

# Australian Journal of Agricultural Research

Contents

Volume 59

Issue 7

2008

## Crop/pasture agronomy and physiology

Design and testing of an automatic irrigation controller for fruit tree orchards, based on sap flow measurements.

*J. E. Fernández, R. Romero, J. C. Montaño, A. Diaz-Espejo, J. L. Muriel, M. V. Cuevas, F. Moreno, I. F. Girón, M. J. Palomo*

589

Effects of low temperature on grain filling, amylose content, and activity of starch biosynthesis enzymes in endosperm of basmati rice.

*Nisar Ahmed, Masahiko Maekawa, Ian J. Tetlow*

599

Growth and physiological responses of balansa clover and burr medic to low levels of salinity.

*Emmanuel Mapfumo, Mohammed A. Behdani, Zed Rengel, Edward G. Barrett-Lennard*

605

Rhizosphere processes do not explain variation in P acquisition from sparingly soluble forms among *Lupinus albus* accessions.

*Stuart J. Pearse, Erik J. Veneklaas, Greg Cawthray, Mike D. A. Bolland, Hans Lambers*

616

Effluent and nitrogen fertiliser effects on dry matter yield, nutritive characteristics, and mineral and nitrate content of turnips.

*J. L. Jacobs, G. N. Ward*

624

Nitrate and nitrite in Australian leafy vegetables.

*S. E. Parks, D. O. Huett, L. C. Campbell, L. J. Spohr*

632

## Crop/pasture improvement and protection

*Echinochloa* spp. in Australian rice fields—species distribution and resistance status.

*J. E. Pratley, J. C. Broster, P. Michael*

639

Effect of grazing, gap dynamics, and inter-specific seedling competition on growth and survival of *Vulpia* spp. and *Hordeum murinum* ssp. *leporinum*.

*Katherine N. Tozer, David F. Chapman, Paul E. Quigley, Peter M. Dowling,*

*Roger D. Cousins, Gavin A. Kearney*

646

Genotypic variation for drought stress response traits in soybean. I. Variation in soybean and wild *Glycine* spp. for epidermal conductance, osmotic potential, and relative water content.

*A. T. James, R. J. Lawn, M. Cooper*

656

Genotypic variation for drought stress response traits in soybean. II. Inter-relations between epidermal conductance, osmotic potential, relative water content, and plant survival.

*A. T. James, R. J. Lawn, M. Cooper*

670

Genotypic variation for drought stress response traits in soybean. III. Broad-sense heritability of epidermal conductance, osmotic potential, and relative water content.

*A. T. James, R. J. Lawn, M. Cooper*

679