

## Publications

### Illinois

- Davis C, Jing H, Howe JA, Rocheford , Tanumihardjo SA. 2008. Beta-Cryptoxanthin from supplements or carotenoid-enhanced maize maintains liver vitamin A in Mongolian gerbils (*Meriones unguiculatus*) better than or equal to b-carotene supplements. *British Journal of Nutrition* 100:786–793.
- Dudley JW. 2008. Epistatic Interactions in Crosses of Illinois High Oil × Illinois Low Oil and of Illinois High Protein × Illinois Low Protein Corn Strains. *Crop Sci.* 48:59-68.
- Flint-Garcia A, Dashiell KE, Prischmann D, Bohn M, Hibbard B. Conventional screening overlooks resistance sources: Rootworm damage of diverse inbred lines and their B73 hybrids is unrelated. *J Econ. Entomol.* *Accepted.*
- Gray M, Sappinton T, Miller N, Moeser J, Bohn M. Adaptation and Invasiveness of Western Corn Rootworm: Intensifying Research on a Worsening Pest. *Annual Rev. Entomol.* *In print.*
- Harjes C, Rocheford T, Bai L, Brutnell T, Kandianis CB, Sowinski S, Stapleton A, Vallabhaneni R, Williams M, Wurtzel E, Yan Y, Buckler E. 2008. Natural genetic variation in lycopene epsilon cyclase tapped for maize biofortification. *Science* 319: 330-330.
- Moose SP and Mumm RH. 2008. Molecular plant breeding as the foundation for 21st century crop improvement. *Plant Physiology* 147: 969-977.
- Pataky JK, Bohn M, Johnson LP, Lutz JD, and Richter PM. 2008. Selection for putative quantitative trait loci associated with Resistance to Stewart's wilt in sweet corn. *Phytopathology* 98:469-474.
- Warburton M, Reif J, Melchinger A, Frisch M, Bohn M, Xianchun X, Crossa J, Franco J, Hoisington D, Pixley K., and Vasal S. 2008. Trends in genetic diversity in CIMMYT's non-temperate maize germplasm. *Crop Sci.* 48:617-624.
- Wassom JJ, Mikkilineni V, Bohn MO, and Rocheford TR. 2008. QTL for Fatty Acid Composition of Maize Kernel Oil in Illinois High Oil × B73 Backcross-Derived Lines. *Crop Sci.* 48:69-78.
- Wassom JJ, Wong J, Martinez E, King J, DeBaene J, Hotchkiss J, Mikkilineni V, Bohn MO, and Rocheford TR. QTL Associated with Maize Kernel Oil, Protein, and Starch Concentrations; Kernel Mass; and Grain Yield in Illinois High Oil × B73 Backcross-Derived Lines. *Crop Sci.* 48:243-252.

### Minnesota

- Bernardo\*, R. 2008. Molecular markers and selection for complex traits: Learning from the last 20 years. *Crop Sci.* 48: 1649-1664.
- Bernardo\*, R. 2009. Genomewide selection for rapid introgression of exotic germplasm in maize. *Crop Sci.* 49: 419-425.
- Bernardo\*, R. 2009. Should maize doubled haploids be induced among F<sub>1</sub> or F<sub>2</sub> plants? *Theor. Appl. Genet.* (submitted).
- Lorenzana\*, R.E., and R. Bernardo\*. 2008. Genetic correlation between corn performance in conventional and organic production systems. *Crop Sci.* 48: 903-910.

- Lewis\*, M.F., R.E. Lorenzana, H.-J. G. Jung\*, and R. Bernardo\*. 2010. Potential for simultaneous improvement of maize grain yield and stover quality for cellulosic ethanol. *Crop Sci.* (submitted).
- Lorenzana\*, R.E., and R. Bernardo\*. 2009. Accuracy of genetic value predictions for marker-based selection in biparental plant populations. *Theor. Appl. Genet.* (submitted).
- Mayor\*, P.M., and R. Bernardo\*. 2009. Genomewide selection and marker-assisted recurrent selection in doubled haploid versus  $F_2$  populations. *Crop Sci.* (accepted).
- Mayor\*, P.J., and R. Bernardo\*. 2009. Doubled haploids in maize breeding: One- and two-stage phenotypic selection versus marker-assisted recurrent selection. *Theor. Appl. Genet.* (submitted).
- Wong\*, C.K., and R. Bernardo\*. 2008. Genomewide selection in oil palm: Increasing selection gain per unit time and cost with small populations. *Theor. Appl. Genet.* 116: 815-824.

## Missouri

- Behle, R.W., **B.E. Hibbard**, S.C. Cermak, and T.A. Isbell. 2008. Examining *Cuphea* as a potential host for western corn rootworm (Coleoptera: Chrysomelidae) larval development. *J. Econ. Entomol.* 101:797-800.
- Buckler Iv, E.S., Yu, J., Holland, J.B., **McMullen, M.D.** 2008. Genome-wide complex trait dissection through nested association mapping. *Genetics.* 178:539-551.
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- Oyediran, I. O., B. W. French, T. L. Clark, K. Dashiell, and **B. E. Hibbard.** 2008. Prairie grasses as hosts of the northern corn rootworm (Coleoptera: Chrysomelidae). *Environ. Entomol.* 37:247-254.
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- Šimic, D., M. Ivezic, I. Brkic, M. Brmez, I. Majic, T. Ledencan, J.J. Tollefson, and **B.E. Hibbard.** 2008. Environmental and genotypic effects for western corn rootworm tolerance traits in American and European maize trials. *Maydica:* 52-425-430.
- Yamasaki, M., Schroeder, S., Sanchez-Villeda, H., Gaut, B., **McMullen, M.D.** 2008. Empirical analysis of selection screens for domestication and improvement loci in maize by extended DNA sequencing. *The Plant Genome.* 1(1):33-43.

## North Dakota

- Hammond, J, and Carena, M.J. 2008. A breeding plan for molecular markers. ASA-CSSA-SSSA, Houston, TX.
- Hallauer, A.R., and Carena, M.J. 2008. Maize breeding. In: M.J. Carena (ed.). *Cereal breeding.* Springer, NY (in press).

- Carena, M.J. 2008. How many commercial maize heterotic patterns are available? ASA-CSSA-SSSA, Houston, TX.
- Carena, M.J., Pollak, L., Salhuana, W., and Denuc, M. 2008. Development of unique lines for early-maturing hybrids: Moving GEM germplasm northward and westward. *Euphytica* (in press).
- Bahadir, S., and Carena, M.J. 2008. Divergent recurrent selection for cold tolerance in two improved maize populations. *Euphytica* (in press).
- Eno, C., and Carena, M.J. 2008. Response to stratified mass selection for earliness in four elite maize populations non-adapted to North Dakota. *Maydica* (in press).
- Osorno, J., and Carena, M.J. 2008. Creating groups of maize genetic diversity for grain quality: implications for breeding. *Maydica* 53:131-141.
- Carena, M.J., and Wanner, D.W. 2008 Development of genetically broad-based inbred lines of maize for early maturing (70-80RM) hybrids. *J. Plant Reg.* 3:107-111.
- Carena, M.J. 2008. Increasing the genetic diversity of northern U.S. maize hybrids: Integrating pre-breeding with cultivar development. In *Conventional and molecular breeding of field and vegetable crops*. Novi Sad, Serbia.
- Yang, J., Carena, M.J. 2008. Identification of early maturing lines with high test weight and fast dry down. Maize Genetics Conference.
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- Jumbo, M.B., and Carena, M.J. 2008. Combining ability, maternal, and reciprocal effects of elite early-maturing maize population hybrids. *Euphytica* 162:325-333.

## Ohio

- Asea, G., B. Vivek, G. Bigirwa, P.E. Lipps, and R.C. Pratt. 2009. Validation of consensus quantitative trait loci associated with resistance to multiple foliar pathogens of maize. *Phytopathology: (In Press)*
- Jović, J., T. Cvrković, S. Krnjajić, A. Petrović, M.G. Redinbaugh, R.C. Pratt, S.A. Hogenhout and I. Toševski. 2009. Maize redness transmitted by *Reptalus panzeri*: the disease cycle in Serbia. *Phytopathology: (In Press)*
- Pratt, R.C., D.M. Francis, and L.S. Barrero-Meneses. 2008. Genomics of Tropical Solanaceous Species: Established and Emerging Crops. p. 453-467. *In*: R. Ming and P. Moore (eds.) *Genomics of Tropical Crops*. Springer/Verlag, New York.
- Poland, J., P. Balint-Kurti, R. Wisser, R. Pratt and R. Nelson. 2009. Quantitative disease resistance in plants. *Trends in Plant Science*. (In Press)
- Redinbaugh, M., and R.C. Pratt. 2009. Virus Resistance. p. 251-270. *In*: *Handbook of Maize: Its Biology* 2nd ed. (J. Bennetzen and S. Hake, eds.). Springer-Verlag. New York.