

# Volume 125 Number 7 November 2012

## ORIGINAL PAPERS

Molecular characterization and dynamic expression patterns of two types of  $\gamma$ -gliadin genes from *Aegilops* and *Triticum* species

S. Wang · X. Shen · P. Ge · J. Li · S. Subburaj · X. Li · F.J. Zeller · S.L.K. Hsam · Y. Yan 1371

Characterization of a QTL affecting spike morphology on the long arm of chromosome 3H in barley (*Hordeum vulgare* L.) based on near isogenic lines and a NIL-derived population

G.D. Chen · H.B. Li · Z. Zheng · Y.M. Wei · Y.L. Zheng · C.L. McIntyre · M.X. Zhou · C.J. Liu 1385

Three-point appraisal of genetic linkage maps

W.R. Gilks · S.J. Welham · J. Wang · S.J. Clark · G.J. King 1393

Inheritance and molecular mapping of a gene conferring seedling resistance against *Puccinia hordei* in the barley cultivar Ricardo

X.S. Sandhu · K.L. Forrest · S. Kong · U.K. Bansal · D. Singh · M.J. Hayden · R.F. Park 1403

Identification and characterization of the soybean IPK1 ortholog of a low phytic acid mutant reveals an exon-excluding splice-site mutation

F.-J. Yuan · D.-H. Zhu · Y.-Y. Tan · D.-K. Dong · X.-J. Fu · S.-L. Zhu · B.-Q. Li · Q.-Y. Shu 1413

Molecular mapping of a powdery mildew resistance gene in common wheat landrace Baihulu and its allelism with *Pm24*

F. Xue · C. Wang · C. Li · X. Duan · Y. Zhou · N. Zhao · Y. Wang · W. Ji 1425

Proteomic and genetic analysis of wheat endosperm albumins and globulins using deletion lines of cultivar Chinese Spring

M. Merlino · S. Bousbata · B. Svensson · G. Branlard 1433

A transgenic system for generation of transposon *Ac/Ds*-induced chromosome rearrangements in rice

C. Yu · F. Han · J. Zhang · J. Birchler · T. Peterson 1449

A transposable element insertion within *ZmGE2* gene is associated with increase in embryo to endosperm ratio in maize

P. Zhang · W.B. Allen · N. Nagasawa · A.S. Ching · E.P. Heppard · H. Li · X. Hao · X. Li · X. Yang · J. Yan · Y. Nagato · H. Sakai · B. Shen · J. Li 1463

Detection of two major grain yield QTL in bread wheat (*Triticum aestivum* L.) under heat, drought and high yield potential environments

D. Bennett · M. Reynolds · D. Mullan · A. Iznaloo · H. Kuchel · P. Langridge · T. Schnurbusch 1473

Quality control genotyping for assessment of genetic identity and purity in diverse tropical maize inbred lines

K. Semagn · Y. Beyene · D. Makumbi · S. Mugo · B.M. Prasanna · C. Magorokosho · G. Atlin 1487

Characteristics of fertile somatic hybrids of *G. hirsutum* L. and *G. trilobum* generated via protoplast fusion

X.S. Yu · B.J. Chu · R.E. Liu · J. Sun · J.J. Brian · H.Z. Wang · Z. Shuijin · Y.Q. Sun 1503

Spectinomycin resistance mutations in the *rrn16* gene are new plastid markers in *Medicago sativa*

B. Dudas · B. Jenes · G.B. Kiss · P. Maliga 1517

Development of candidate gene markers associated to common bacterial blight resistance in common bean

C. Shi · K. Yu · W. Xie · G. Perry · A. Navabi · K. Peter Pauls · P.N. Miklas · D. Fourie 1525

Detection of QTL for flowering time in multiple families of elite maize

J. Steinhoff · W. Liu · J.C. Reif · G.D. Porta · N. Ranc · T. Würschum 1539

QTL mapping of yield-associated traits in *Brassica juncea*: meta-analysis and epistatic interactions using two different crosses between east European and Indian gene pool lines

S.K. Yadava · N. Arumugam · A. Mukhopadhyay · Y.S. Sodhi · V. Gupta · D. Pental · A.K. Pradhan 1553

Mapping of crown gall resistance locus *Rcg1* in grapevine

A. Kuczmog · A. Galambos · S. Horváth · A. Máta · P. Kozma · E. Szegedi · P. Putnoky 1565

Swift block-updating EM and pseudo-EM procedures for Bayesian shrinkage analysis of quantitative trait loci

C.M. Mutshinda · M.J. Sillanpää 1575