

Volume 123 Number 5 September 2011

ORIGINAL PAPERS

A model for linkage analysis with apomixis

W. Hou · S. Lin · Y. Li · X. Pang · Y. Zeng · R. Wu 681

Genetic diversity and population structure in cultivated sunflower and a comparison to its wild progenitor, *Helianthus annuus* L

J.R. Mandel · J.M. Dechaine · L.F. Marek · J.M. Burke 693

Candidacy of a chitin-inducible gibberellin-responsive gene for a major locus affecting plant height in rice that is closely linked to Green Revolution gene *sd1*

M.R. Kovi · Y. Zhang · S. Yu · G. Yang · W. Yan · Y. Xing 705

Analysis of genetic structure in a panel of elite wheat varieties and relevance for association mapping

F. Le Couvreur · S. Faure · B. Poupard · Y. Flodrops · P. Dubreuil · S. Praud 715

Responses of maize (*Zea mays* L.) near isogenic lines carrying *Wsm1*, *Wsm2*, and *Wsm3* to three viruses in the Potyviridae

M.W. Jones · E.C. Boyd · M.G. Redinbaugh 729

Genetic analysis of resistance to septoria tritici blotch in the French winter wheat cultivars Balance and Apache

S.M. Tabib Ghaffary · O. Robert · V. Laurent · P. Lonnet · E. Margalé · T.A.J. van der Lee · R.G.F. Visser · G.H.J. Kema 741

Quantitative trait loci and underlying candidate genes controlling agronomical and fruit quality traits in octoploid strawberry (*Fragaria × ananassa*)

Y. Zorrilla-Fontanesi · A. Cabeza · P. Domínguez · J.J. Medina · V. Valpuesta · B. Denoyes-Rothan · J.F. Sánchez-Sevilla · I. Amaya 755

Temporal dynamics in the evolution of the sunflower genome as revealed by sequencing and annotation of three large genomic regions

M. Buti · T. Giordani · F. Cattonaro · R.M. Cossu · L. Pistelli · M. Vukich · M. Morgante · A. Cavallini · L. Natali 779

A novel *FAD2-1A* allele in a soybean plant introduction offers an alternate means to produce soybean seed oil with 85% oleic acid content

A.-T. Pham · J.-D. Lee · J.G. Shannon · K.D. Bilyeu 793

Molecular mapping for resistance to pea rust caused by *Uromyces fabae* (Pers.) de-Bary

R. Rai · A.K. Singh · B.D. Singh · A.K. Joshi · R. Chand · C.P. Srivastava 803

Evaluation of near-isogenic lines for drought resistance QTL and fine mapping of a locus affecting flag leaf width, spikelet number, and root volume in rice

X. Ding · X. Li · L. Xiong 815

SNP marker diversity in common bean (*Phaseolus vulgaris* L.)

A.J. Cortés · M.C. Chavarro · M.W. Blair 827

Association mapping in an elite maize breeding population

W. Liu · M. Gowda · J. Steinhoff · H.P. Maurer · T. Würschum · C.F.H. Longin · F. Cossic · J.C. Reif 847

Map-based cloning proves *qGC-6*, a major QTL for gel consistency of japonica/indica cross, responds by *Waxy* in rice (*Oryza sativa* L.)

Y. Su · Y. Rao · S. Hu · Y. Yang · Z. Gao · G. Zhang · J. Liu · J. Hu · M. Yan · G. Dong · L. Zhu · L. Guo · Q. Qian · D. Zeng 859