RESEARCH ON CROPS

Vol. 25 June 2024 No. 2

CONTENTS

RESEARCH PAPERS

AGRONOMY & SOIL SCIENCE

PAIMAN 207 Optimizing bioherbicide application timing and plant **ZULKAISI NURUL AMAR** spacing to manage weed growth in rice (*Oryza sativa* L.) cultivation

HAGENG RAHMATULLOH PRIYO-

PAMBUDI

ANGGUNILA

CICILIA TRI KUSUMASTUTI

ARDIYANTA

T. D. H. TRUONG 216 Enhancing the efficacy of biochar derived from crop residues on rice (*Oryza sativa* L.) dry matter, yield accumulation and soil organic carbon in Central Vietnam

T. T. H. HOANG

T. X. P. TRAN 222 Impact of rice straw biochar and reduced chemical fertilizer on the growth and yield of rice (*Oryza sativa* L.) in Central Vietnam

SUNITA MEHER 228 Efficacy of broad-spectrum herbicide mixtures on weed **SANJOY SAHA** flora in wet direct seeded rice (*Oryza sativa* L.) in the east coast plain region of India

ASHIRBACHAN MAHAPATRA JAGADISH JENA

MINU MOHAN

M. JAYARAJ 235 Influence of establishment methods and seed coating
R. DURAI SINGH techniques on the performance of direct seeded rice
(Oryza sativa L.) under Periyar Vaigai command area

SSAN HUSSAINY
of Tamil Nadu

SYED ABUL HASSAN HUSSAINY

P. SUBRAMANIAN

B. BHAKIYATHU SALIHA

B. SIVASANKARI

VICTORIA VLADIMIROVNA- 241 Environmental surveillance of the rice massif in the USTINOVA Kuban-Protoka river region

ALEXEY DMITRIEVICH TIMOSHKIN

T. D. PHUNG 247 Climate change impacts on rice cultivation paddies in the Plain of Reeds, Vietnam

HAYDER ABID AL-RAZZAQ BAQIR 253 Response of yield and its components of two wheat **NAJAT HUSSEIN ZEBOON** varieties to foliar spraying with stearic acid

NASEER FARAJ SHACHAI 258 Investigating the influence of growth inhibitors on the AHMED ALI HUSSEIN growth and yield of oat (*Avena sativa*)

BASHEER ABDALA ABRAHEEM

- **FATIMA E. ALDAINY** 263 Assessment of maize leaf indicators under water **BASHEER A. ABRAHEEM** reduction levels: Impact of polymer, charcoal, and antiperspirant treatments
- **MEHRNOUSH AMINISARTESHNIZI** 269 Analysing *Pandoraea* associated with *Brassica oleracea* using 16S rDNA from Limpopo Province, South Africa
 - **T. D. PHUNG** 273 Assessing the impact of unsustainable exploitation and climate change on soil properties alterations in the mountainous regions, Vietnam
 - T. N. LE 280 Land cover change assessment in Thai Nguyen
 D. D. NGUYEN Province, Vietnam using GIS and remote sensing techniques

HORTICULTURAL & VEGETABLE CROPS

- CUCU SUHERMAN 286 Optimizing oil palm farming: Soil quality, fertilization
 JAJANG SUPRIATNA and agro-environmental performance
 ANNE NURAINI
 SYARIFUL MUBAROK
- **GAVIN GELDENHUYS** 292 Evaluating the efficiency of Chelex 100 for DNA extraction in orange (*Citrus sinensis*)
 - K. P. MALATJI 296 Response of selected nutrient elements in leaf tissues
 P. W. MASHELA of sweet potato cv. 'Bophelo' to Nemafric-BL phytonematicide
 - **RYAN WIDIANTO** 302 Chemical desiccation of potato haulms to increase skin **DENNY KURNIADIE** hardness and potato yield
- **GAVIN GELDENHUYS** 308 Investigation on the population dynamics of Helicotylenchus pseudorobustus and its relationship with soil factors in tomato fields
- **GAVIN GELDENHUYS** 312 Identification of molecular characters of tomato seedlings (*Solanum lycopersicum*) from Limpopo Province, South Africa, using 28S rDNA
- **BUSHRA SOLANKI** 316 Unveiling the efficacy of a bacterial antagonist in the **MOHD SAGHIR KHAN** management of tomato wilt disease caused by *Ralstonia solanacearum*
- **GAVIN GELDENHUYS** 324 Relationship between soil factors with *Helicotylenchus* pseudorobustus isolated from tomato fields in Limpopo Province, South Africa

SAGAR MAITRA 328 Growth, productivity and quality of colored capsicum
MASINA SAIRAM
(Capsicum annuum L.) as influenced by hybrids and plant
growth regulators under controlled environment
conditions

MEDICINAL PLANTS

MAROPENG CHOSHI 336 Influence of growth stages on the nutritional value of **YVONNE MAILA** *Momordica balsamina* leaf powder

MOSES TIMANA
ZAKHELENI DUBE
NCOBILE NKUNA
MMAGADIMA SEBATI
THOBILE MKHWANAZI
RIVONINGO UBISI

MOSES TIMANA 343 Sphenoptera sp. (Buprestidae: Coleoptera) threatening wild cancer bush (Sutherlandia frutescens) population

PLANT PROTECTION

- **MEHRNOUSH AMINISARTESHNIZI** 350 Phylogenetic position of *Aceria sp.* (Trombidiformes: Eriophyidae) based on 28S rDNA partial sequences Limpopo Province, South Africa
- **MEHRNOUSH AMINISARTESHNIZI** 353 Phylogenetic position of *Discolaimium* (Nematoda: Dorylaimida) from South Africa using 28S rDNA
- AGUS SUSANTO 356 Toxicity of several insecticides against fruit flies WAHYU DARADJAT NATAWIGENA Bactrocera dorsalis (Hendel) and Bactrocera carambolae (Drew & Hancock) (Diptera: Tephritidae) in the laboratory