CV for John Bamberg

Updated June 7th , 2024

1. Education, Employment, Positions:

Ph.D., University of Wisconsin-Madison, December, 1988, Major: Plant Breeding & Plant Genetics. **M.S.**, University of Wisconsin, Madison, May, 1983, Major: Plant Breeding & Plant Genetics. **B.S.**, Western Illinois University, Macomb, IL, May, 1980, Major: Agronomy. **A.A.**, Highland Community College, Freeport IL, May, 1978.

Project Leader/Director, US Potato Genebank (USPG) at PARS, Sturgeon Bay (1989-p). **Project Assistant,** USPG (1985-1989). **Research Assistant**, Dr. R. E. Hanneman, Jr., Plant Breeding & Plant Genetics, UW Madison (1981-1985).

USDA/ARS Geneticist, Plants GS14 (since 1989)
Project Leader, US Potato Genebank (since 1989)
Professor, Dept. Horticulture (since April 2002)
Asst. Professor, Dept. Horticulture (1989-1995)

Current Role: Bamberg is Lead Scientist of the US Potato Genebank located on the UW Peninsular Agricultural Research Station near Sturgeon Bay. USPG is the US genebank for tuber-bearing *Solanum* species (potatoes) and is part of the USDA National Plant Germplasm System. The genebank's mission is to facilitate the improvement of potato through acquisition, classification, preservation, distribution, and evaluation of wild and cultivated potato germplasm. The genebank provides germplasm for US and foreign potato breeders and scientists. It coordinates evaluation of stocks by specialists around the US, and technology, germplasm and research cooperation with other potato genebanks around the world. It also has a program of on-site evaluation and characterization associated with *Solanum* taxonomy, genetics, physiology, genebank technology and any other disciplines that deploy the germplasm to return economic and nutritional benefits through improvement of the potato crop.

2. Appointment: Genebank Administration/Service: 80%, Research: 20%

General Research topics:

EVALUATION AND GENETICS OF TRAITS: frost tolerance, hormone and reproductive mutants, seed germination, tuber calcium, nutritionals and all other disease, pest, and stress issues of interest to the potato industry.

STATUS AND DYNAMICS OF GENETIC DIVERSITY IN THE GENEBANK:
What is the partitioning of diversity and how do our protocols affect diversity within and among genebanks? Can diversity in the wild be predicted and how does it compare to that in genebanks? Focus is within species.

GENEBANK TECHNOLOGY. Gather and publish information for maximizing the efficiency of germplasm handling.

COLLECTING: Wild potatoes of the southwest USA and associated research.

Service:

-- Editor in Chief, Amer. J. Potato Research (AJPR) (Jan 2003-Aug 2018)
-- Chairman, Crop Germplasm Committee (CGC) for potatoes (Jul 1989 – Jun 2020).
-- National Rep for potato, Plant Germplasm Operations Comm. (Jul 1989 – present).

3. Full peer-reviewed publications (no abstracts or advised theses) Ones highlighted in orange claimed in 2024 Annual Report. Ones highlighted in purple were cited in the 2023 Annual Report. Ones highlighted in green were claimed on 2022 annual report, those in blue claimed in 2021 annual report.

152	2024	Bamberg, J., Palta, J., Atucha, A. and del Rio, A., 2024. Tuber Calcium Accumulation in the Wild Potato *Solanum microdontum. American Journal of Potato Research* 101:437-441.
151	2024	McCoy, H.J., Fenstemaker, S., MacKinley, P., Vickruck, J., Bamberg, J., Calhoun, L.A. and Tai, H.H. 2024. Rapid Screening of Colorado Potato Beetle Resistance Derived from *Solanum okadae. American Journal of Potato Research* 101:356-367.
150	2024	Bamberg, John, W. Rodney Cooper, and Sean Fenstemaker. 2024. Resistance to Candidatus Liberibacter Solanacearum (Lso) in the Wild Potato *Solanum microdontum*. *American Journal of Potato Research* 101:433-436.
149	2024	Tuttle, Heather K., Alfonso H. Del Rio, John B. Bamberg, and Laura M. Shannon. 2024. Potato soup: analysis of cultivated potato gene bank populations reveals high diversity and little structure. *Frontiers in Plant Science* 15:1429279.
148	2024	Pavlik, B. M., A. del Rio, J. Bamberg, and L. A. Louderback. 2024. Evidence for human-caused founder effect in populations of Solanum jamesii at archaeological sites: II. Genetic sequencing establishes ancient transport across the Southwest USA. *American Journal of Botany*. 111:e16365. https://doi.org/10.1002/ajb2.16365
147	2024	Arcos-Pineda, J.H., Del Rio, A.H., Bamberg, J.B., Vega-Semorile, S.E., Palta, J.P., Salas, A., Gomez, R., Roca, W. and Ellis, D. 2024. An international breeding project using a wild potato relative *Solanum commersonii* resulted in two new frost-tolerant native potato cultivars for the Andes and the Altiplano. *Frontiers in Plant Science* 15:1358565.
146	2024	Díaz-García, G., Enciso-Maldonado, G.A., Díaz-García, L.A., Legaria-Solano, J.P., Bamberg, J. and Lozoya-Saldaña, H. 2024. Field Screening of *Solanum demissum* confirms its late blight resistance in the Toluca Valley, Mexico. *American Journal of Potato Research* 101:122-131.
145	2024	Diaz-Garcia, G., Lozoya-Saldaña, H., Bamberg, J. and Diaz-Garcia, L. 2024. Morphometric analysis of wild potato leaves. *Genetic Resources and Crop Evolution* pp. 1-16. https://doi.org/10.1007/s10722-024-01921-8
144	2024	Fenstemaker S.M., X. Ma, J. Bamberg and B. Swingle. 2024. Reproducible QTLs for resistance to soft rot caused by *Dickeya dianthicola* derived from the wild potato *Solanum microdontum* (PI 458355) are located on chromosomes 1, 3, and 5. Phytopathology® 114:580-589. https://doi.org/10.1094/PHYTO-05-23-0158-R Outstanding Paper Award

143	2023	Bamberg, J., A. del Rio, D. Kinder, L. Louderback, B. Pavlik, and C.J. Fernandez. 2023. Mother tubers of wild potato *Solanum jamesii* can make shoots five times. *American Journal of Potato Research* 100:407–412 . DOI: 10.1007/s12230-023-09927-1
142	2023	Burgos, A., X.Hu, J. Bamberg, J. Foster and R. French. 2023. First Report of Tomato Brown Rugose Fruit Virus Infecting *Solanum polyadenium* Greenm. in the United States. *Plant Disease*.
141	2023	Volk, G., D. Carver, B. Irish, L. Marek, A. Frances, S. Greene, C. Khoury, J. Bamberg, A. Rio, M. Warburton, P. Bretting. 2023. Safeguarding plant genetic resources in the United States during global climate change. *Crop Science* 2023;1-23. DOI: 10.1002/csc2.21003. Outstanding Paper Award.
140	2023	Cohen, Z., J. Bamberg, S. Schoville, R. Groves and B. Bradford. 2023. Colorado Potato Beetle (*Leptinotarsa decemlineata*) prefer *Solanum jamesii* populations on which they were originally observed in the wild. *American Journal of Potato Research* 100:247-251. https://doi.org/10.1007/s12230-023-09911-9. Featured on Cover.
139	2023	Jenderek, M.M., B.D. Ambruzs, J.D. Tanner, and J.B. Bamberg. 2023. High regrowth of potato crop wild relative genotypes after cryogenic storage. *Cryobiology* 111:84-88. doi: https://doi.org/10.1016/j.cryobiol.2023.03.006.
138	2023	Bamberg, J., T. Kazmierczak, J. Colquhoun, and A. del Rio. 2023. Cheatgrass Inhibits Wild Potato (*Solanum jamesii*) Tuber Sprouts. *American Journal of Potato Research* 100:87-90. Featured on Cover.
137	2022	Haynes, K.G., X. Qu, and J.B. Bamberg. 2022. Germplasm Release: True Potato Seed (TPS) from a Late Blight Resistant, Long-day Adapted Diploid Potato Population that is Segregating for Early Blight Resistance. *American Journal of Potato Research* 99:321-325. https://doi.org/10.1007/s12230-022-09882-3. . LOG 375120
136	2022	M. Nagel, E. Dulloo, P. Bissessur, T. Gavrilenko, J. Bamberg, D. Ellis, P. Giovanni. 2022. Global strategy for conservation of potato. Global Crop Diversity Trust. Bonn, Germany. https://doi.org/10.5447/ipk/2022/29
135	2022	Enciso-Maldonado, G., H. Lozoya-Saldaña, M.T. Colinas-Leon, J.A. Cuevas-Sanchez, A.D. Sanabria-Velázquez, J.B. Bamberg, and K.V. Raman. 2022. Assessment of Wild *Solanum* Species for Resistance to *Phytophthora infestans* (Mont.) de Bary in the Toluca Valley, Mexico. *American Journal of Potato Research* 99:25-39. https://doi.org/10.1007/s12230-021-09856-x
134	2021	Ma, Xing, Lily Lofton, John Bamberg and Bryan Swingle. Identification of resistance to *D. dianthicola* soft rot in *Solanum microdontum. American Journal of Potato Research* 99:58-68.
133	2021	Pavlik, B.M., M. Baker, J.B. Bamberg, A.H. del Rio, D. Kinder, and L.A. Louderback. 2021. Evidence for human-caused founder effect in populations of *Solanum jamesii* found at archaeological sites: I. Breeding experiments and the geography of sexual reproduction. *American Journal of Botany* 108:1808-1815.
132	2021	del Rio AH and Bamberg JB. 2021. An AFLP marker core subset for the cultivated potato species *Solanum phureja* (*Solanum tuberosum* Group Phureja). *American Journal of Potato Research.* https://doi.org/10.1007/s12230-021-09849-w

131	2021	Kinder, D., J.B. Bamberg, L. Louderback, B. Pavlik, and A.H. del Rio. *Solanum jamesii* as a Food Crop: History and Current Status of a Unique Potato *Pharmacy Faculty Scholarship*. 464. DOI: 10.5772/intechopen.98414
130	2021	Bamberg J.B. and A.H. del Rio. 2021. A metric for species representation in the US Potato Genebank. *American Journal of Potato Research* 98:263-265.
129	2021	Bamberg, J.B., and K. Lombard. 2021. Cold hardiness variation in *Solanum jamesii* and *Solanum kurtzianum* tubers. *American Journal of Potato Research* 99:69-72.
128	2021	Bamberg J.B., A.H. del Rio, L. Louderback, and B. Pavlik. 2021. Assessing SNP heterozygosity in potato (*Solanum*) species – bias due to missing and non-allelic genotypes. *American Journal of Potato Research* 98:328-332.
127	2021	Bamberg J.B., A. Kielar, A.H. del Rio, and D. Douches. 2021. Making hybrids with the wild potato *Solanum jamesii*. *American Journal of Potato Research* 98:187-193. Outstanding Paper Award.
126	2020	Bamberg, J. and A. del Rio. 2020. Assessing under-Estimation of Genetic Diversity within Wild Potato (*Solanum*) Species Populations. *American Journal of Potato Research* 97:547-553.
125	2020	del Rio, A., and J.B. Bamberg. 2020. Detection of adaptive genetic diversity in wild potato populations and its implications in conservation of potato germplasm. *American Journal of Plant Sciences* 11:1562-1578.
124	2020	del Rio, A., and J.B. Bamberg. 2020. A Core Subset of the *ex situ* Collection of *S. demissum* at the US Potato Genebank. *American Journal of Potato Research* 97:505–512.
123	2020	Bamberg, J., K. Lombard, J.P. Palta, B.A. Workmaster and A. Atucha. 2020. Survival of *Solanum jamesii* Tubers at Freezing Temperatures. *American Journal of Potato Research* 97:497–504.
122	2020	Bamberg, J., del Rio, A., Fernandez, C.J. *et al.* A "Mega Population" of the Wild Potato Species *Solanum fendleri*. *American Journal of Potato Research* 97:531–533.
121	2020	Bamberg, JB. Emasculation technique reduces seedset in *Solanum verrucosum*. *American Journal of Potato Research* 97:111-113.
120	2019	Bamberg, JB, and G Greenway. 2019. Nutritional and Economic prospects for expanded potato outlets. *American Journal of Potato Research* 96:206-215.
119	2019	Robinson, BR, CG Salinas, PR Parra, JB Bamberg, RI Diaz de la Garza, and A Goyer. 2019. Expression Levels of the Y-Glutamyl Hydrolase I Gene Predict Vitamin B9 Content in potato Tubers. *Agronomy* 9, 734; doi:10.3390/agronomy9110734.

118	2019	Spooner, DM, PW Simon, JB Bamberg, and KM Cameron. 2019. PTIS potato herbarium transferred to WIS, the Wisconsin State Herbarium. *American Journal of Potato Research* 96:625–628.
117	2019	Kramer, L.J. and John Bamberg. 2019. Comparing Methods of Ploidy Estimation in Potato (*Solanum*) Species. *American Journal of Potato Research* 96:419-426.
116	2018	Bali, S., BR Robinson, V Sathuvalli, JB Bamberg, and A Goyer. 2018. Single nucleotide polymorphism markers associated with high folate content in wild potato species. PloS ONE. 2018 Feb 23;13(2):e0193415. doi: 10.1371/journal.pone.0193415.
115	2018	Graebner, RC, CR. Brown, RE Ingham, CH Hagerty, H Mojtahedi, RA Quick, LL Hamlin, N Wade, JB Bamberg, and V Sathuvalli. 2018. Resistance to *Meloidogyne chitwoodi* identified in wild potato species. *American Journal of Potato Research* 95:679-686.
114	2018	Bamberg, J.B. 2018. Diurnal alternating temperature improves germination of some wild potato (Solanum) botanical seedlots. *American Journal of Potato Research* 95:368-373.
113	2018	Bamberg, JB, del Rio, A, Jansky, J and Ellis, D. 2018. Ensuring the genetic diversity of potatoes. In: Achieving sustainable cultivation of potatoes No. 26, Vol.1 (Ed. Prof. Gefu Wang-Pruski). Burleigh-Dodds Science Publishers. Chapter 3, pp 57-80.
112	2017	Bamberg, JB, CJ Fernandez, and AH del Rio. 2017. Extra soil fertilization of mother plants increases botanical seed yield but not long-term germination in wild *Solanum* (potato) species. *American Journal of Potato Research* 94:583-587.
111	2017	del Rio A.H., Obregon C., Bamberg J.B., Petrick J., Bula R., de la Calle F. 2017. Validation of high-quality potato seed production protocol under controlled conditions (CETS System) in cultivated potato species (*Solanum tuberosum* L.). *ALAP Journal* 21(2): 71-78.
110	2016	Cooper, R., and JB Bamberg. 2016. Variation in susceptibility to potato psyllid, Bactericera cockerelli (Hemiptera: Triozidae), among *Solanum verrucosum* germplasm accessions. *American Journal of Potato Research* 93:386-391.
109	2016	Bamberg, JB, A. H. del Rio, D. Kinder, L. Louderback, B.Pavlik, and C.Fernandez. 2016. Core Collections of potato (*Solanum*) species native to the USA. *American Journal of Potato Research* 93:564-571.
108	2016	Bamberg, JB and A. H. del Rio. 2016. Accumulation of genetic diversity in the US Potato Genebank. *American Journal of Potato Research* 93:430-435.
107	2016	Bamberg, J.B., Martin, M.W., Abad, J., Jenderek, M.M., Tanner, J., Donnelly, D.J., Nassar, AM.K., Veilleux, R.E., Novy, R.G. 2016. *In vitro* technology at the US Potato Genebank. In Vitro Cellular and Developmental Biology – Plants 52:213-225.
106	2016	Bamberg, JB, AH del Rio and RA Navarre. 2016. Intuitive Visual Impressions (Cogs) for Identifying Clusters of Diversity within Potato Species. *American Journal of Potato Research* 93:350-359.
105	2016	Jansky, S.H., Charkowski, A.O., Douches, D.S., Gusmini, G., Richael, C., Bethke, P.C., Spooner, D.M., Novy, R.G., De Jong, H., De Jong, W.S., Bamberg, J.B., Thompson, A.L., Bizimungu, B., Holm, D.G, Brown, C.R., Haynes, K.G., Sathuvalli, V.R. et al. 2016. Reinventing potato as a diploid inbred line-based crop. Crop Science 56:1-11.
104	2016	Chung, Y.S., Palta, J., Bamberg, J., Jansky, S. 2016. Potential molecular markers associated with tuber calcium content in wild potato germplasm. Crop Science.

		56(2):576-584.
103	2015	Bruce R. Robinson, Vidyasagar Sathuvalli, John Bamberg, and Aymeric Goyer. 2015. Exploring Folate Diversity in Wild and Primitive Potatoes for Modern Crop Improvement. Genes (Basel). 2015 Dec 8;6(4):1300-14.
102	2015	Bamberg, J., Moehninsi, R. Navarre, and J. Suriano. 2015. Variation for Tuber Greening in the Diploid Wild Potato *Solanum microdontum*. American Journal of Potato Research 92:435-443.
101	2015	Hardigan, M., J. Bamberg, C. Robin Buell and D. Douches. 2015. Taxonomy and genetic differentiation among wild and cultivated germplasm of *Solanum* sect. Petota. The Plant Genome. 8:1:16.
100	2015	Bamberg, JB, A del Rio, J Coombs and D Douches. 2015. Assessing SNPs versus RAPDs for predicting heterogeneity in wild potato species. *American Journal of Potato Research* 92:276-283.
99	2014	Bamberg, JB, J Suriano, A del Rio, WR Cooper, J Abad and C.Fernandez. 2014. *Matryoshka*: A New Floral Mutant in Potato. *American Journal of Potato Research*: 91:500-503.
98	2014	Cooper, WR and JB Bamberg. 2014. Variation in *Bactericera cockerelli* (Hemiptera: Triozidae) oviposition, survival, and development on *Solanum bulbocastanum* germplasm. *American Journal of Potato Research* 91:532-537.
97	2014	Zorrilla, C, F Navarro, S Vega, JB Bamberg and JP Palta. 2014. Identification and Selection for Tuber Calcium, Internal Quality and Pitted Scab in Segregating Atlantic x Superior reciprocal tetraploid populations. *American Journal of Potato Research* 91:673-687.
96	2014	Bethke, P, N Atef, S Kubow, Y Leclerc, X Li, M Haroon, T Molen, JB Bamberg, M Martin and D Donnelly. 2014. History and Origin of Russet Burbank (Netted Gem) a sport of Russet Burbank. *American Journal of Potato Research* 91:579-593.
95	2014	Bamberg, JB. and AH del Rio. 2014. Selection and Validation of an AFLP Marker Core Collection for the Wild Potato *Solanum microdontum*. *American Journal of Potato Research* 91:368-375.
94	2013	Pillai, Syamkumar, Duroy Navarre, and John Bamberg. 2013. Analysis of polyphenols, anthocyanins, and carotenoids in tubers from *Solanum tuberosum* Group Phureja, Stenotomum and Andigena. *American Journal of Potato Research* 90:440-450.
93	2012	del Rio, Alfonso H., JB Bamberg, Ruth Centeno-Diaz, J. Soto, A. Salas, W. Roca and D. Tay. 2012. Pesticide contamination has little effect on the genetic diversity of potato species. *American Journal of Potato Research* 89:348-391.
92	2012	del Rio, Alfonso H., JB Bamberg, Ruth Centeno-Diaz, A. Salas, W. Roca and D. Tay. 2012. Effects of the pesticide Furadan on traits associated with reproduction of wild potato species. *American Journal of Plant Sciences* 3:1608-1612.
91	2012	Goyer, A., C Brown, R Knowles, L Knowles and JB Bamberg. 2012. Attacking the acrylamide dilemma by developing low sugar high carotenoid processing potatoes. Potato Progress (Washington State Potato Commission): 12(1):2-3.
90	2012	Bamberg, JB and JC Miller, Jr. 2012. Comparisons of *ga1* with other reputed gibberellin mutants in potato. *American Journal of Potato Research* 89:142-149.
89	2011	Bamberg, JB and AH del Rio. 2011. Diversity relationships among wild potato collections from seven "Sky Island" mountain ranges in the Southwest USA. *American Journal of Potato Research* 88(6):493-499

88	2011	Bamberg, JB, AH del Rio and J Penafiel. 2011. Successful prediction of genetic richness at wild potato collection sites in Southeastern Arizona. *American Journal of Potato Research* 88:398-402.
87	2011	Bamberg, JB and AH del Rio. 2011. Use of native potatoes for research and breeding. *Hortscience Proceedings* 46(11):1444-1445.
86	2010	Nitzan, N, RA Quick, WD Hutson, JB Bamberg and CR Brown. 2010. Partial Resistance to Potato Black Dot, Caused by *Colletotrichum coccodes* in *Solanum tuberosum* Group Andigena. *American Journal of Potato Research* 87:502-508.
85	2010	Bamberg, JB, AH del Rio, CF Fernandez, A Salas, S Vega, C Zorilla, W Roca and D Tay. 2010. Comparison of "remote" versus "easy" in situ collection locations for USA wild Solanum (potato) germplasm. *American Journal of Potato Research* 87:277-284.
84	2010	Bamberg, JB. 2010. Tuber dormancy lasting eight years in the wild potato *Solanum jamesii*. *American Journal of Potato Research* 87:226-228.
83	2010	Kiszonas, AM, and JB Bamberg. 2010. Survey of tuber pH variation in potato (*Solanum*) species. *American Journal of Potato Research* 87:167-176.
82	2009	Bamberg, J.B., A. H. del Rio. 2009. Unbalanced bulk of parents' seed does not cause significant drift in germplasm regeneration of two model potato (*Solanum*) species populations. *American Journal of Potato Research* 86:391-397.
81	2009	Bamberg, J.B., A. H. del Rio and Rocio Moreyra. 2009. Genetic consequences of clonal versus seed sampling in model populations of two wild potato species indigenous to the USA. *American Journal of Potato Research* 86:367-372.
80	2009	Nzaramba, M. Ndambe, Lavanya Reddivari, John Bamberg, and J. Creighton Miller, Jr. 2009. Antiproliferative activity and cytotoxicity of *Solanum jamesii* tuber extracts on human colon and prostate cancer cells *in vitro*. *Journal of Agricultural and Food Chemistry* 57:8308-8315.
79	2008	Hale, AL, L Reddivari, MN Nzaramba, JB Bamberg, and JC Miller Jr. 2008. Interspecific variability for antioxidant activity and phenolic content among *Solanum* species. Am J Potato Res 85:332-341.
78	2008	Bamberg, JB and A. del Rio. 2008. Proximity and Introgression of Other Potato Species Does not Explain Genetic Dissimilarity between *Solanum verrucosum* Populations of Northern and Southern Mexico. Am. J. Pot. Res. 85:232–238.
77	2007	Bamberg, JB and A. H. del Rio. 2007. The canon of potato science-- 50 topics in potato science that every potato scientist should know: 1) Genetic diversity and gene banks. Potato Research 50:207-210.
76	2007	Nzaramba, M. Ndambe, J. B. Bamberg and J. C. Miller, Jr. 2007. Effect of propagule type and growing environment on antioxidant activity and total phenolic content in potato germplasm. Amer J Potato Res 84:323-330.
75	2007	Hijmans, R., T. Gavrilenko, S. Stephenson, J. Bamberg, A. Salas and D.M. Spooner. 2007. Geographic and environmental range expansion through polyploidy in wild potatoes (*Solanum* section Petota). Global Ecol. Biogeogr. 16: 485-495.

74	2006	Bamberg, JB, C. Fernandez, and A. del Rio. 2006. A new wild potato mutant in *Solanum stoloniferum* Schltdl. lacking purple pigment. Am J. Potato Res 83:437-445.
73	2006	del. Rio, AH, JB Bamberg and Z. Huaman. 2006. Genetic equivalence of putative duplicate germplasm collections held at CIP and US potato genebanks. Am J. Potato Res 83:279-285.
72	2006	Bamberg, JB. 2006. *Crazy Sepal*: a new floral Sepallata-like mutant in the wild potato *Solanum microdontum* Bitter. Am J. Potato Res 83:433-435.
71	2006	Vega. S. E. J. B. Bamberg and J. P. Palta. 2006. Gibberellin-deficient dwarfs in potato vary in exogenous GA3 response when the *ga1* allele is in different genetic backgrounds. Am J. Potato Res 83:357-363.
70	2006	Bamberg, JB and A del Rio. 2006. Seedling transplant selection does not cause genetic shifts in genebank populations of inbred potato species. Crop Science 46:424-427.
69	2005	Kuang, H.H., F.S. Wei, M.R. Marano, U. Wirtz, X.X. Wang, J. Liu, W.P. Shum, J. Zaborsky, L.J. Tallon, W. Rensink, S. Lobst, P.F. Zhang, C.E. Tornqvist, A. Tek, J. Bamberg, J. Helgeson, W. Fry, F. You, M.C. Luo, J.M. Jiang, C.R. Buell, and B. Baker. 2005. The R1 resistance gene cluster contains three groups of independently evolving, type I R1 homologues and shows substantial structural variation among haplotypes of Solanum demissum. Plant J 44(1):37-51.
68	2005	Bamberg, JB, JP Palta and SE Vega. 2005. *Solanum commersonii* cytoplasm does not improve freezing tolerance in substitution backcross hybrids with frost-sensitive potato species. Am J Potato Res 82:251-254.
67	2005	Bamberg, JB and A del Rio. 2005. Conservation of Genetic Resources. In: Maharaj K Razdan and Autar K Mattoo (Eds.), 2005. Genetic Improvement of Solanaceous Crops Vol.1: Potato. Science Publishers, Inc., Enfield, USA, 451 pp.
66	2005	Kiru, S, S Makovskaya, J Bamberg and A del Rio. 2005. New sources of resistance to race Ro1 of the Golden nematode (Globodera rostochiensis Woll.) among reputed duplicate germplasm accessions of *Solanum tuberosum L. subsp. andigena* (Juz. et Buk.) Hawkes in the VIR (Russian) and US Potato Genebanks. Genet Resources and Crop Evol 52:145-149.
65	2004	Bamberg, J.B. and A.H. del Rio. 2004. Genetic heterogeneity estimated by RAPD polymorphism of four tuber-bearing potato species differing by breeding system. Am J Potato Res 81:377-383.
64	2004	Brown CR, H Mojtahedi, and JB Bamberg. 2004. Evaluation of *Solanum fendleri* as a source of resistance to Meloidogyne chitwoodi. Am J Potato Res 81:415-419.
63	2004	del Rio, AH and JB Bamberg. 2004. Geographical parameters and proximity to related species predict genetic variation in the inbred potato species *Solanum verrucosum* Schlechtd. Crop Science 44:1170-1177.
62	2004	Spooner, DM, RG van den Berg, A Rodríguez, J Bamberg, RJ Hijmans, and SI Lara-Cabrera. 2004. Wild potatoes (Solanum section Petota) of North and Central America. Syst Bot Monogr Vol 68. 209 pp.
61	2004	Vega SE, AH del Rio, JB Bamberg and JP Palta. 2004. Evidence for the up-regulation of stearoyl-ACP (delta9) desaturase gene expression during cold acclimation. Am J Potato Res 81:125-135.
60	2003	Bamberg, JB and AH del Rio. 2003. Vulnerability of alleles in the US Potato Genebank Extrapolated from RAPDs. Am J Potato Res 80:79-85.

59	2003	Bamberg, JB, AH del Rio, Z Huaman, S Vega, M Martin, A Salas, J Pavek, S Kiru, C Fernandez and DM Spooner. 2003. A decade of collecting and research on wild potatoes of the southwest USA. Am J Potato Res 80:159-172.
58	2003	del Rio, AH and JB Bamberg. 2003. The effect of genebank seed increase on the genetics of recently collected potato (*Solanum*) germplasm. Am J Potato Res 80:215-218.
57	2003	Hijmans, RJ, M Jacobs, JB Bamberg, and DM Spooner. 2003. Frost tolerance in wild potato species: Assessing the predictivity of taxonomic, geographic, and ecological factors. Euphytica 130:47-59.
56	2003	Vega SE, AH del Rio, G Jung, JB Bamberg and JP Palta. 2003. Marker-assisted genetic analysis of non-acclimated freezing tolerance and cold acclimation capacity in a backcross *Solanum* population. Am J Potato Res 80:359-369.
55	2002	del Rio, AH and J. Bamberg. 2002. Lack of association between genetic and geographic origin characteristics for the wild potato *Solanum sucrense* Hawkes. Am J Potato Res 79:335-338.
54	2001	Bamberg, JB, SD Kiru and AH del Rio. 2001. Comparison of reputed duplicate populations in the Russian and US potato genebanks using RAPD markers. Am J Potato Res 78: 365-369.
53	2001	del Rio, AH, JB Bamberg, Z Huaman, A Salas, and SE Vega. 2001. Association of eco-geographical variables and genetic variation in native wild US potato populations determined by RAPD markers. Crop Science 41:870-878.
52	2001	Douches, DS, JB Bamberg, W Kirk, K Jastrzebski, BA Niemira, J Coombs, DA Bisognin, and KJ Fletcher. 2001. Evaluation of wild *Solanum* species for resistance to the US-8 genotype of Phytophthora infestans utilizing a fine-screening technique. Am J Potato Res 78:159-165.
51	2000	Bamberg, JB. 2000. Germination of gibberellin sensitive *Solanum* (potato) botanical seeds soaked in GA3 and re-dried. Am J Potato Res 77:201-202.
50	2000	Bamberg, J, C Singsit, AH del Rio and EB Radcliffe. 2000. RAPD analysis of genetic diversity in *Solanum* populations to predict the need for fine screening. Am J Potato Res 77:275-278.
49	2000	del Rio AH and JB Bamberg. 2000. RAPD markers efficiently distinguish heterogenous populations of wild potato (*Solanum*). Genetic Resources and Crop Evolution 47:115-121.
48	2000	Huaman, Z, R Hoekstra, and J Bamberg. 2000. The intergenebank potato database and the dimensions of available wild potato germplasm. Am J Potato Res 77:353-362.
47	2000	Vega, SE, J Palta and J Bamberg. 2000. Variability in the rate of cold acclimation and de-acclimation among tuber-bearing *Solanum* (potato) species. J Am Soc Hort Sci 125:205-211.
46	1999	Bamberg, JB. 1999. Dependence on exogenous gibberellin for seed germination in *Solanum acaule* Bitter and other *Solanum* (potato) species. Am J Potato Res 76:351-355.
45	1999	Bamberg, JB. 1999. Screening for gibberellin deficiency mutants in *Solanum tuberosum* ssp. *andigena* Am J Potato Res 76:321-322.
44	1999	Bamberg, JB. 1999. Wild potatoes on public lands of the Southwest. US Potato Genebank publication, 4312 Hwy 42, Sturgeon Bay, WI, USA. 6pp.
43	1999	Chen, Y-K, J Palta and J Bamberg. 1999. Freezing tolerance and tuber production in self and backcross progenies derived from somatic hybrids

		between *Solanum tuberosum* L. and *S. commersonii* Dun. Theor Appl Genet 99:100-107.
42	1999	Chen, Y-K, J Palta, J Bamberg, H Kim, G Haberlach, and J Helgeson. 1999. Expressions of nonacclimated freezing tolerance and cold acclimation capacity in somatic hybrids between hardy wild *Solanum* species and cultivated potatoes. Euphytica 107:1-8.
41	1999	Chen, Y-K, J Bamberg and J Palta. 1999. Expression of freezing tolerance in the interspecific F1 and somatic hybrids of potatoes. Theor Appl Genet 98:955-1004.
40	1999	Errebhi, M, C Rosen, F Lauer, M Martin, and J Bamberg. 1999. Evaluation of tuber-bearing *Solanum* species for nitrogen use efficiency and biomass partitioning. Am J Potato Res 76:143-152.
39	1998	Bamberg, J, J Palta, L Peterson, M Martin, and A Krueger. 1998. Fine screening potato (*Solanum*) species germplasm for tuber calcium. Am J Potato Res 75:181-186.
38	1998	Errebhi, M, C Rosen, F Lauer, M Martin, J Bamberg, and D Birong. 1998. Screening of exotic potato germplasm for nitrogen uptake and biomass production. Am J Potato Res 75:93-100.
37	1998	Palta, JP, JB Bamberg, YK Chen, LS Weiss, and BH Karlsson. 1998. Understanding genetic control of freezing stress resistance using potato species as a model system. In: Plant cold hardiness: Molecular biology, biochemistry and physiology. P. Li and T.H.H. Chen, Eds. New York, Plenum Press, pp 67-75, 40 refs.
36	1997	del Rio, AH, JB Bamberg, Z Huaman, A Salas, and SE Vega. 1997. Assessing changes in the genetic diversity of potato genebanks. 2. *In Situ* vs *ex situ.* Theor Appl Genet 95(1/2):199-204.
35	1997	del Rio, AH, JB Bamberg and Z Huaman. 1997. Assessing changes in the genetic diversity of potato genebanks. 1. Effects of seed increase. Theor Appl Genet 95(1/2):191-198.
34	1996	Bamberg, JB, CA Longtine and EB Radcliffe. 1996. Fine screening *Solanum* accessions for resistance to Colorado potato beetle. Am Potato J 73:211-223.
33	1996	Bamberg, JB, MW Martin, JJ Schartner, and DM Spooner. 1996. Catalog of potato germplasm - 1996. US Potato Genebank publication, 4312 Hwy 42, Sturgeon Bay, WI, USA. 110 pp.
32	1996	Vega, SE, JB Bamberg and JP Palta. 1996. Potential for improving freezing stress tolerance of wild potato germplasm by supplemental calcium fertilization. Am Potato J 73:397-409.
31	1995	Bamberg, J., Z Huaman and R Hoekstra. 1995. International cooperation in potato germplasm. In: International germplasm transfer: Past and present, R. Duncan, Ed. CSSA Special Publication #23. CSSA/ASA/SSSA, Madison, WI. Pp. 177-182
30	1995	Kleinhenz, MK, JB Bamberg and JP Palta. 1995. Use of stomatal index as a marker to screen backcross populations of two wild potato species segregating for freezing tolerance. Am Potato J 72:243-250.
29	1995	Spooner, DM, R van den Berg and J Bamberg. 1995. Examination of species boundaries of *Solanum* series Demissa and potentially related species in series Acaulia and Tuberosa (Solanaceae sect. Petota). Systematic Botany 20:295-314.
28	1995	Spooner, D, R Castillo, L Lopez, R Pineda, R Leon, A Vargas, M Garcia, and J Bamberg. 1995. Colombia and Venezuela 1992 wild potato (*Solanum* sect.

		Petota) germplasm collecting expedition: taxonomy and new germplasm resources. Euphytica 81:45-56.
27	1995	Spooner, D, R Castillo, T Lopez, R Pinada, R Leon, P Vargas, M Garcia, and J Bamberg. 1995. Colombia and Venezuela 1992 wild potato (*Solanum* sect. Petota) germplasm collecting expedition: Taxonomy and new germplasm resources. Euphytica 81:45-56.
26	1995	Bamberg, J. 1995. Screening potato (solanum) species for male fertility under heat stress. American Journal of Potato Research. 72:23-33.
25	1995	Vega, SE and JB Bamberg. 1995. Screening the US potato collection for frost hardiness. Am Potato J 72:13-21.
24	1994	Bamberg, JB. 1994. Allelism of endosperm balance number (EBN) in *Solanum acaule* and other wild potato species. Theor Appl Genet 89:682-686.
23	1994	Bamberg, JB and DM Spooner. 1994. The United States Potato Introduction Station herbarium. Taxon 43:489-496.
22	1994	Bamberg, JB, RE Hanneman, Jr, JP Palta, and JF Harbage. 1994. Accessing disomic 4x(2EBN) potato species germplasm via hybridization with *Solanum commersonii* Dunal. Genome 37:866-870.
21	1994	Spooner, DM and JB Bamberg. 1994. Potato genetic resources: Sources of resistance and systematics. Proc. of the Symp. "Potato Production: Can we break the chemical dependency?" Am Potato J 71:325-337.
20	1994	Bamberg, JB, MW Martin and JJ Schartner. 1994. Elite selections of tuber-bearing Solanum species germplasm. US Potato Genebank catalog, 4312 Hwy 42, Sturgeon Bay, WI, 54235, USA.
19	1993	Bamberg, JB. 1993. Evaluation, introgression of wild genes, and taxonomy. Proceedings, NPGS Research Workshop, June 29-30, Fort Collins, CO.
18	1993	Bamberg, JB. 1993. IR-1: The Inter-Regional Potato Program--the United States Potato Genebank. Palmer Pubs, Antigo, WI. 6 pp.
17	1993	Bamberg, JB and RE Hanneman, Jr. 1993. The transmission and yield effects of a gibberellin mutant allele in potato (*Solanum tuberosum* L.). Potato Research 36:365-373.
16	1993	Bamberg, JB, JP Palta, LA Peterson, Max W Martin, and AR Krueger. 1993. Screening tuber-bearing *Solanum* (Potato) germplasm for efficient accumulation of tuber calcium. Am Potato J 70:219-226.
15	1993	Palta, JP, LS Weiss, JF Harbage, JB Bamberg, and JM Stone. 1993. Molecular mechanisms of freeze-thaw injury and cold acclimation in herbacious plants: merging physiological and genetic approaches. In: Interacting stresses on plants in a changing climate (M. B. Jackson and C. R. Black, Eds.). Berlin, Germany; Springer-Verlag, pp. 659-680.
14	1993	Stone, JM, JP Palta, JB Bamberg, LS Weiss, and JF Harbage. 1993. Inheritance of freezing resistance in tuber-bearing *Solanum* species: Evidence for independent genetic control of non-acclimated freezing tolerance and cold acclimation. Proc Natl Acad Sci 90:7869-7873.
13	1992	Bamberg, JB. 1992. A planting aid for potato seedling transplants. Am Potato J 70:677-681.
12	1992	Bamberg, JB. 1992. World potato genebank collaborators meet at Braunschweig. Diversity 8(4):22.
11	1991	Bamberg, JB and RE Hanneman, Jr. 1991. An effective method for culturing pollen tubes of potato. Am Potato J 68:373-379.
10	1991	Bamberg, JB and RE Hanneman, Jr. 1991. Characterization of a new gibberellin related dwarfing locus in potato (*Solanum tuberosum* L.). Am

		Potato J 68:45-52.
9	1991	Bamberg, JB and RE Hanneman, Jr. 1991. Rapid ploidy screening of tuber-bearing *Solanum* (potato) species through pollen diameter measurement. Am Potato J 68:279-285.
8	1991	Bamberg, JB. 1991. World potato genebank collaborators meet at Sturgeon Bay. Diversity 7(3):11-12.
7	1991	Spooner, DM and JB Bamberg. 1991. Profile: The Inter-Regional Potato Introduction Project (NRSP-6), US Center for Potato Germplasm. Diversity 7(4):32-35.
6	1991	Spooner, DM, A Contreras and JB Bamberg. 1991. Potato germplasm collecting expedition to Chile, 1989, and utility of the Chilean species. Am Potato J 68:681-690.
5	1991	Spooner, DM, JB Bamberg, JP Hjerting, and J Gomez. 1991. Mexico, 1988 potato germplasm collecting expedition and utility of Mexican potato species. Am Potato J 68:29-43.
4	1990	Bamberg, JB and RE Hanneman, Jr. 1990. Allelism of endosperm balance number (EBN) in Mexican tuber-bearing *Solanum* species. Theor Appl Genet 80:161-166.
3	1990	Bamberg, JB. 1990. Potato intergenebank collaboration. Diversity 6(3&4):6-7.
2	1990	Kowalski, SD, JB Bamberg, WM Tingey, and JC Steffens. 1990. Inheritance of polyphenol oxidase in type A glandular trichomes of *Solanum berthaultii*. J Heredity 81:475-478
1	1986	Bamberg, JB, RE Hanneman, Jr and LE Towill. 1986. Use of activated charcoal to enhance the germination of botanical seeds of potato. Am Potato J 63:181-189.