

Australian Journal of Agricultural Research

Contents Volume 59 Issue 4 2008

Farming systems

Dual-purpose canola—a new opportunity in mixed farming systems.

J. A. Kirkegaard, S. J. Sprague, H. Dove, W. M. Kelman, S. J. Marcroft, A. Lieschke, G. N. Howe, J. M. Graham 291

High crop productivity with high water use in winter and summer on the Liverpool Plains, eastern Australia.

R. R. Young, P-J. Derham, F. X. Dunin, A. L. Bernardi, S. Harden 303

High subsoil chloride concentrations reduce soil water extraction and crop yield on Vertosols in north-eastern Australia.

Y. P. Dang, R. C. Dalal, D. G. Mayer, M. McDonald, R. Routley, G. D. Schwenke, S. R. Buck, I. G. Daniells, D. K. Singh, W. Manning, N. Ferguson 321

Testing the primer-plant concept: wheat yields can be increased on alkaline sodic soils when an effective primer phase is used.

J. G. Nuttall, S. L. Davies, R. A. Armstrong, M. B. Peoples 331

Crop/pasture agronomy and physiology

Significance of intracellular and secreted acid phosphatase enzyme activities, and zinc and calcium interactions, on phosphorus efficiency in wheat, sunflower, chickpea, and lentil cultivars.

Aydin Gunes, Ali Inal 339

Content of carotenoids at different ripening stages in processing tomato in relation to soil water availability.

Ezio Riggi, Cristina Patanè, Giuseppe Ruberto 348

Developmental and physiological traits associated with high yield and stay-green phenotype in wheat.

J. T. Christopher, A. M. Manschadi, G. L. Hammer, A. K. Borrell 354

Effect of site, harvesting stage, and genotype on environmental staining in faba bean (*Vicia faba* L.).

Syed M. Nasar-Abbas, Julie A. Plummer, Peter White, Kadambot H. M. Siddique, Mario D'Antuono, David Harris, Ken Dods 365

Use of garden organic compost in vegetable production under contrasting soil P status.

K. Y. Chan, C. Dorahy, T. Wells, D. Fahey, N. Donovan, F. Saleh, I. Barchia 374

Crop/pasture improvement and protection

Resistance to *Phytophthora medicaginis* Hansen and Maxwell in wild *Cicer* species and its use in breeding root rot resistant chickpea (*Cicer arietinum* L.).

E. J. Knights, R. J. Southwell, M. W. Schwinghamer, S. Harden 383