

CURRICULUM VITAE

Name: M. Isabel Vales

Address: Dept. of Horticultural Sciences
202 Horticulture/Forest Sciences Bldg.
2133 Texas A&M University
College Station, TX 77843-2133

Phone: 541-740-4437 (mobile)

Email Address: isabel.vales@tamu.edu

Websites: <http://potato.tamu.edu/>
<https://hortsciences.tamu.edu/people/faculty-2/isabel-vales/>

Education:

Doctorate in Biology, 1996. Univ. Vigo, Spain.
Graduate Degree in Biology, 1995. Univ. Vigo, Spain.
Pedagogy Certification, 1993. Univ. Santiago de Compostela, Spain.
Licentiate Degree in Biological Sciences, 1992. Univ. Santiago de Compostela, Spain.

Employment History:

Texas A&M University (TAMU), Dept. of Horticultural Sciences, College Station, TX.
Associate Professor, Potato Breeding and Genetics, 2017 to date.
International Scientific Consultant (private), Pullman, WA, July 2012 to 2016.
Oregon State University (OSU), Dept. of Crop and Soil Science, Oregon, USA.
Associate Professor, Courtesy Faculty, July 2010 to July 2015.
Associate Professor, Potato Breeding and Genetics, 2005 to 2010.
Assistant Professor Senior Research, Maize, Barley and Wheat Genetics, 1999 - 2005.
International Crops Research Institute for the Semi-Arid Tropics (ICRISAT), Patancheru, A.P., India.
Principal Scientist, Pigeonpea Breeding, 2010 - 2012.
University of Minnesota (UMN), Dept. of Agronomy and Plant Genetics, St. Paul, Minnesota, USA.
Post-Doctoral Research Associate, Maize and Oat Genetics, 1997, 1998.
Spanish National Research Council (CSIC), Misión Biológica de Galicia, Pontevedra, Spain.
Graduate Research Assistant, Maize Breeding, 1993 - 1996.
Private academy in Santiago de Compostela, Spain.
English tutor, 1/1993 - 4/1993.
Instituto (high school) Xelmírez, Santiago de Compostela, Spain.
High School teacher (practical training), 10/1992 - 3/1993.
Lácteos Prieto Company, Pontevedra, Spain.
Laboratory Trainee, 8/1992 - 9/1992.

Graduate Committee service: 2001-2022: 31 students

Courses taught: Molecular Breeding (modules: DNA fingerprinting, Genetic mapping, QTL analysis), Potato Production, Potato Breeding and Genetics, Plant Physiology.

Honors and Awards:

- The Potato Association of America Outstanding Extension Project Award for work on potato tuberworm. 2010.
- Federal Laboratory Consortium (Far West) Technology Transfer Award for "Outstanding Partnership". TriState Potato Breeding Program and PVMI. 2010.
- James and Mildred Oldfield/E.R. Jackman Team Award to Oregon Organic Potato Project. 2008.
- Recognition Certificate as member of the Certification, Foundation Seed, and Plant Materials Potato Advisory Committee. OSU Extension Service. 2007.
- Fellowship for Doctorates and Technologists, Ministerio de Educación y Cultura, Madrid, Spain. 1997, 1998.
- Travel Grant, Ministerio de Educación y Cultura, Madrid, Spain. 1998.
- Scholarship from the Excelentísima Diputación Provincial de Pontevedra, Spain. 1993 - 1996.
- Scholarship from Pedro Barrie de la Maza Foundation, Galicia, Spain. 1991, 1992.
- High School Honors Award, Pontevedra, Galicia, Spain. 1987.

Professional Organizations:

American Society of Horticultural Sciences. 2018 to date.
National Association of Plant Breeders. 2017 to date.
Potato Association of America. 2005 to 2013. 2017 to date.
American Society of Agronomy. 1997 to present.
Crop Science Society of America. 1997 to present.
Indian Society of Pulses Research and Development. 2010-2012.
Genetics Society of America. 2006 to 2012.

Publications:

Journal articles

2022. Mora, V., M. Ramasamy, M. B. Damaj, S. Irigoyen, V. Ancona, C. A. Avila, **M. I. Vales**, F. Ibanez, and K. K. Mandadi. Identification and characterization of new sources of zebra chip disease resistance among wild Solanum species. *Frontiers in Microbiology*. <https://doi.org/10.3389/fmicb.2022.857493>.
2022. Pandey, J, D.C. Scheuring, J.W. Koym, and **M.I. Vales**. Genomic Regions Associated with Tuber Traits in Tetraploid Potatoes and Identification of Superior Clones for Breeding Purposes. *Frontiers in Plant Science*. <https://doi.org/10.3389/fpls.2022.952263>.
2022. Toinga-Villafuerte, S., **M.I. Vales**, J.M. Awika and K.S. Rathore. CRISPR/Cas9-mediated mutagenesis of the granule-bound starch synthase gene in the potato variety Yukon Gold to obtain amylose-free starch in tubers. *International Journal of Molecular Sciences*. <https://doi.org/10.3389/fpls.2022.952263>.
2022. Toinga-Villafuerte, S., M.R. Janga, **M.I. Vales**, and K.S. Rathore. 2022. Green fluorescent protein gene as a tool to examine the efficacy of Agrobacterium delivered CRISPR/Cas9 reagents to generate

targeted mutations in the potato genome. *Plant Cell, Tissue and Organ Culture*. DOI: 10.1007/s11240-022-02310-8

2022. **Vales, M.I.**, D.C. Scheuring, J.W. Koym, D.G. Holm, S.Y.C. Essah, R.G. Wilson, J.K. Sidhu, R.G. Novy, J.L. Whitworth, J.C. Stark, R.R. Spear, V. Sathuvalli, C.C. Shock, B.A. Charlton, S. Yilma, N.R. Knowles, M.J. Pavék, C.R. Brown, D.A. Navarre, M. Feldman, C.M. Long, and J.C. Miller, Jr. Vanguard Russet: A Fresh Market Potato Cultivar with Medium-Early Maturity and Long Dormancy. *American Journal of Potato Research* (in press)
2022. Hoopes, G., X. Meng, J.P. Hamilton, S.R. Achakkagari, F. de A. Freitas Guesdes, M.E. Bolger, J.J. Coombs, D. Esselink, N.R. Kaiser, L. Kodde, M. Kyriakidou, B. Lavrijssen, N. van Lieshout, R. Shereda, H.K. Tuttle, B. Vaillancourt, J.C. Wood, J. M. de Boer, P.M. Bourke, D. Douches, H.J. van Eck, D. Ellis, M.J. Feldman, K.M. Gardner, J. C.P. Hopman, J. Jiang, W.S. de Jong, J.C. Kuhl, R.G. Novy, S. Oome, V. Sathuvalli, E.H. Tan, R.A. Ursem, **M.I. Vales**, K. Vining, R. G.F. Visser, J. Vossen, G.C. Yencho, N.L. Anglin, C.W.B. Bachem, J.B. Endelman, L.M. Shannon, M. Strömvik, H.H. Tai, B. Usadel, C. Robin Buell, R. Finkers. Phased, chromosome-scale genome assemblies of tetraploid potato reveals a complex genome, transcriptome, and proteome landscape that underpin phenotypic diversity. *Molecular Plant* 15: 520-536.
2021. Gautam S., N. Solis-Gracia, M.K. Teale, K. Mandadi, J.A. da Silva, and **M.I. Vales**. Development of an in vitro microtuberization and temporary immersion bioreactor system to evaluate heat stress tolerance in potatoes (*Solanum tuberosum* L.). *Frontiers in Plant Science* 12: 700328.
2021. Pandey, J., D.C. Scheuring, J.W. Koym, J. Coombs, R.G. Novy, A.L. Thompson, D.G. Holm, D.S. Douches, J.C. Miller Jr., and **M.I. Vales**. Genetic diversity and population structure of advanced clones selected over forty years by a potato breeding program in the USA. *Scientific Reports* 11: 8344.
2021. Farber, C., L. Sanchez, S. Pant, D. Scheuring and **I. Vales**, K. Mandadi, and D. Kourouski. Potential of spatially offset Raman spectroscopy for detection of Zebra Chip and Potato Virus Y diseases of Potatoes (*Solanum tuberosum*). *ACS Agricultural Science and Technology* (in press)
2020. Morey, R., A. Ermolenkov, D.C. Scheuring, J.W. Koym, **M.I. Vales**, and D. Kourouski. Non-Invasive identification of potato varieties and prediction of the origin of tuber cultivation using spatially offset Raman spectroscopy. *Analytical and Bioanalytical Chemistry* 412: 4585–4594.
2020. Chappell, A.L., J.W. Koym, D.C. Scheuring, J.C. Miller, Jr., and **M.I. Vales**. Incorporation of mannitol in tissue culture media for long-term storage of potatoes at moderately low temperature and effect on subsequent micropropagation. *Amer. J. Potato Res.* 97: 439-446.
2020. Vigue, S.J., D.C. Scheuring, J.W. Koym, C.M. Rush, F. Workneh, C. Tamborindeguy, J.C. Miller Jr., D.S. Douches, R.G. Novy, **M.I. Vales**. Identification of tetraploid potato clones with good processing quality among genotypes with reduced Zebra Chip symptomatology. *Amer. J. Potato Res.* 97: 565-579.
2018. **Vales, M. I.**, R. Sultana, S. B. Patil, G. V. Ranga Rao, R. V. Kumar and K. B. Saxena. Honey bee mediated (*Apis mellifera* L.) hybrid pigeonpea seed production under net house condition. *J. of Food Legumes* 31: 197-204.
2018. Shock C.C., C.R. Brown, V. Sathuvalli, B.A. Charlton, S. Yilma, D.C. Hane , R. Quick, E. Feibert, J.L. Whitworth, R.G. Novy, J.C. Stark, M.J. Pavék, N.R. Knowles, R.A. Navarre, J.C. Miller, Jr. , D.G. Holm, J. Debons , **M.I. Vales**, X. Wang. TerraRossa , a mid-season specialty potato with red flesh and skin and resistance to golden cyst nematode. *Amer. J. Potato Res.* 95: 597–605.
2018. Saxena, K.B., D. Sharma, and **M.I. Vales**. Development and commercialization of CMS pigeonpea hybrids. *Plant Breeding Reviews* 41: 103-167.
2018. Choudhary, A.K., R. Sultana, **M.I. Vales**, K.B. Saxena, R.R. Kumar, P. Ratnakumar. Integrated physiological and molecular approaches to improvement of abiotic stress tolerance in two pulse crops of the semi-arid tropics. *The Crop Journal* 6: 99-114.

2017. Yilma, S., B.A. Charlton, C.C. Shock, D.C. Hane, S.R. James, A.R. Mosley, K.A. Rykbost, E. B.G. Feibert, N.R. Knowles, M.J. Pavék, J.C. Stark, R.G. Novy, J.L. Whitworth, J.J. Pavék, D.L. Corsini, T.L. Brandt, N. Olsen, C.R. Brown, **M.I. Vales**, V. Sathuvalli. Sage Russet: a new high yielding russet potato variety with cold-sweetening resistance, high vitamin C and protein contents and excellent fresh pack and processing potential. *Amer. J. Potato Res.* (in press)
2016. Sathuvalli V., C.R. Brown, S. Yilma, A. Charlton, C.C. Shock, R. Quick, E. Feibert, J.L. Whitworth, R.G. Novy, J.C. Stark, M.J. Pavék, N.R. Knowles, R.A. Navarre, J. Debons, and **M.I. Vales**. Yukon Nugget: a mid-season yellow skin, yellow flesh specialty potato with extreme resistance to Potato Virus X. *Amer. J. Potato Research* 93: 602-608.
2016. Zhou, Y. **M.I. Vales**, A. Wang, and Z. Zhang. Systematic bias of correlation coefficient may explain negative accuracy of genomic prediction. 2016. Briefings in Bioinformatics doi: 10.1093/bib/bbw064
2014. **Vales, M.I.**, G.V. Ranga Rao, H. Sudini, S.B. Patil, L.L. Murdock. Effective and economic storage of pigeonpea seed in triple layer plastic bags. *Journal of Stored Products Research* 58: 29-38.
2014. Karaagac, E., S. Yilma, A. Cuesta-Marcos, **M.I. Vales**. Molecular analysis of potatoes from the Pacific Northwest Tri-State Variety Development Program and selection of markers for practical DNA fingerprinting applications. *Amer. J. Potato Res.* 91: 195-203.
2013. Roorikiwal, M., S.L. Sawargaonkar, A. Chitikineni, M. Thudi, R.K. Saxena, H.D. Upadhyaya, **M.I. Vales**, O. Riera-Lizarazu, R.K. Varshney. Single nucleotide polymorphism genotyping for breeding and genetics applications in chickpea and pigeonpea using the BeadXpress platform. *The Plant Genome* 6: 1-10.
2013. Sultana, R. **M.I. Vales**, K.B. Saxena, A. Rathore, S. Raob, S.K. Raob, M.G. Mula, and R.V. Kumar. Water-logging tolerance in pigeonpea [*Cajanus cajan* (L.) Millsp.]: Genotypic variability and identification of tolerant genotypes. *J. Ag. Sci. (Cambridge)* 151: 659-671
2012. Srivastava, R.K., **M.I. Vales**, R. Sultana, K.B. Saxena, R.V. Kumar, H.P. Thanki, J.S. Sandhu and K.N. Chaudhari. Development of 'super-early' pigeonpeas with good yield potential from early × early crosses. *SAT eJournal* 10: 1-6.
2012. **Vales, M.I.**, R.K. Srivastava, R. Sultana, S. Singh, I. Singh, G. Singh, S.B. Patil, and K.B. Saxena. Breeding for earliness in pigeonpea: Development of new determinate and non-determinate lines. *Crop Sci.* 52: 2507-2516.
2012. Srivastava R., A. Rathore, **M.I. Vales**, R.V. Kumar, S. Panwar, and H.P. Thanki. GGE biplot based assessment of yield stability, adaptability and mega-environment characterization for hybrid pigeonpea (*Cajanus cajan*). *Indian J. of Ag. Sci.* 82: 928-933.
2012. Saxena, K.B., R. V. Kumar, R.K. Saxena, M. Sharma, R.K. Srivastava, R. Sultana, R.K. Varshney, **M.I. Vales**, and S. Pande. Identification of dominant and recessive genes for resistance to Fusarium wilt in pigeonpea and their implication in breeding hybrids. *Euphytica* 188: 221-227.
2012. **Vales, M.I.**, C.R. Brown, S. Yilma, D. C. Hane, S.R. James, C.C. Shock, B.A. Charlton, E. Karaagac, A. R. Mosley, D. Culp, E. Feibert, J. C. Stark, M. J. Pavék, N. R. Knowles, R. G. Novy, and J. L. Whitworth. Purple Pelisse: A specialty 'fingerling' potato with purple skin and flesh and medium specific gravity. *Amer. J. Potato Res.* 89: 306-314.
2012. Brown, C.R., **M.I. Vales**, S. Yilma, S. James, B. Charlton, D. Culp, D. Hane, C. Shock, E. Feibert, M. Pavék, R. Knowles, R. Novy, J. Whitworth, J. Stark, J. C. Miller Jr., D. Holm, R. Quick, and R. Navarre. "AmaRosa", a red skinned, red fleshed fingerling with high phytonutrient value. *Amer. J. Potato Res.* 89: 249-254.
2012. Yilma, S., **M.I. Vales**, B.A. Charlton, D.C. Hane, S.R. James, C.C. Shock, A.R. Mosley, D. Culp, E. Feibert, L. Leroux, E. Karaagac, N.R. Knowles, M.J. Pavék, J.C. Stark, R.G. Novy, J.L. Whitworth, J.J. Pavék, D.L. Corsini T.L. Brandt, N. Olsen, and C.R. Brown. Owyhee Russet: A variety with high yields of U.S. No. 1 tubers, excellent processing quality, and moderate resistance to fusarium dry rot (*Fusarium solani* var. *coeruleum*). *Amer. J. Potato Res.* 89: 175-183.

2012. Novy, R.G, J.L. Whitworth, J.C. Stark, B.A. Charlton, S. Yilma, N.R. Knowles, M.J. Pavek, T.L. Brandt, S. Gupta, N. Olsen, M. Thornton, C.R. Brown, S.L. Love, D.L. Corsini, J.J. Pavek, S.R. James, D.C. Hane H. Lozoya-Saldana, and **M.I. Vales**. Palisade Russet: A Late blight resistant potato germplasm having a low incidence of sugar ends and high specific gravity. *Amer. J. Potato Res.* 89: 89-101.
2011. Bohra, A., N. Mallikarjuna, K.B. Saxena, H. Upadhyaya, **M.I. Vales**, and R. Varshney. Harnessing the potential of crop wild relatives through genomics tools for pigeonpea improvement *J. Plant Biol.*, Vol. 37: 83-98.
2011. Saxena, K.B., G. Singh, H.S. Gupta, V. Mahajan, R.V. Kumar, J.C. Bhatt, B. Singh, **M.I. Vales**, A.K. Shukla, and Madanlal. Enhancing the livelihoods of Uttarakhand farmers by introducing pigeonpea cultivation in hilly areas. *Journal of Food Legumes* 24: 128-132.
2011. Saxena, K.B., **M.I. Vales**, R.V. Kumar, R. Sultana, and R.K. Srivastava. Ensuring genetic purity of pigeonpea hybrids by incorporating a naked-eyed polymorphic marker in A and B lines. *Crop Science* 51: 1564-1570.
2011. Whitworth, J.L., R.G. Novy, J. C. Stark, J.J. Pavek, D.L. Corsini, S.L. Love, N. Olsen, S.K. Gupta, T. Brandt, **M.I. Vales**, A.R. Mosley, S. Yilma, S.R. James, D.C. Hane, B.A. Charlton, C.C. Shock, N.R. Knowles, M.J. Pavek, J.S. Miller and C.R. Brown. Alpine Russet: A Potato Cultivar Having Long Tuber Dormancy Making it Suitable for Processing from Long-term Storage. *Amer. J. Potato Res.* 88: 256-268.
2010. Whitworth, J.L., R.G. Novy, J.C. Stark, J.J. Pavek, D.L. Corsini, S.L. Love, J.S. Miller, **M.I. Vales**, A.R. Mosley, S. Yilma, S.R. James, D.C. Hane, B.A. Charlton, C.R. Brown, N.R. Knowles, and M.J. Pavek. 2010. Yukon Gem: a yellow-fleshed potato cultivar suitable for fresh-pack and processing with resistances to PVY^o and late blight. *Am. J. Pot Res.* 87: 327-336.
2010. Novy, R.G., J.L. Whitworth, J.C. Stark, S.L. Love, D.L. Corsini, J.J. Pavek, **M.I. Vales**, S.R. James, D.C. Hane, C.C. Shock, B.A. Charlton, C.R. Brown, N.R. Knowles, M.J. Pavek, T.L. Brandt, S. Gupta, and N. Olsen. Clearwater Russet: A dual-purpose potato cultivar with cold-sweetening resistance, high protein content, and a low incidence of external defects and sugar ends. *Amer. J. Potato Res.* 87:458-471.
2010. Stark, J.C., R.G. Novy, J. L. Whitworth, N.R. Knowles, M.J. Pavek, S.L. Love, **M.I. Vales**, S.R. James, D.C. Hane, C.R. Brown, B.A. Charlton, D.L. Corsini, J.J. Pavek, N. Olsen, and T. Brandt. Classic Russet: a potato cultivar with excellent fresh market characteristics and high yields of U.S. No. 1 tubers suitable for early harvest or full-season production. *Amer. J. Potato Res.* 87: 360-373.
2010. Karaagac, E., S. Yilma, and **M.I. Vales**. SSR-based DNA fingerprinting of potato clones from the Pacific Northwest Potato Variety Development Program. *Acta Horticulturae* 859: 121-127.
2010. **Vales, M.I.**, R.J. Ottoman, J.A. Ortega, S. Yilma, and E. Karaagac. Marker-assisted selection for PVY resistance in tetraploid potatoes. *Acta Horticulturae* 859: 409-416.
2009. Gandhi, H.T., **M.I. Vales**, C. Mallory-Smith, and O. Riera-Lizarazu. Population structure of *Aegilops cylindrica* Host in its native range and in the United States of America. *Theor. Appl. Genet.* 119: 1013-1025.
2009. Whitworth, J.L., R.G. Novy, J.C. Stark, J.J. Pavek, D.L. Corsini, **M.I. Vales**, A.R. Mosley, S.R. James, D.C. Hane, C.C. Shock, B.A. Charlton, N.R. Knowles, and M.J. Pavek. Yukon Gem: A yellow-fleshed potato cultivar with resistance to PVYO and late blight. *Amer. J. Potato Res.* Am. J. Pot Res. 87: 327-336.
2009. Rondon, S.I., D.C. Hane, C.R. Brown, **M.I. Vales**, and M. Dogramaci. Screening potato clones for resistance to Potato Tuberworm, *Phthorimaea operculella* Zeller (Lepidoptera: *Gelechiidae*). *J. of Ec. Entomol.* 102: 1649-1653.
2009. Ottoman, R.J., D. Hane, C.R. Brown, S. Yilma, A.R. Mosley, and **M.I. Vales**. Validation and implementation of marker-assisted selection (MAS) for PVY resistance (*Ry_{adg}* gene) in a potato breeding program. *Amer. J. Potato Res.* 86: 304-314.

2009. Stark, J.C., R.G. Novy, J.L. Whitworth, S.L. Love, D.L. Corsini, J.J. Pavek, **M.I. Vales**, S.R. James, D.C. Hane, B.A. Charlton, C.R. Brown, N.R. Knowles, M.J. Pavek, T.L. Brandt, and N. Olsen. Highland Russet: A full season, processing variety with high yields of uniform U.S. No. 1 tubers. *Amer. J. Potato Res.* 86: 171-182
2009. Brown, C.R., H. Mojtahedi, J.M. Crosslin, S. James, B. Charlton, R.G. Novy, S.L. Love, **M.I. Vales**, and P. Hamm. Characterization of resistance to corky ringspot disease in potato: A Case for Resistance to Infection by Tobacco Rattle Virus. *Amer. J. Potato Res.* 86: 49-55.
2008. Novy, R.G., J. L. Whitworth, J.C. Stark, S.L. Love, D.L. Corsini, J.J. Pavek, **M.I. Vales**, S.R. James, D.C. Hane, C.C. Shock, B.A. Charlton, C.R. Brown, N.R. Knowles, M.J. Pavek, T.L. Brandt, and N. Olsen. Premier Russet: A dual-purpose, potato cultivar with significant resistance to low temperature sweetening during long-term storage. *Amer. J. Potato Res.* 85: 198-209.
2008. Mosley, A.R., S. Yilma, D.C. Hane, S.R. James, K.A. Rykbost, C.C. Shock, S.L. Love, D.L. Corsini, J.J. Pavek, R.E. Thornton, B.A. Charlton, E.P. Eldredge, R.G. Novy, M.J. Pavek, N.R. Knowles, J.L. Whitworth, C.R. Brown, J.C. Stark, and **M.I. Vales**. Willamette: A chipping cultivar with high yield and specific gravity, low incidence of hollow heart and brown center, and suitability for fresh-market usage. *Amer. J. Potato Res.* 85: 85-92.
2008. Riera-Lizarazu, O., **M.I. Vales**, and S.F. Kianian. Radiation hybrid (RH) and HAPPY mapping in plants. *Cytogenet. Genome Res.* 120: 233-240.
2008. Castro, A.J., P.M. Hayes, L. Viega, and **M.I. Vales**. Transgressive segregation for phenological traits in barley explained by two major QTL alleles with additivity. *Plant Breeding* 127: 561-568.
2008. Okagaki, R.J., M.S. Jacobs, A.O. Stec, R.G. Kynast, E. Buescher, H.W. Rines, **M.I. Vales**, O. Riera-Lizarazu, M. Schneerman, G. Doyle, K.L. Friedman, R.W. Staub, D.F. Weber, T.L. Kamps, I.F. E. Amarillo, C.D. Chase, H.W. Bass, and R.L. Phillips. 2008. Maize centromere mapping: A comparison of physical and genetic strategies. *J. Heredity* 99: 85-93.
2007. Nalam, V.J., **M.I. Vales**, E.B. Johnson, and O. Riera-Lizarazu. Map-based analysis of genetic loci on chromosome 2D that affect glume tenacity and the free-threshing character in common wheat (*Triticum aestivum* L.). *Theor. Appl. Genet.* 116: 135-145.
2007. Whitworth, J.L., R.G. Novy, H. Lozoya-Saldana, S. Yilma, A.R. Mosley, and **M.I. Vales**. Multiple-site identification of potato parent clones conferring high levels of late blight resistance with a corresponding genetic model for resistance. *Amer. J. Potato Res.* 84: 313-321.
2007. Stark, J.C., R.G. Novy, S.L. Love, J.L. Whitworth, D.L. Corsini, J.J. Pavek, A.R. Mosley, M.J. Pavek, N.R. Knowles, R.E. Thornton, S.R. James, D.C. Hane, N. Olsen, **M.I. Vales**, and C. Brown. Blazer Russet: An early to mid-season potato cultivar with high U.S. no. 1 yields and good processing and culinary qualities. *Amer. J. Potato Res.* 84: 467-477.
2006. Rossi, C., A. Cuesta-Marcos, **M.I. Vales**, L. Gomez-Pando, G. Orjeda, R. Wise, K. Sato, K. Hori, F. Capettini, H. Vivar, X. Chen, and P. Hayes. Mapping multiple disease resistance genes using a barley mapping population evaluated in Peru, Mexico, and the USA. *Mol. Breeding* 18:355-366.
2006. Gandhi, H.T., C.A. Mallory-Smith, L.A. Morrison, R.S. Zemetra, C.J.W. Watson, **M.I. Vales**, and O. Riera-Lizarazu. Patterns of mating between *Triticum aestivum* and *Aegilops cylindrica* under field conditions. *Weed Sci.* 54: 1073-1079.
2006. Inukai, T., **M.I. Vales**, K. Hori, K. Sato, and P.M. Hayes. *RMo1* confers blast resistance in barley and is located within the complex of resistance genes containing *Mla*, a powdery mildew resistance gene. *Mol. Plant-Microbe Interact.* 19: 1034-1041.
2006. Richardson, K., **M.I. Vales**, J. Kling, C. Mundt, and P. Hayes. Pyramiding and dissecting disease resistance QTL to barley stripe rust. *Theor. Appl. Genet.* 113: 485-495.
2006. Kalavacharla, V., K.G. Hossain, Y. Gu, O. Riera-Lizarazu, **M.I. Vales**, S. Bhamidimarri, J.L. Gonzalez-Hernandez, S.S. Maan, and S.F. Kianian. High-resolution radiation hybrid map of wheat chromosome 1D. *Genetics* 173: 1089-1099.

2006. Nalam, V.J., **M.I. Vales**, C.J.W. Watson, S.F. Kianian, and O.Riera-Lizarazu. Map-based analysis of genes affecting the brittle rachis character in tetraploid wheat (*Triticum turgidum* L.). *Theor. Appl. Genet.* 112: 373-381.
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