

# Contents

Vol. 55 No. 4 2021

## REVIEWS

### Biotechnology

- 285 Reference Genome Sequencing and Advances in Genomic Resources in Common Wheat–Chromosome 6B Project in Japan

Fuminori KOBAYASHI,  
Tsuyoshi TANAKA,  
Hiroyuki KANAMORI,  
Jianzhong WU & Hirokazu HANDA

### Crop Science

- 295 Technology Development for Stable Agricultural Production under Adverse Environments and Changing Climate Conditions

Kazuo NAKASHIMA, Takeshi URAO,  
Donghe XU, Shotaro ANDO &  
Masayasu KATO

## ARTICLES

### Crop Science

- 307 A Trial for the Identification of Brown Planthopper (*Nilaparvata lugens* Stål) Resistance Alleles in Two Rice Lines, Norin-PL3 and Norin-PL4, Using Next-generation Sequencing and Simple Graphical Genotyping Methods

Yukina NAKATSUJI,  
Shuichi FUKUOKA,  
Yuichi KATAYOSE,  
Tatsumi MIZUBAYASHI,  
Hideki SEZUTSU,  
Tetsuya KOBAYASHI,  
Yoshinori HATAKEYAMA &  
Yasumori TAMURA

- 323 Diurnal Dynamics of Nectar Secretion in *Cucurbita maxima* Duch: Implications for Effective Pollen Transfer by Japanese Wild Pollinators

Shoko NAKAMURA,  
Hisatomo TAKI & Yasuo KONNO

- 333 General Utilities for Genotyping Study (GUGS): A Comprehensive Application in Genotype and Sequence Data Manipulation

Tokuro SHIMIZU

### Agricultural Environment

- 341 Distribution of Pink-pigmented Facultative Methylophs Isolated from the Leaves of Potato Grown in Different Regions of Japan

Nobutaka SOMEYA,  
Masaharu KUBOTA, Yusuke UNNO &  
Tomohiro MOROHOSHI

### Food

- 347 Investigation of Total Polyphenol Content, Antioxidant Activity, and Carbohydrate-hydrolyzing Enzyme Inhibition of Yacon Leaves among Four Domestic Cultivars and a Peru Line for over Four Years

Yuto UEDA, Yasushi MATSUDA,  
Tatsuro MURATA, Yoshikazu HOSHI,  
Kiyotaka KABATA, Masateru ONO,  
Hideki KINOSHITA, Keiji IGOSHI &  
Shin YASUDA

### Horticulture

- 359 Comparison of Carotenoid Accumulation and Abscisic Acid Content in Fruit-color Altered Mutant and Original Types in Citrus

Naoko NAKAJIMA,  
Yoshinori IKOMA,  
Hikaru MATSUMOTO,  
Masaya KATO & Takeshi KUNIGA

## **Contents**

**Vol. 55 No. 4 2021**

---

### **Forestry**

- 367 Effects of Biochar on the Growth of *Vachellia etbaica* and *Faidherbia albida* Planted in Tigray, Northern Ethiopia  
Masazumi KAYAMA,  
Buruh ABEBE & Emiru BIRHANE
- 379 Effects of Topography, Soil Organic Matter, and Chemical Properties on the Growth of Teak (*Tectona grandis*) Plantations in Northeast Thailand  
Iwao NODA, Woraphun HIMMAPAN,  
Tosporn VACHARANGKURA,  
Somsak SUKCHAN,  
Wilawan WICHINNOPPARAT &  
Naoyuki FURUYA