

CONTENTS

ORIGINAL ARTICLES

- 1 Reactive natural phosphate enriched with filter cake enhances soil P content and noni seedlings growth
Gustavo Caione, Cid Naudi Silva Campos, Flávia Bastos Agostinho, Leandro Rosatto Moda, Renato de Mello Prado and Rafael Ferreira Barreto
- 5 Selenium treatment alters the effects of UV radiation on chemical and production parameters in hybrid buckwheat
Aleksandra Golob, Vekoslava Stibilj, Ivan Kreft, Katarina Vogel-Mikuš, Alenka Gabersčik and Mateja Germ
- 16 Apple rootstocks may become infected by *Neonectria ditissima* during propagation
Jorunn Børve, S. A. Kolltveit, V. Talgø and A. Stensvand
- 26 Migration, colonization and seedling growth of rhizobia with matrine treatment in alfalfa (*Medicago sativa* L.)
Yang-yang Miao, Shang-li Shi, Jian-guo Zhang and Osama Abdalla Mohamad
- 39 The quantitative changes of nutrients in two contrasting soils amended with sewage sludge compost evaluated by various statistical tools
Monika Jakubus, Ewa Bakinowska and Bernard Gałka
- 50 Soil enzyme activity and sulphur uptake by oilseed rape depending on fertilization and biostimulant application
Anetta Siwik-Ziomek and Małgorzata Szczepanek
- 57 Elemental composition and phosphorus availability in hydrochars from seaweed and organic waste digestate
Anne-Kristin Løes, Judit Sandquist and Gregor Meyer
- 67 Phenotypic divergence in vegetable amaranth for total antioxidant capacity, antioxidant profile, dietary fiber, nutritional and agronomic traits
Umakanta Sarker, Md. Tofazzal Islam, Md. Golam Rabbani and Shinya Oba
- 77 Animal-based organic nutrition can substitute inorganic fertigation in soilless-grown grape tomato
Oscar Guajardo-Ríos, Carlos Javier Lozano-Cavazos, Luis Alonso Valdez-Aguilar, Adalberto Benavides-Mendoza, Luis Ibarra-Jiménez, Juan Alberto Ascacio-Valdés and Cristóbal Noé Aguilar-González
- 86 Relationship between spring barley productivity and growing management in Lithuania's lowland
Virmantas Povilaitis, Sigitas Lazauskas, Šarūnas Antanaitis, Dalia Feizienė, Virginijus Feiza and Vita Tilvikienė