

Reviews

- Invited review: Engineering aspects of physical treatments to increase fruit and vegetable phytochemical content**
C. Vigneault, D. I. Leblanc, B. Goyette, and S. Jenni 373–397

- Review: Nitrogen assimilation in crop plants and its affecting factors**
B. Mokhele, X. Zhan, G. Yang, and X. Zhang 399–405

- Anti-atherosclerotic effects of fruit bioactive compounds: A review of current scientific evidence**
S. H. Thilakarathna and H. P. V. Rupasinghe 407–419

Grain

- SHORT COMMUNICATION: Climate change and biofuel wheat: A case study of southern Saskatchewan**
H. Wang, Y. He, B. Qian, B. McConkey, H. Cutforth, T. McCaig, G. McLeod, R. Zentner, R. DePauw, R. Lemke, K. Brandt, T. Liu, X. Qin, J. White, T. Hunt, and G. Hoogenboom 421–425

Forage

- Changes in kernel characteristics during grain filling in silage-specific and dual-purpose corn hybrids**
B. L. Ma and L. M. Dwyer 427–439

- SHORT COMMUNICATION: Etiolated growth of hybrid bromegrass (*Bromus inermis* × *B. riparius*) compared with smooth bromegrass, meadow bromegrass, crested wheatgrass and tall fescue under grazed or nongrazed conditions**
C. I. Ward, H. A. Lardner, and P. G. Jefferson 441–445

Molecular Biology

- Genome-wide transcriptome analysis of rice genes responsive to chilling stress**
H. Y. Cho, S.-G. Hwang, D. S. Kim, and C. S. Jang 447–460

- Phylogeny of Korean *Rubus* (Rosaceae) based on the second intron of the *LEAFY* gene**
JiY. Yang, H-S. Yoon, and J.-H. Pak 461–472

Fruit

- American elder cultivation under cold climates: Potential and limitations**
R. Drapeau and D. Charlebois 473–484

Vegetable

- Influence of cultivar and year on phytochemical and antioxidant activity of potato (*Solanum tuberosum* L.) in Ontario**
C. Hu, R. Tsao, R. Liu, J. A. Sullivan, and M. R. McDonald 485–493

Plant Pathology

- Prokaryotic expression of a Thunberg fritillary mosaic virus CP gene and antiserum preparation**
W. Chuanbao, W. Qiyao, Y. Yu, and L. Chunyun 495–500

- Screening of *Brassica* germplasm for resistance to *Plasmodiophora brassicae* pathotypes prevalent in Canada for broadening diversity in clubroot resistance**

- M. J. Hasan, S. E. Strelkov, R. J. Howard, and M. H. Rahman 501–515

Weed Science

- Biologically effective rate of saflufenacil/dimethenamid-p in soybean (*Glycine max*)**
R. T. Miller, N. Soltani, D. E. Robinson, T. E. Kraus, and P. H. Sikkema 517–531

- Occurrence and distribution of glyphosate-resistant giant ragweed (*Ambrosia trifida* L.) in southwestern Ontario**

- J. P. Vink, N. Soltani, D. E. Robinson, F. J. Tardif, M. B. Lawton, and P. H. Sikkema 533–539

Application of Technology

- Effect of hyperbaric treatments on the quality attributes of tomato**
B. Goyette, C. Vigneault, M. T. Charles, and V. G. S. Raghavan 541–551

Other

- Combined selection of progeny in crop breeding using best linear unbiased prediction**
J. M. S. Viana, V. R. Faria, F. F. Silva, and M. D. V. de Resende 553–562

- The effect of irrigation on nitrogen uptake and use efficiency of two willow (*Salix* spp.) biomass energy varieties**

- R. D. Hags, J. J. Schoenau, K. C. J. Van Rees, and J. D. Knight 563–575

Effect of crop residue, nitrogen rate and fungicide application on malting barley productivity, quality, and foliar disease severity
T. K. Turkington, J. T. O'Donovan, M. J. Edney,
P. E. Juskiw, R. H. McKenzie, K. N. Harker,
G. W. Clayton, K. Xi, G. P. Lafond, R. B. Irvine,
S. Brandt, E. N. Johnson, W. E. May,
and E. Smith 577-588

Cultivar Descriptions

OAC Inferno common bean
T. H. Smith, T. E. Michaels, A. Navabi,
and K. P. Pauls 589-592

Abstracts of Technical Papers 593-610

2011 Outstanding Reviewers 611-612

Acknowledgement of Outstanding Associate Editors 613-615

Retiring Associate Editors 615