

## REVIEWS

### Horticulture

- 285 Modification of the Light Environment Influences the Production of Horticultural Crops Takeshi KUNIGA
- 293 Leaf Trichomes as an Effective Structure for Disease Resistance: The Case of Grapevine Downy Mildew Atsushi KONO & Takeo SHIMIZU

### Animal Science

- 299 Spatial Distribution of Grazing Sites and Dung of Beef Cows in a Sloping Pasture Rena YOSHITOSHI, Nariyasu WATANABE & Jihyun LIM

## ARTICLES

### Agricultural Environment

- 307 Limited Occurrence of Tristeza in Yuzu and Possible Tristeza-free Cultivation in Northernmost Commercial Yuzu-producing Areas of Japan Eiko NAGAOKA-NAKAZONO, Nami UECHI, Hiroshi KATOH, Takashi FUJIKAWA, Shin-ichi MIYATA, Tsutomu FURUKAWA, Tomonori ASAKAWA, Makoto SASAKI, Riho KUWAHARA, Ok-Kyung KIM, Hirosuke SHINOHARA & Toru IWANAMI

### Agricultural Engineering

- 317 Research on a Method of Evaluating Fuel Efficiency during Traveling and Driving for Head-feeding Combine Harvesters Hirofumi YAMASAKI, Mitsuhiro HORIO & Kohichi FUJITA

### Social Science

- 327 Competitive Advantage Factors in Vertically Diversified Brand Chicken Business: A Partial Value Chain Analysis of a Japanese Poultry Wholesaler Kenji HOSONO & Yuji YASHIMA

### Horticulture

- 335 Crossability between Transgenic Blue Chrysanthemums and the Wild Chrysanthemum Species *Chrysanthemum japonense* var. *japonense* Ryutaro AIDA, Naonobu NODA, Satoshi YOSHIOKA, Mitsuru DOUZONO, Mai TSUDA & Ryo OHSAWA
- 341 Postharvest Treatments and Shipping Conditions for Reducing Fruit Drop in Cut *Sarcandra glabra* Branches Hiroko SHIMIZU-YUMOTO, Yumi UJIIE & Takayuki OGAWA

## Contents

Vol. 54 No. 4 2020

---

### Forestry

- 349 Biomass and Production Rates of Fine Roots in Two Mangrove Stands in Southern Thailand

Kyotaro NOGUCHI,  
Sasitorn POUNGPARN,  
Suthathip UMNOUYSIN,  
Pipat PATANAPONPAIBOON,  
Decha DUANGNAMOL,  
Reiji YONEDA, Hajime UTSUGI,  
Tamotsu SATO & Ryuichi TABUCHI

### Fisheries

- 361 Growth and Reproductive Status of the Spotted Scat *Scatophagus argus* in Mangrove Estuary in Matang Mangrove Forest Reserve, Malaysia

Shinsuke MORIOKA,  
Katsuhisa TANAKA,  
Tatsuya YURIMOTO,  
Faizul M. KASSIM &  
Kazumaro OKAMURA

### Volume Contents

- 369 Contents of Vol. 54 (2020)