-Horticultural-Crops-Challenges-and-Opportunities/Mou-Scorza/p/book/9781420093780

Mou, B. and E.J. Ryder. 2010. 06-857, a green leaf lettuce breeding line with resistance to leafminer and lettuce mosaic virus. HortScience 45: 666-667.

Liu, H. Y., **B. Mou**, K. Richardson, and S.T. Koike. 2010. First report of *Beet necrotic yellow vein virus* infecting spinach in California. Plant Disease 94(5): 640.

Mou, B. 2009. Nutrient content of lettuce and its improvement. Current Nutrition and Food Science 5(4): 242-248.

Liu, H. Y., J. L. Sears, and **B. Mou**. 2009. Spinach (*Spinacia oleracea*) is a new natural host of *Impatiens necrotic spot virus* in California. Plant Disease 93(6): 673.

Mou, B. 2008. Evaluation of oxalate concentration in the U.S. spinach germplasm collection. HortScience 43: 1690-1693.

Mou, B., S. Koike, and L. du Toit. 2008. Screening for resistance to leaf spot diseases of spinach. HortScience 43: 1706-1710.

Mou, B. 2008. Leafminer resistance in spinach. HortScience 43: 1716-1719.

Mou, B. 2008. Lettuce. in: J. Prohens and F. Nuez, ed., *Handbook of Plant Breeding,*

Vegetables I, Asteraceae, Brassicaceae, Chenopodicaceae, and Cucurbitaceae. Springer, New York, p. 75-116. https://www.springer.com/gp/book/9780387722917#reviews

Mou, B. 2007. Leafminer-resistant spinach germplasm 03-04-63. HortScience 42: 1717-1718.

Mou, B. 2007. Leafminer-resistant spinach germplasm 03-04-9. HortScience 42 (3): 699-700.

Mou, B., R. J. Hayes, and E. J. Ryder. 2007. Crisphead lettuce breeding lines with resistance to corky root and lettuce mosaic virus. HortScience 42(3): 701-703.

Hu, J., **B. Mou**, and B.A. Vick. 2007. Genetic diversity of 38 spinach (*Spinacia oleracea* L.) germplasm accessions and ten commercial hybrids assessed by TRAP markers. Genetic Resources and Crop Evolution 54: 1667-1674.

Mou, B., S. Koike, and L. du Toit. 2006. Screening for resistance to Stemphylium leaf spot of spinach. Proceedings of the International Spinach Conference, 13-14 July 2006, La Conner, WA.

Mou, B. 2005. Genetic variation of β-carotene and lutein contents in lettuce. Journal of the American Society for Horticultural Science 130(6): 870-876. https://doi.org/10.21273/JASHS.130.6.870

Mou, B. and C. Bull. 2004. Screening lettuce germplasm for new sources of resistance to corky root. Journal of the American Society for Horticultural Science 129(5): 712-716.

Mou, B. and Y.B. Liu. 2004. Host plant resistance to leafminers in lettuce. Journal of the American Society for Horticultural Science 129(3): 383-388. https://doi.org/10.21273/JASHS.129.3.0383

Mou, B., E.J. Ryder, J. Tanaka, Y.B. Liu, and W.E. Chaney. 2004. Breeding for resistance to leafminer in lettuce. Acta Horticulturae 637: 57-62.

Mou, B. and E.J. Ryder. 2004. Relationship between the nutritional value and the head structure of lettuce. Acta Horticulturae 637: 361-367. https://doi.org/10.17660/ActaHortic.2004.637.45

Mou, B. and Y.B. Liu. 2003. Leafminer resistance in lettuce. HortScience 38(4): 570-572.

Mou, B. and E.J. Ryder. 2003. Screening and breeding for resistance to leafminer (*Liriomyza langei*) in lettuce and spinach. p. 43-47. In: Th. J.L. van Hintum, A. Lebeda, D.A. Pink, and J.W. Schut (eds.) Proceedings of the Eucarpia meeting on leafy vegetables genetics and breeding, Noordwijkerhout, the Netherlands, March 19-21, 2003. Centre for Genetic Resources, the Netherlands (CGN), Wageningen, the Netherlands.

McClure, B., **B. Mou**, S. Canevascini, R. Bernatzky. 1999. A small asparagine-rich protein required for S-allele-specific pollen rejection in *Nicotiana*. PNAS (96) 23: 13548-13553.

https://doi.org/10.1073/pnas.96.23.13548

Zurek, D.M., **B. Mou**, B. Beecher, and B. McClure. 1997. Exchanging sequence domains between S-RNases from *Nicotiana alata* disrupts pollen recognition. Plant J. 11(4): 797-808.

Murfett, J.,T.J. Strabala, D.M. Zurek, **B. Mou**, B. Beecher, and B. McClure. 1996. S RNase and interspecific pollen rejection in the genus *Nicotiana*: Multiple pollen-rejection pathways contribute to unilateral incompatibility between self-incompatible and self-compatible species. Plant Cell 8: 943-958.

Murfett, J., T.L. Atherton, **B. Mou**, C.S. Gasser, and B.A. McClure. 1994. S-RNase expressed in transgenic *Nicotiana* causes S-allele-specific pollen rejection. Nature 367: 563-566. (Cover story) https://doi.org/10.1038/367563a0

Mou, B. and W.E. Kronstad. 1994. Duration and rate of grain filling in selected winter wheat populations. I. Inheritance. Crop Sci. 34: 833-837.

Mou, B., W.E. Kronstad, and N.N. Saulescu. 1994. Grain filling parameters and protein content in selected winter wheat populations. II. Associations. Crop Sci. 34: 838-841.

Germplasm Releases (12)

Mou, B. 2022. Release of green leaf, red leaf, and romaine lettuce germplasm with resistance to leafminer, corky root and downy mildew. Agricultural Research Service, U.S. Dept. of Agriculture.

Mou, B. 2018. Release of 'USDA Red' spinach. Agricultural Research Service, U.S. Dept. of Agriculture.

Hayes, R. J., G. Sandoya, **B. Mou**, I. Simko, and K. V. Subbarao. 2017. Notice of release of RH14-1156, RH14-1157, and RH14-1158 iceberg lettuce breeding populations. Agricultural Research Service, U.S. Dept. of Agriculture.

Simko, I., R. J. Hayes, C. T. Bull, **B. Mou**, Y. Luo, M. A. Trent, A. J. Atallahl, E. J. Ryder, and R. G. Sideman. 2014. Notice of release of iceberg, romaine, and leaf lettuce breeding lines with improved disease resistance. Agricultural Research Service, U.S. Dept. of Agriculture.

Hayes, R. J., M. Trent, **B. Mou**, I. Simko, and C. T. Bull. 2013. Notice of release of baby leaf romaine breeding lines of lettuce with resistance to bacterial leaf spot caused by *Xanthomonas campestris* pv. *vitians.* Agricultural Research Service, U.S. Dept. of Agriculture.

Mou, B. 2009. Release of green leaf lettuce germplasm with resistance to corky root. Agricultural Research Service, U.S. Dept. of Agriculture.

Mou, B. 2009. Release of red leaf lettuce germplasm with resistance to corky root.

Agricultural Research Service, U.S. Dept. of Agriculture.

Mou, B. and Ryder, E.J. 2008. Release of crisphead lettuce germplasm with resistance to leafminers. Agricultural Research Service, U.S. Dept. of Agriculture.

Mou, B. and E.J. Ryder. 2008. Release of green leaf lettuce germplasm with resistance to leafminers and lettuce mosaic. Agricultural Research Service, U.S. Dept. of Agriculture.

Mou, B. 2006. Notice of release of line 03-04-63 spinach. Agricultural Research Service, U.S. Dept. of Agriculture.

Mou, B., R. J. Hayes, and E. J. Ryder. 2006. Notice of release of seven breeding lines of crisphead lettuce (*Lactuca sativa* L.). Agricultural Research Service, U.S. Dept. of Agriculture.

Mou, B. 2006. Notice of release of spinach breeding line 03-04-9. Agricultural Research Service, U.S. Dept. of Agriculture.

Patent

Mou, B., J. Jane, C. Jansson, and C. Sun. 2006. Transgenic corn plants having seeds with modified cornstarch characteristics and method of making the transgenic corn plants. U.S. utility patent number 7,009,092. Issue date March 7, 2006.