

Volume 123 Number 3 August 2011

ORIGINAL PAPERS

Rye-derived powdery mildew resistance gene *Pm8* in wheat is suppressed by the *Pm3* locus

R.A. McIntosh · P. Zhang · C. Cowger · R. Parks · E.S. Lagudah · S. Hoxha 359

QTL analyses and comparative genetic mapping of frost tolerance, winter survival and drought tolerance in meadow fescue (*Festuca pratensis* Huds.)

V. Alm · C.S. Busso · Á. Ergon · H. Rudi · A. Larsen · M.W. Humphreys · O.A. Rognli 369

Mapping and characterization of *Rf₅*: a new gene conditioning pollen fertility restoration in A₁ and A₂ cytoplasm in sorghum (*Sorghum bicolor* (L.) Moench)

D.R. Jordan · R.R. Klein · K.G. Sakreowski · R.G. Henzell · P.E. Klein · E.S. Mace 383

Genetic architecture of the circadian clock and flowering time in *Brassica rapa*

P. Lou · Q. Xie · X. Xu · C.E. Edwards · M.T. Brock · C. Weinig · C.R. McClung 397

Identification of quantitative trait loci associated with germination using chromosome segment substitution lines of rice (*Oryza sativa* L.)

M. Li · P. Sun · H. Zhou · S. Chen · S. Yu 411

Genetic analysis and QTL detection of reproductive period and post-flowering photoperiod responses in soybean

L. Cheng · Y. Wang · C. Zhang · C. Wu · J. Xu · H. Zhu · J. Leng · Y. Bai · R. Guan · W. Hou · L. Zhang · T. Han 421

Genetics and molecular mapping of genes for high-temperature resistance to stripe rust in wheat cultivar Xiaoyan 54

X.L. Zhou · W.L. Wang · L.L. Wang · D.Y. Hou · J.X. Jing · Y. Wang · Z.Q. Xu · Q. Yao · J.L. Yin · D.F. Ma 431

Differential gene expression and associated QTL mapping for cotton yield based on a cDNA-AFLP transcriptome map in an immortalized F₂

R. Liu · B. Wang · W. Guo · L. Wang · T. Zhang 439

Comparison of a high-density genetic linkage map to genome features in the model grass *Brachypodium distachyon*

N. Huo · D.F. Garvin · F.M. You · S. McMahon · M.-C. Luo · Y.Q. Gu · G.R. Lazo · J.P. Vogel 455

Tomato *fruit weight 11.3* maps close to *fasciated* on the bottom of chromosome 11

Z. Huang · E. van der Knaap 465

The self-compatibility mechanism in *Brassica napus* L. is applicable to F₁ hybrid breeding

T. Tochigi · H. Udagawa · F. Li · H. Kitashiba · T. Nishio 475

Bayesian functional mapping of dynamic quantitative traits

R. Yang · J. Li · X. Wang · X. Zhou 483

A genome-wide genetic map of NB-LRR disease resistance loci in potato

E. Bakker · T. Borm · P. Prins · E. van der Vossen · G. Uenk · M. Arens · J. de Boer · H. van Eck · M. Muskens · J. Vossen · G. van der Linden · R. van Ham · R. Klein-Lankhorst · R. Visser · G. Smant · J. Bakker · A. Goverse 493