Combined Proceedings International Plant Propagators' Society 2021

IPPS Volume 71

Held 2021

ISBN: 978-1-7138-4505-8

Printed from e-media with permission by:

Curran Associates, Inc. 57 Morehouse Lane Red Hook, NY 12571



Some format issues inherent in the e-media version may also appear in this print version.

Copyright© (2021) by International Plant Propagators' Society (IPPS) All rights reserved.

Printed with permission by Curran Associates, Inc. (2022)

For permission requests, please contact International Plant Propagators' Society (IPPS) at the address below.

International Plant Propagators' Society (IPPS) 174 Crestview Drive Bellefonte, PA 16823-8516 USA

Phone: +01 814-355-2467

secretary@ipps.org

Additional copies of this publication are available from:

Curran Associates, Inc. 57 Morehouse Lane Red Hook, NY 12571 USA Phone: 845-758-0400

Fax: 845-758-2633

Email: curran@proceedings.com Web: www.proceedings.com

Table of Contents

New Zealand Region

Chris Barnaby	Plant variety rights review: What is happening?	1-6
Fiona Calvert	Measure to manage – Lab testing for growers	7-13
Puthiyaparambil Josekutty	Tissue culture propagation of some temperate woody ornamentals	14-16
Eastern Region - USA		
William Barnes	A brief look at grafting <i>Franklinia</i> to × <i>Gordolinia</i>	17-20
William Barnes	Tissue Culture Propagation of <i>Aronia</i> melanocarpa	21-23
Bridget Bolt, Roberta Magnani, Marta Nosarzewski, Carlos Rodríguez López and Robert Geneve	Gibberellin and clipping promote germination in fresh grape seeds	24-27
Lincoln Gillon	Tech talk: Bane or boon? a brief look at horticultural tech	28-32
Richard Hawke	Chicago botanic garden plant evaluation program	33-38
Brent Horvath	Breeding new plants and a new breeder	39-41
Allie Maternowski, Winston Dunwell, Dwight Wolfe, Virginia Travis and Daniel Becker	Brown turkey fig softwood cutting propagation	42-46
Brandon Miller and Nina Bassuk	Supplemental nickel corrects mouse ear disorder of bitternut hickory	47-49

Erin Pfarr Moreau, Josh Honig, John M. Capik, Thomas J. Molnar	Innovation at work: Dogwood breeding at Rutgers University	50-57
Lydia Scott	Challenges of improving urban forest canopy in the Chicago region	58-66
Zenaida Viloria, Raul Villanueva, Ric Bessin, Win Dunwell	Using apple bolts to test insecticide efficacy against ambrosia beetles	67-72
Heping Zhu and Peter Ling	Laser-guided intelligent greenhouse spray system to deliver variable-rate water, chemicals, and nutrients	73-76
Kris Bachtell	New plant forum 2021 – Eastern Region IPPS	77-88
Southern Region - USA		
Brie Arthur	Technical sessions of International Plant Propagators'Society-Southern Region of North America (SRNA) annual meeting	89-91
Bin Wu, Elizabeth Chun ² , Runshi Xie, Gary W. Knox, Mengmeng Gu and Hongmin Qin	"To eat, or not to eat, that is the question" - Answered by real-time monitoring techniques combining with computational analysis for feeding behavior study of crapemyrtle bark scale (<i>Acanthococcus lagerstroemiae</i>)	92-99
Anthony T. Bowden, Patricia R. Knight, Christine E.H. Coker, Jenny B. Ryals, Scott A. Langlois, Shaun R. Broderick, Eugene K. Blythe, Hamidou F. Sakhanokho, and Ebrahiem M. Babiker	Evaluation of surfactants for use in one-time foliar auxin applications in the propagation of woody ornamentals	100-106

Yuvraj Khamare, S. Christopher Marble, James E Altland and Annette Chandler	Growth of liverwort (<i>Marchantia</i> polymorpha) and spotted spurge (<i>Euphorbia</i> maculata) decreases with substrate stratification and strategic fertilizer placement	107-115
Kristopher S. Criscione, Jeb S. Fields and James S. Owen Jr.	Exploring water movement through stratified substrates	116-124
Jenny B. Ryals, Patricia R. Knight, Christine E. H. Coker, Gary R. Bachman, Jim M. DelPrince, Patricia R. Drackett, Scott Langlois, David Brand and Anthony T. Bowden	Rooting response of Piedmont azalea (<i>Rhododendron canescens</i>) softwood, single-node cuttings to a basal auxin quick dip	125-129
Ping Yu, Kevin Ong, Kevin Crosby, Terry Gentry and Mengmeng Gu	Using poinsettia and pepper as model plants to investigate biochar and <i>Trichoderma</i> suppressing effects on plant diseases	130-137
Runshi Xie, Bin Wu, Mengmeng Gu, Stacey R. Jones, James Robbins and Hongmin Qin	Identification of new crapemyrtle bark scale (<i>Acanthococcus lagerstroemiae</i>) hosts (<i>Spiraea</i> and <i>Callicarpa</i>) through DNA barcoding	138-143
Robert Black	Camellia propagation from cuttings	144-163
David Creech, Lais Machado and David Kulhavy	Keeping ornamental winners and losers in the record Texas freeze of February 15-21, 2021	164-170
John Davy	Cutting propagation of Magnolia grandiflora	171-176
Robert Elliot and Lis Myer	Connecting veterans to horticulture	177-182

Maarten van der Giessen	35-Years of propagation in 30 minutes – Tricks and tips	183-195
Chris Hayes	The does and don'ts of using biologicals	196-202
Shea A. Keene	IPPS European Exchange 2019	203-216
Heather Kirk-Ballard	Keeping consumer demand high: Riding the green wave of the COVID-19 garden explosion	217-221
Michael Roe	Is your fertility program stuck in the 1950's? well, it should be! Nutritional approach to passive plant pest immunity	222-234
Anthony Witcher and Isha Poudel	Weed control in propagation: Hand weeding is NOT the only option	235-241