

## **2000 WESTERN REGIONAL PLANT INTRODUCTION STATION PUBLICATIONS**

### **A. Peer Reviewed**

Clement, S.L., Elberson, L.R., Youssef, N.N., Davitt, C.M., Doss, R.P. In press. Incidence and diversity of *Neotyphodium* fungal endophytes in tall fescue from Morocco, Tunisia, and Sardinia. *Crop Science*.

Coyne, C.J., D.A. Inglis, S.J. Whitehead and F.J. Muehlbauer. 2000. Chromosomal location of *Fwf* in pea. *Pisum Genetics* 32:20-22.

Coyne, C.J., Meksem K., Lightfoot D.A., Keller K.E., Martin R.R., McClendon M.T., Inglis D.A., Storlie E.W., and McPhee K.E. 2000. Construction of a bacterial artificial chromosome library for pea (*Pisum sativum* L.). *Pisum Genetics* 32:23-26.

Coyne, C.J., Pilet, M-L, Deniot G., Baranger, A., Prioul, and McClendon, M.T. 2000. Selected AFLP primer pairs for fine mapping in pea. *Pisum Genetics* 32:27-30.

Coyne, C.J., S.A. Mehlenbacher, K.B. Johnson, D.C. Smith, and J.N. Pinkerton. 2000. Comparison of two methods to evaluate quantitative resistance to eastern filbert blight in European hazelnut. *J. Amer. Soc. Hort. Sci.* 125:603-608.

Doss, R.P, Oliver, J.E., Proebsting, W.M., Potter, S.W. Kuy, S-R., Clement, S.L., Williamson, R.T., Carney, J.R., DeVilbiss, E.D. 2000. Bruchins: insect-derived plant regulators that stimulate neoplasm formation. *Proceedings National Academy Sciences* 97:6218-6223.

Greene, S.L. and J.B. Morris. 2001. The case for multiple-use plant germplasm collections and a strategy for implementation. *Crop Science* v. 41 (in press).

Hannan, R. M. 2001. Review of Legume (Fabaceae) Fruits and Seeds: Interactive Identification and Information Retrieval. By: J. H. Kirkbride, Jr., C. R. Gunn, A. L. Weitzman, and M. J. Dallwitz. Parkway Publishers, Inc., Boone, NC. *Crop Science* (accepted 11/00)

Hellier, B. 2000. Genetic, morphologic, and habitat diversity of two species of *Allium* native to the Pacific Northwest, USA and their implications for in situ seed collection for the National Plant Germplasm System. Master's thesis. Washington State University.

Li, Z, L. Qin, J. Thompson, M. Welsh, and R. Nelson. 2000. Molecular Genetic Analysis of the U.S. and Chinese Soybean ancestral Lines. *Crop Science*. In press.

Macias, F.A., R.M. Varela, A.M. Simonet, H.G. Cutler, S.J. Cutler, S.A. Ross, D.C. Dunbar, F.M. Dugan, and R.A. Hill. 2000. (+)-Brevione A. The first member of a novel family of

bioactive spiroditerpenoids isolated from *Penicillium brevicompactum* Dierckx. Tetrahedron Letters 41:2683-2686.

Miklas, P. N., R. M. Hannan, J. S. Beaver, R. Riley, S. Antonius. 2000. Transferring heat tolerance and indeterminacy from indeterminate Jamaica Red (PI 163122) to kidney bean. Ann. Rept. of Bean Improvement Cooperative. 3:68-69.

Morris, J.B. and S.L. Greene. Defining a multiple-use germplasm collection for the genus *Trifolium*. Crop Science 2001 v.41 (in press).

Poole, G.J., W.J. Johnston, and R.C. Johnson. *Poa annua* diversity on golf course greens in the Pacific Northwest, USA. Int. Turfgrass Society Research Journal (In press).

Ratcliffe, R.H., Cambron, S.E., Flanders, K.L., Bosque-Perez, N.A., Clement, S.L., Ohm, H.W. Biotype composition of Hessian fly (Diptera: Cecidomyiidae) populations from the southeastern, midwestern, and northwestern United States and virulence to resistance genes in wheat. Journal Economic Entomology 93:1319-1328.

Robertson, N.L., and Brumfield, S.K. 2000. First report of barley yellow streak mosaic virus-infected barley in Alaska. Plant Disease 84:595.

Robertson, N.L., French, R., and Morris, T.J. 2000. The open reading frame 5A of foxtail mosaic virus is expressed *in vivo* and is dispensable for systemic infection. Archives of Virology 145: 1-14.

Ulrich, S.E., R.C. Johnson, F.J. Muehlbauer, L.E. Wiesner. 2000. Establishment of a new crop registration category *Mapping Populations*. Crop Sci. 40:1189-1190. (Also in CSA NEWS 45 No 6:11-12, 2000.)

Welsh, M.M., and K.F. Grafton. 2000. Resistance to common bacterial blight of bean introgressed from *Phaseolus coccineus*. HortScience. accepted.

Welsh, M.M., 2000. Soybeans. In: Plant Sciences for Students. Ed. R. Robinson. Macmillan Reference USA, New York. In press.

Whitehead, S.J., Summerfield, R.J., Muehlbauer, F.J. Coyne, C.J. and Wheeler, T.R. 2000. The consequences of crop improvement on the accumulation and partitioning of biomass and nitrogen in lentil. Crop Science 40:110-120.

Youssef, N.N., and F.M. Dugan. Location of an endophytic *Neotyphodium* sp. within various leaf tissues of wild barley (*Hordeum brevisubulatum* subsp. *violaceum*). Plant Genetic Resources Newsletter. RMIS review accomplished. Accepted Aug., 2000.

## **B. Books, Chapters, Proceedings, Popular**

Dugan, F.M. Glossary, in: Measuring and Monitoring Biological Diversity, Standard Methods for Fungi. Smithsonian Institution. RMIS review accomplished. Accepted July, 2000

Greene, S.L. and G. Bauchan. Status of the *Medicago* germplasm collection. pg. 292. Proceedings of the 37<sup>th</sup> North American Alfalfa Improvement Conference, Madison, WI, July 16-19, 2000, NAAIC.

Greene, S.L., M. Gritsenko, R.C. Johnson, G. Vandemark. Predicting genetic differentiation using GIS-derived data: case study in the Caucasus Mountains, Russia. *In* Proceedings of the International Conference on Science and Technology for Managing Plant Genetic Diversity in the 21<sup>st</sup> Century, 12-16 June, 2000, Kuala Lumpur, Malaysia. 2001. (in press).

Greene, S.L. Improving the quality of passport data to enhance germplasm use and management. Plant Genetic Resources Newsletter. March 2001 (in press).

Hannan, R. M. 2000. The U. S. national system for germplasm conservation. Aridus, Vol 4, 3:1-2.

Hannan, R., N. Acikgoz and L. Robertson. 2000. The genetic diversity of legume species in the Mediterranean: *Cicer*. In. N. Maxted and S. Bennett (eds.) The Plant Genetic Resources of Legumes in the Mediterranean. December 2000. Kluwer Academic Publishers. The Netherlands.

Hannan, R. M. 2000. Status report on the Beta germplasm collection activities at the USDA, ARS, Western Regional Plant Introduction Station. Sugarbeet Research 1999 report to Beet Sugar Development Foundation.

Hardie, D.C., Clement, S.L. In press. Development of bioassays to evaluate wild pea germplasm for resistance to pea weevil. Crop Protection.

Johnson, R.C., and V.L. Bradley. 2000. Grass regeneration research and methodology. p.32-41. *In* M. Casler (ed.) Proceedings of the Thirty-Fifth Grass Breeder's Work Planning Conference, 8-11 August 1998, Madison WI.

Johnston, W.J., R.C. Johnson, C.T. Golob. 2000 Seed production and turfgrass quality evaluation of diverse Kentucky bluegrass germplasm utilizing core subsets. *In* International Seed Testing World Conference Society Association Proceeding, 6-8 September 1999, Cambridge, UK (In press).

Johnston, W.J., and R.C. Johnson. 2000. Washington State and USDA work to preserve and clarify the rich diversity of Kentucky bluegrass. Diversity Magazine 16: 30-32.

Johnston, W.J., R.C. Johnson, J W. Sitton. 2000. Evaluation of diverse Kentucky bluegrass germplasm for seed production in alternative residue management systems. P. 19-22 *In* Grass Seed Cropping Systems for a Sustainable Agriculture, Progress Reports 2000.

Kaiser, W.J., and F.M. Dugan. 2000. *Mycosphaerella pinodes (Ascochyta pinodes)*: Epidemiology, Dispersal, Management. Literature review for web site: Ecoport (University of Florida, FAO, Smithsonian Institution). URL <http://Ecoport.org> RMIS review accomplished.

M. M. Jenderek and A. J. Olney. 2000. *Hibiscus syriacus* plant regeneration from callus. Combined Proceedings International Propagators' Society; submitted.

Prosperi, J.M, G.C. Auricht, R.C. Johnson, and G. Génier. 2001. The genetic resources of the genus *Medicago*. In N. Maxted et al. (ed.) Plant genetic resources of legumes in the Mediterranean. CLIMA/ICARDA Kluwer (In press).

### **C. Abstracts, Posters, Presentations**

Al-Saad, K. A., R. M. Hannan, W. F. Siems and H. H. Hill, Jr. 2000. Comparison between MALDI-TOF and GC methods to analyze non-polar lipids in plant tissues. 48<sup>th</sup> ASMS Conference. March, 2000.

Clement, S.L. 2000. *Neotyphodium* diversity in grasses and the issue of insect resistance. XXI International Congress of Entomology, August 2000, Foz do Iguassu, Brazil, Book of Abstracts, No. 847 (Abstract).

Clement, S.L. 2000. Enhancing insect resistance in grasses through deployment of fungal endophytes. XXI International Congress of Entomology, August 2000, Foz do Iguassu, Brazil, Book of Abstracts, No. 3887 (Abstract).

Clement, S.L. 2000. Overview of *Neotyphodium* incidence in pastures and seed collections worldwide. 4<sup>th</sup> International *Neotyphodium*/Grass Interactions Symposium, September 2000, University of Paderborn, Soest, Germany, Book of Abstracts, p. 32 (Abstract).

Clement, S.L., Youssef, N.N., Bruehl, G.W., Kaiser, W.J., Elberson, L.R., Bradley, V. 2000. The relationship between storage temperature, grass endophyte viability, and seed germination. 4<sup>th</sup> International *Neotyphodium*/Grass Interactions Symposium, September 2000, University of Paderborn, Soest, Germany, Book of Abstracts, p. 144 (Abstract).

Clement, S.L., Doss, R., Elberson, L.R. 2000. Endophyte diversity in tall fescue and the issue of aphid resistance. 4<sup>th</sup> International *Neotyphodium*/Grass Interactions Symposium, September 2000, University of Paderborn, Soest, Germany, Book of Abstracts, p. 154 (Abstract).

Coyne, C.J., K. Meksem, K. Keller, R. Martin and D.A. Lightfoot. 2001 Two-genome equivalents

pea BAC library. International Plant and Animal Genome VIII Conference. (Abstr).  
<http://www.intl-pag.org/pag/9/abstracts/>

Coyne, C.J., Meksem, K. Keller, R. Martin and D.A. Lightfoot. 2000. Plant transformation ready bacterial artificial chromosome library of *Pisum sativum*. Molecular Genetics of Model Legumes: Impact for Legume Biology and Breeding: John Innes Centre, Norwiche, UK. Proceedings pg. 81.

Dugan, F.M., and S.L. Lupien. 2000. Fungi quiescent in field and storage samples of grass seeds. Phytopathology 90(6) Supplement: S20 (abstract).

Dugan, F.M. 2000. Synanamorphs of *Selenophoma* species in culture. Inoculum 51(3):27 (abstract).

Greene, S.L. and G. Bauchan. Impact of U.S. germplasm collection on alfalfa variety development (abstract). ASA, CSSA symposium: Genetic Resources in Action. Minneapolis, MN, Nov. 6, 2000.

Hellier, B. C. and R. M. Hannan. 2000. Morphologic data collected from proposed National Plant Germplasm System *in situ* seed collection sites of two *Allium* species native to the Pacific Northwest. The 3<sup>rd</sup> International Symposium on Edible Alliaceae, University of Georgia, October 2000.

Jenderek, M.M. and R. M. Hannan. 2000. Seed producing ability of garlic (*Allium sativum* L.) clones from two public U. S. collections. The 3<sup>rd</sup> International Symposium on Edible Alliaceae, University of Georgia, Athens, GA (Abstract).

Johnson, R.C., W.J. Johnston, M.C. Nelson, C.J. Simon, C.T. Golob. Comparing *Poa pratensis* L. core collections developed using agronomic and RAPD data. Plant and Animal Genome VIII Conference Abstracts (<http://www.intl-pag.org/pag/>). 1999.

Johnson, R.C., W.J. Johnston C.T. Golob, and R.J. Soreng. 2000. Characterization of the USDA *Poa pratensis* collection using RAPD markers. Agronomy Abstracts p. 190.

M. Tekeoglu, C.J. Coyne, P.N. Rajesh, D.K. Santra, M. Khalid, E. Storlie, D. Lightfoot, F.J. Muehlbauer. 2000. Construction of a BAC library to facilitate cloning a resistance gene . International Plant and Animal Genome VII Conference. (Abstr). <http://www.intl-pag.org/pag/8/abstracts/pag8839.html>

McClendon, M. T., C. J. Coyne, K. E. McPhee, D. A. Inglis. 2001 AFLP marker linked to Fusarium wilt race 1 resistance in pea. International Plant and Animal Genome VIII Conference. (Abstr). [http://www.intl-pag.org/pag/9/abstracts/P5f\\_16.html](http://www.intl-pag.org/pag/9/abstracts/P5f_16.html)

McClendon, M.T., C.J. Coyne, K.E. McPhee, and D.A. Inglis. 2000. Locating a novel DNA

marker for resistance to Fusarium wilt in pea. Western Society of Crop Science. Agronomy Abstracts, Appendix 3; pg. 3.

Mimura, M., CJ Coyne and TA Lumpkin. 2001. Genetic Diversity of Edamame (Vegetable Soybean, *Glycine max*. North America and Japan. International Plant and Animal Genome VIII Conference. (Abstr). [http://www.intl-pag.org/pag/9/abstracts/P3b\\_32.html](http://www.intl-pag.org/pag/9/abstracts/P3b_32.html)

Panella, L., L. Frese and R. M. Hannan. 2000. Coordination of a national core collection with the international synthetic Beta core collection. Agr. Abstr. 195.

P.N.Rajesh, Mucella Tekeoglu, Clarice J Coyne, Khalid Meksem, David Lightfoot and Fred J. Muehlbauer. 2001. BAC library construction and mapping using Resistant Gene Analog Polymorphism (RGAP) in Chickpea. International Plant and Animal Genome VIII Conference. (Abstr). [http://www.intl-pag.org/pag/9/abstracts/P02\\_16.html](http://www.intl-pag.org/pag/9/abstracts/P02_16.html)

Pilet-Nayel, M.L., J.M. Kraft, R.J. McGee, F.J. Muehlbauer, A. Baranger and C.J. Coyne. 2001. Aphanomyces root rot resistance QTL in pea. International Plant and Animal Genome VIII Conference. (Abstr). [http://www.intl-pag.org/pag/9/abstracts/P5f\\_23.html](http://www.intl-pag.org/pag/9/abstracts/P5f_23.html)

Pilet, M.L., Coyne C.J., McGee R.J., Kraft J.M., Baranger A. and F.J. Muehlbauer. 2000. Genetic dissection of quantitative Aphanomyces root rot resistance in pea using molecular markers. Molecular Genetics of Model Legumes, John Innes Centre, Norwich, UK (Abstr). Proceedings pg. 104.

Poole, G.J., W.J. Johnston, C.T. Golob, and R.C. Johnson. 2000. Variation in annual bluegrass on the Pacific Northwest golf greens. Agronomy Abstracts p. 169.

Rajesh, P.N., C.J. Coyne, E. Storlie, K. Meksem, D.A. Lightfoot, and F.J. Muehlbauer. 2000. Construction of a large insert library for isolation of disease resistance genes in chickpea. Western Society of Crop Science. Agronomy Abstracts, Appendix 3; pg. 3.

Robertson, N.L., and Knight-Slater, D.F. 2000. Plant virus survey of native plants and barley in Alaska. Phytopathology 90:S66 (Abstract).

Sitton, J.W., W.J. Johnston, C.T. Golob, and R.C. Johnson. 2000. Identification of ergot resistance in Kentucky bluegrass (*Poa pratensis*). Abstract Western Society of Crop Science Meetings, Moscow ID.

Sorensen, E. J., G. Q. Pelter, R. W. VanDenburgh and R. M. Hannan. 2000. Effect of scape removal on bulb yield and quality of garlic grown in Central Washington. The 3<sup>rd</sup> International Symposium on Edible Alliaceae, University of Georgia, October 2000.