

CONTENTS

581 Editorial
A. Mårtensson

ORIGINAL ARTICLES

- 582 Modelling below-ground shoot elongation and emergence time of *Sonchus arvensis* shoots
B. Torssell, H. Eckersten, S. Anbari, A. Lundkvist and T. Verwijst
- 589 Driving factors of temporal variation in agricultural soil respiration
Y. Wang, M. Bölter, Q. Chang, R. Duttmann, A. Scheltz, J.F. Petersen and Z. Wang
- 605 Ontogenetic-based sequential path analysis of grain yield and its related traits in several winter wheat cultivars
W. Mađdry, M. Studnicki, J. Rozbicki, J. Golba, D. Gozdowski, A. Pecio and A. Oleksy
- 619 Cattle manure and straw have contrasting effects on organic nitrogen mineralization pathways in a subtropical paddy soil
Y. Zhang, F. Wang, J. Zhang, T. Zhu, C. Lin, C. Müller and Z. Cai
- 629 Suppression of rice blast, cabbage black leaf spot, and tomato bacterial wilt diseases by *Meyerozyma guilliermondii* TA-2 and the nature of protection
M.M. Elsharkawy, M. Nakatani, M. Nishimura, T. Arakawa, M. Shimizu and M. Hyakumachi
- 637 Mechanism of plant growth promotion elicited by *Bacillus* sp. LKE15 in oriental melon
S.-M. Kang, R. Radhakrishnan, K.-E. Lee, Y.-H. You, J.-H. Ko, J.-H. Kim and I.-J. Lee
- 648 Biological activity and microbial genetic diversity of bare-fallow and grassland soils
A. Kot, M. Frąc, J. Lipiec and B. Usowicz
- 658 Nitrogen yield and nitrogen fixation of winter faba beans
R.W. Neugschwandtner, K.V. Ziegler, S. Kriegner, H. Wagentristl and H.-P. Kaul
- 667 Development of potato late blight (*Phytophthora infestans*) in differently developed potato crops and the potential to graduate the fungicide dose according to crop biomass
P.K. Jensen and B.J. Nielsen
- 673 Potential existence of multiple *Tylenchulus semipenetrans* biotypes in South Africa
R.V. Mathabatha, P.W. Mashela, N.M. Mokgalong and Z.P. Dube
- 680 Erratum