

HortScience

American Society for Horticultural Science

Volume 47, Number 12 December 2012

H1





REPORTS

Breeding, Cultivars, Rootstocks, and Germplasm Resources

- 1672 Olive Seed Germination and Initial Seedling Vigor as Influenced by Stratification Treatment and the Female Parent
Ana Morales-Sillero, María Paz Suárez, María Rocío Jiménez, Laura Casanova, José Ordovás, and Pilar Rallo
- 1679 Morphology and Inheritance of Double Floweredness in *Catharanthus roseus*
Chin-Mu Chen, Tzu-Yao Wei, and Der-Ming Yeh
- 1682 Resistance to Phytophthora Fruit Rot of Watermelon Caused by *Phytophthora capsici* in U.S. Plant Introductions
Chandrasekar S. Kousik, Jennifer L. Ikerd, Patrick Wechter, Howard Harrison, and Amnon Levi
- 1690 Doubled Haploid Onion (*Allium cepa* L.) Lines and Their Impact on Hybrid Performance
Peter T. Hyde, Elizabeth D. Earle, and Martha A. Mutschler

Crop Production

- 1696 Podophyllotoxin Concentration in Junipers in the Big Horn Mountains in Wyoming
Valtcho D. Zheljzakov, Charles L. Cantrell, Mateus Augusto Donega, Tess Astatkie, and Bonnie Heidel
- 1698 Changes in Selected Quality Attributes of Greenhouse Tomato Fruit as Affected by Pre- and Postharvest Environmental Conditions in Year-round Production
Chieri Kubota, Mark Kroggel, Mohammad Torabi, Katherine A. Dietrich, Hyun-Jin Kim, Jorge Fonseca, and Cynthia A. Thomson
- 1705 Partial Shade, Irrigation, and Added Nutrients Maximize Dry Matter Yield of American Skullcap (*Scutellaria lateriflora* L.)
Arsène Similien, Dennis A. Shannon, C. Wesley Wood, Edzard van Santen, Nirmal Joshee, and Wheeler G. Foshee

- 1710 Chilling Requirements to Break Dormancy of *Veratrum californicum*
Youping Sun, Sarah A. White, David Mann, and Jeffrey Adelberg
- 1714 Increased Oxygen Bioavailability Improved Vigor and Germination of Aged Vegetable Seeds
Guodong Liu, D. Marshall Porterfield, Yuncong Li, and Waldemar Klassen
- 1722 Seed Germination and Seedling Growth of Tomato and Lettuce as Affected by Vermicompost Water Extracts (Teas)
Norman Q. Arancon, Archana Pant, Theodore Radovich, Nguyen V. Hue, Jesse K. Potter, and Chad E. Converse
- 1729 Comparative Study of Color, Pungency, and Biochemical Composition in Chili Pepper (*Capsicum annuum*) Under Different Light-emitting Diode Treatments
Baniekal Hiremath Gangadhar, Raghvendra Kumar Mishra, Gobinath Pandian, and Se Won Park

Disease and Pest Management

- 1736 Biochar Amendment Increases Resistance to Stem Lesions Caused by *Phytophthora* spp. in Tree Seedlings
Drew C. Zwart and Soo-Hyung Kim

Growth Regulators

- 1741 Abscisic Acid Effect on Improving Horse Chestnut Secondary Somatic Embryogenesis
Dušica Čalić, Nina Devrnja, Jelena Milojević, Igor Kostić, Dušica Janošević, Snežana Budimir, and Snežana Zdravković-Korać
- 1745 Ethephon and Methyl Jasmonate Affect Fruit Detachment in Rabbiteye and Southern Highbush Blueberry
Anish Malladi, Tripti Vashisth, and Lisa Klima Johnson
- 1750 Improving Freezing Tolerance of 'Chambourcin' Grapevines with Exogenous Abscisic Acid
Yi Zhang and Imed Dami



Image Analysis Systems for Plant Science


www.regentinstruments.com

WinRHIZO™
The complete product family for root analysis

WinFOLIA™
Leaf area meter, morphology and pest damage analyser

WinSEEDLE™
Seed and needle morphology and pest damage analyser

Postharvest Biology and Technology

- 1758 Microbiological Quality and Shelf Life of Enzyme-peeled Fresh-cut Persimmon Slices Stored in High CO₂ Atmospheres
Yukari Murakami, Yoshihiko Ozaki, and Hidemi Izumi

Propagation and Tissue Culture

- 1764 1-Methylcyclopropene Has a Variable Effect on Adventitious Root Emergence from Cuttings of Two Sweetpotato Cultivars
Arthur Villordon, Christopher Clark, Don LaBonte, and Nurit Firon

Soil Management, Fertilization, and Irrigation

- 1768 Nitrogen Requirements and N Status Determination of Lettuce
Thomas G. Bottoms, Richard F. Smith, Michael D. Cahn, and Timothy K. Hartz
- 1775 Evaluating Fertilizer Influence on Overwintering Survival and Growth of *Sedum* Species in a Fall-installed Green Roof
Mary Jane Clark and Youbin Zheng
- 1782 Storage Time and Amendments Affect Pine Tree Substrate Properties and Marigold Growth
Linda L. Taylor, Alexander X. Niemiera, Robert D. Wright, and J. Roger Harris

Turf Management

- 1789 Turfgrass Establishment from Polymer-coated Seed Under Saline Irrigation
Matteo Serena, Bernd Leinauer, Rossana Sallenave, Marco Schiavon, and Bernd Maier

CULTIVAR AND GERMLASM RELEASES

- 1795 'Artemisz', 'Cordelia', 'Hesztia', and 'Rosmerta': New Hungarian Multiresistant Apple Cultivars
Magdolna Tóth, Gitta Ficzek, Ildikó Király, Szilvia Kovács, Mária Hevesi, Júlia Halász, and Zsolt Szani
- 1801 'Raider Gold' Plains Zinnia (*Zinnia grandiflora* Nutt.)
Cynthia B. McKenney, Amber Bates, Kaylee Decker, and Ursula K. Schuch
- 1803 TexFirst, an Early-ripening, Low-chill Peach for the Subtropics
David H. Byrne and Natalie Anderson
- 1805 392291-VDR, a Watermelon Germplasm Line with Resistance to *Squash vein yellowing virus*-caused Watermelon Vine Decline
Chandrasekar S. Kousik, Scott Adkins, William W. Turechek, Craig G. Webster, and Pamela D. Roberts

- 1808 Fruitless *Ruellia simplex* R10-102 ('Mayan Purple') and R10-108 ('Mayan White')
Rosanna Freyre, Adam Moseley, Gary W. Knox, and Sandra B. Wilson
- 1815 'Taoyuan No. 1': A High-yielding Batavia Lettuce Cultivar High in Total Phytochemicals and Dietary Fiber
Ah-Chiou Lee, Fang-Shin Liao, and Hsiao-Feng Lo
- 1817 'Orleans' Sweetpotato
Don R. La Bonte, Christopher A. Clark, Tara P. Smith, and Arthur Q. Villordon
- 1819 'USS Arizona' and 'USS California' Tropical Hibiscus (*Hibiscus rosa-sinensis* L.)
Cecil T. Pounders and Hamidou Sakhankho

MISCELLANEOUS

- 1821 Evaluation of Cold Hardiness in Seven Iranian Commercial Pomegranate (*Punica granatum* L.) Cultivars
Ali Akbar Ghasemi Soloklui, Ahmad Ershadi, and Esmail Fallahi
- 1826 Evaluation of Chilling and Heat Requirements in Japanese Apricot with Three Models
Zhihong Gao, Weibing Zhuang, Liangju Wang, Jing Shao, Xiaoyan Luo, Binhua Cai, and Zhen Zhang
- 1832 *Chilades pandava* Damage among 85 *Cycas* Species in a Common Garden Setting
Thomas E. Marler, Anders J. Lindström, and L. Irene Terry
- 1837 Self-fertility Evaluations of Northern-adapted Rabbiteye Blueberry Hybrids
Mark K. Ehlenfeldt and Matthew Kramer

BOOK REVIEW

- 1843 *Horticulture and Livelihood Security*
by P. Nath and P.B. Gaddagimath
reviewed by Touria El-Jaoual Eaton

PRESIDENTIAL ADDRESS

- 1844 Presidential Biography
Dewayne L. Ingram
- 1844 Presidential Address
Dewayne L. Ingram

ON THE COVER

In their paper (p. 1679), Chen et al. discuss the identification of a double-flowered periwinkle (*Catharanthus roseus*) mutant TYV1. The cover shows (upper left) a longitudinal section of a flower of TYV1 and (lower right) the structure of the apex of a corolla tube.