Contents

Vol. 55 No. 1 2021

REVIEW

Social Science

1 The Farm-type TMR Center as a Regional Farming System in Hokkaido

Makoto HIMI

ARTICLES

Crop Science

5 Radioactive Cesium Concentration in Silage Corn (Zea Mays L.) and Italian Ryegrass (Lolium Multiflorum Lam.) Cultivated with Three Different Tillage Methods after the Fukushima Daiichi Nuclear Power Plant Accident Tsutomu KANNO, Hisatomi HARADA, Koichi AMAHA, Yoshiyuki ABE, Noritoshi SUMIDA, Hidehiko INOUE, Yoichiro KOJIMA, Soichiro MORITA, Toshihiko IBUKI & Setsuro SATO

Agricultural Environment

17 Nitrous Oxide Emissions from a Sugarcane Field with Green Manure and Chemical Fertilizer Applications in Okinawa, Japan Tabito MAEDA, Soh SUGIHARA,
Tomohiro NISHIGAKI,
Naoko MIYAMARU,
Koichi YOSHIDA,
Akinori YAMAMOTO,
Koki TOYOTA & Haruo TANAKA

29 Development of Rapid Immunofilter Paper Assay for Chrysanthemum Stem Necrosis Orthotospovirus using Polyclonal Antibody Generated in Rabbits

Yasuhiro TOMITAKA

Agricultural Engineering

35 Applicability of Water Level Monitoring System and Water Level Estimation System to Tank Cascade in Sri Lanka

Akira IZUMI & Toshikazu HORI

45 Recurrent Neural Network Predictions for Water Levels at Drainage Pumping Stations in an Agricultural Lowland

Nobuaki KIMURA, Ikuo YOSHINAGA, Kenji SEKIJIMA, Issaku AZECHI, Hirohide KIRI & Daichi BABA

Social Science

59 Soybean Rust and Resistant Cultivar Effects on Global Soybean Supply and Demand

Yuki ISHIKAWA-ISHIWATA & Jun FURUYA

Contents

Vol. 55 No. 1 2021

Animal Science

69 Comparative Analysis of Rumen Bacteria between Water Buffalo and Cattle Fed the Same Diet during their Fattening Period in the Philippines

Ken ASAI, Khin Ohnmar LWIN,
Abraham G. TANDANG,
Rosalina M. LAPITAN,
Jesus Rommel V. HERRERA,
Arnel N. DEL-BARRIO,
Makoto KONDO,
Tomomi BAN-TOKUDA,
Arfan ABRAR, Tsutomu FUJIHARA &
Hiroki MATSUI

77 The Effects of Chronic Social Defeat Stress on Solid Gastric Emptying and Defecation in C57BL/6J Mice

Naoko MORIYA, Naoko YAMAGISHI, Tatsuhiko GOTO, Hikari OTABI, Hiromi NIRA-KIMOTO, Atsushi TOYODA & Chise SUZUKI

Fisheries

85 Identification of Potential Predators for Asari Clam Ruditapes philippinarum Using Time-lapse Camera Observations Naoaki TEZUKA, Yoshitake TAKADA, Toshihiro SHIGETA & Motoharu UCHIDA

97 Practical Research on Rearing Broodstock Abalone Using a Closed Recirculating System Yukio MATSUMOTO & Tomoki MAEDA