

REVIEW

**Agronomic and molecular characterization of gamma ray induced banana (*Musa* sp.) mutants using a multivariate statistical algorithm**

R.K.N. Pestanana · E.P. Amorim · C.F. Ferreira · V.B. de Oliveira Amorim · L.S. Oliveira · C.A. da Silva Ledo · S. de Oliveira e Silva 151

ORIGINAL PAPERS

**Construction of a crop—wild hybrid population for broadening genetic diversity in cultivated sunflower and first evaluation of its combining ability: the concept of neodomestication**

H. Nooryazdan · H. Serieys · J. David · R. Bacilieri · A.J. Bervillé 159

**Bayesian threshold analysis of breeding values, genetic correlation and heritability of flowering intensity in *Eucalyptus cladocalyx* under arid conditions**

C. Cané-Retamales · F. Mora · F. Vargas-Reeve · S. Perret · R. Contreras-Soto 177

**Mating systems in tropical forages: *Stylosanthes capitata* Vog. and *Stylosanthes guianensis* (Aubl.) Sw.**

M.O. Santos-Garcia · R.M.S. Resende · L. Chiari · M.I. Zucchi · A.P. de Souza 185

**Overcoming pre-fertilization barriers in the wide cross between *Chrysanthemum grandiflorum* (Ramat.) Kitamura and *C. nankingense* (Nakai) Tzvel. by using special pollination techniques**

C.-Q. Sun · Z.-Z. Huang · Y.-L. Wang · F.-D. Chen · N.-J. Teng · W.-M. Fang · Z.-L. Liu 195

**Pollen morphology as fertility predictor in hybrid tea roses**

L. Pipino · M.-C. Van Labeke · A. Mansuino · V. Scariot · A. Giovannini · L. Leus 203

**Genetic, quantitative and microscopic evidence for fusion of haploid nuclei and growth of somatic calli in cultured *ms10<sup>35</sup>* tomato anthers**

P. Corral-Martínez · F. Nuez · J.M. Seguí-Simarro 215

**Molecular markers assist in the development of diverse inbred backcross lines in European Long cucumber (*Cucumis sativus* L.)**

I.Y. Delannay · J.E. Staub 229

**Genetic variability of seed-quality traits in gamma-induced mutants of sunflower (*Helianthus annuus* L.) under water-stressed condition**

P. Haddadi · B. Yazdi-samadi · M. Berger · M.R. Naghavi · A. Calmon · A. Sarrafi 247