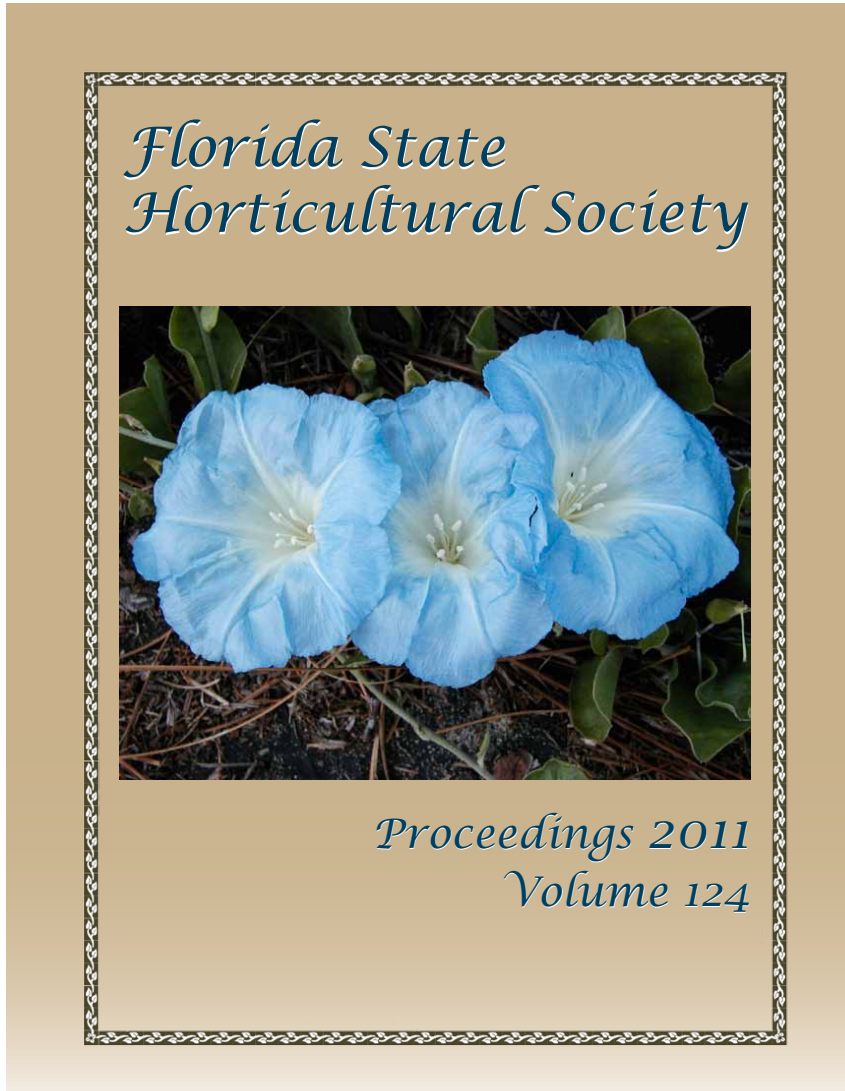


INSTRUCTIONS

Proceedings of the Florida State Horticultural Society

1. Page down to the Table of Contents.
2. Click on the title of the article you would like to view, and a new window will open with the article requested.
3. Close the article to return to the main index.



FRONT AND BACK COVERS: *Bonamia grandiflora* (Florida Bonamia) is a member of the Convolvulaceae (morning-glory) family. It is the only member of this genus in Florida. Its small, oval leaves with entire margins and shorter, trailing stems differentiate it from the more common morning-glories. Sturdy stems up to 3 feet long support this perennial trailing vine. The leaves are 1–2 inches long, grading into small bracts at the end of the stem; oval with pointed tips, entire margins, short, silky hairs, and very short leaf stalks. The flowers are 3–4 inches long, solitary, with 5 lobes and 5 leathery, unequal sepals in two series. The bright blue flowers sport a white throat in



the morning but quickly fade to pale blue by afternoon when they close. Flowering occurs May through August, but leaves and vines are distinctive most of the year. Wild populations of this plant are found only in white sand scrub on central Florida ridges. Historic records indicate that Florida bonamia once occurred from Volusia and Marion counties south to Highlands and Charlotte counties. Presently it is most abundant in the Ocala National Forest. Roughly one-third of the approximately 100 remaining known populations are located on protected managed areas. The Rare Plant Conservation Program at Bok Tower Gardens has been actively involved with the protection efforts for this species since 1986.

Photo credits: Cindy Campbell, Rare Native Plant Curator, Rare Plant Conservation Program*, Bok Tower Gardens, 1151 Tower Boulevard, Lake Wales, FL 33853-3412 (ph: 863-676-1408, ext. 2241).

*The Rare Plant Conservation Program at Bok Tower Gardens is supported in part by grants from the State of Florida and the U.S. Fish and Wildlife Service, and by donations. Program staff consists of Cheryl Peterson (Conservation Program Manager), Cindy Campbell (Rare Native Plant Curator), and Juliet Rynear (Rare Plant Specialist).



Thank You 2011 Meeting Sponsors

Gold Level

Citrus Research and Development Foundation (CRDF)
Yara North America

Silver Level

Bayer CropScience
(SPONSOR OF VEGETABLE SECTION BEST PAPER AWARD)
Helena
(SPONSOR OF CITRUS SECTION BEST PAPER AWARD)
Natural Industries Inc.
(SPONSOR OF ORNAMENTAL, GARDEN, & LANDSCAPE SECTION BEST PAPER AWARD)
Valent BioSciences
(SPONSOR OF KROME MEMORIAL INSTITUTE SECTION BEST PAPER AWARD)

Bronze Level

Chemical Dynamics
Syngenta
Triangle Chemical Co.

Pewter Level

AgraQuest
BASF Chemicals
Chemtura AgroSolutions
McLean Ag Chemicals
ProFlowers.com

Proceedings of the Florida State Horticultural Society 2011

Table of Contents

CONTENTS

VOLUME CXXIII	PRINTED APRIL 2011
Board of Directors for 2011	ii
Presidential Address: Richard V. Tyson	vi
Awards of the Society	viii
2011 FSHS Keynote Speaker: Mike Joyner.....	xiv
List of Presidents, Honorary Members: 1988 to Present	xviii
Outstanding Growers or Commercial Horticulturists	xix
Endowment Contributions	xix
By-laws	332
Minutes of the Board of Directors Meetings	337
Minutes, 2011 Annual Meeting.....	344
Manuscript Preparation Guide for Authors.....	346
Proceedings order form.....	349
Conversion Table: U.S. & Metric Measures	350
Membership list	351
Index	355

Published Papers

KROME MEMORIAL INSTITUTE (TROPICALS)

FamC30-5-1: A Potential Red Wine Selection for Florida	1
<i>Z. Ren, J. Lu*, X. Xia, and F. Bradley</i>	
Screening for Crown Gall Disease Resistance in Various Grapevine Cuttings Inoculated by <i>Agrobacterium vitis</i> C493 and C4612	4
<i>Xia Xu, Jiang Lu*, Jeong Ho Roh, Zhongbo Ren, and Hong Huang</i>	
Molecular Assessment of Anthocyanin Biosynthesis Pathway in Synchronized In Vitro Red Cell Cultures of American Native Grapes	7
<i>Anthony Ananga, Stoyanka Krastanova, Safira Sutton, Stephen Leong, and Violetka Colova (Tsolova)*</i>	
Genetic Transformation for Overexpression of Flavonoid Compounds in <i>Muscadinia</i> Grape Cell Cultures.....	13
<i>Safira Sutton, Stoyanka Krastanova, Anthony Ananga, Stephen Leong, and Violetka Colova (Tsolova)*</i>	
Leaf Net CO ₂ Assimilation and Electrolyte Leakage and Alcohol Dehydrogenase Activity in Roots of Mamey Sapote (<i>Pouteria sapota</i>) Trees as Affected by Root Zone Oxygen Content	18
<i>Mark T. Nickum, Jonathan H. Crane*, Bruce Schaffer, and Frederick S. Davies</i>	
Fertilizer Rates, Application Timing, Growth, and Yields of Papaya Plants in North Central Florida.....	23
<i>Frederick S. Davies, Jonathan H. Crane*, Bruce Schaffer, Kati Migliaccio, and Glenn Zalman</i>	

Time after Scion Harvest and Grafting Method Influence Graft Success Rate for Purple-fruited Pitanga (<i>Eugenia uniflora</i> L.)	28
<i>Malcolm M. Manners*, John L. Griffis, Jr., and Ty G. McDonald</i>	

Field Evaluation of Blueberry Pruning Techniques	31
<i>Gary K. England*, Ryan A. Atwood, and Jeffrey G. Williamson</i>	
Pomegranate in Florida for Commercial Enterprises and Homeowners.....	33
<i>William S. Castle*, James C. Baldwin, and Megh Singh</i>	
Optimizing Fruit Spacing in Florida Peach Production.....	41
<i>Mercy Olmstead*, Gary England, and Ryan Atwood</i>	
Performance of Blueberry Cultivars under High Tunnels	45
<i>Teresa P. Salame* and Bielinski M. Santos</i>	

CITRUS SECTION

Salinity Tolerance of Cleopatra Mandarin Seedlings and Two of Its Trifoliata Hybrids, US-897 and x639	47
<i>J.P. Syvertsen* and Wije Bandaranayake</i>	
Measuring and Modeling Transpiration in Relation to Citrus Tree Size using Sap Flow Sensors	52
<i>Laura J. Waldo*, Kirandeep K. Mann, and Arnold W. Schumann</i>	
Citrus Shoot Age Requirements to Fulfill Flowering Potential	56
<i>L. Gene Albrigo* and Eduardo J. Chica</i>	
Stimulating Flowering in Basal Buds of Sweet Orange Summer Shoots by Removal of Terminal Buds Early in the Flower Bud Induction Period.....	60
<i>Eduardo J. Chica and L. Gene Albrigo*</i>	
Lack of Development of Huanglongbing in Seedlings from Citrus Seed.....	65
<i>James H. Graham*, Evan G. Johnson, Diane B. Bright, and Michael S. Irely</i>	
Starch Analysis of HLB-affected and Control Healthy Citrus Leaves Reveal Variations in the Amylose/Amylopectin Ratio.....	69
<i>Pedro Gonzalez, Jose Reyes, and Ed Etxeberria*</i>	
NAA Thinning of 'W. Murcott'	76
<i>Ryan Atwood, Nick Faryna, and Ed Stover*</i>	
Comparison of Copper Formulations for Control of Citrus Canker on 'Hamlin' Orange	79
<i>James H. Graham*, Megan M. Dewdney, and Henry D. Yonce</i>	
Effectiveness of Selective Insecticides to Control Asian Citrus Psyllid and Citrus Leafminer during Leaf Flushing.....	85
<i>Jawwad A. Qureshi*, Barry C. Kostyk, and Philip A. Stansly</i>	
Evaluation of Environmental Conditions within a Central Florida Citrus Grove: Potential Implications for Pesticide Spray Applications	90
<i>Chris Oswald*, Ryan Atwood, Steve Futch, and Michael Rogers</i>	
A Summary of Nematode Soil Sampling Results from the Indian River Area in 2010–2011	93
<i>Timothy P. Gaver*, Alex Truszkowski, and Larry Duncan</i>	

Winter-injury Following Horticultural Treatments to Overcome Juvenility in Citrus Seedlings	95
<i>Ed Stover*, Kim Bowman, and Peter Chaires</i>	
Response of Citrus to Exogenously Applied Salicylate Compounds during Abiotic and Biotic Stress	101
<i>Kirandeep K. Mann*, Arnold W. Schumann*, and Timothy M. Spann</i>	
Quantification of Furanocoumarins and Acids in Grapefruit Hybrid Populations to Evaluate Their Relation and Assist Selection	111
<i>Chunxian Chen, Fred Gmitter, Jr.*, Carl Haun, and Paul Cancalon</i>	
Air Temperatures within a Florida Citrus Grove Using Microsprinkler Irrigation for Cold Protection.....	115
<i>Chris Oswalt*, Ryan Atwood, and Timothy Spann</i>	
Economic Arguments for and against Tree Eradication to Control HLB.....	119
<i>Fritz M. Roka*</i>	
Balanced Mineral Nutrition Decreases Greasy Spot Incidence in Citrus.....	123
<i>Kirandeep K. Mann*, Arnold W. Schumann*, and Timothy M. Spann</i>	
New Somatic Hybrid Rootstock Candidates for Tree-size Control and High Juice Quality.....	131
<i>J.W. Grosser*, J.L. Chandler, P. Ling, and G.A. Barthe</i>	

VEGETABLE SECTION

Efficacy of Programs of Experimental and Registered Miticides for Twospotted Spider Mite [<i>Tetranychus urticae</i> Koch (Acari: Tetranychidae)] Management on Strawberry	136
<i>James F. Price* and Curtis A. Nagle</i>	
Abundance and Management of Melon Thrips, <i>Thrips palmi</i> Karny (Thysanoptera: Thripidae).....	140
<i>Dakshina R. Seal*</i>	
Diel Density Patterns of Leafminer, <i>Liriomyza trifolii</i> (Diptera: Agromyzidae), and Two Parasitoids, <i>Opius dissitus</i> (Hymenoptera: Braconidae) and <i>Diglyphus</i> spp. (Hymenoptera: Eulophidae)	144
<i>Li Jian, Dakshina R. Seal*, Gary L. Leibee, and Oscar E. Liburd</i>	
Evaluation of Herbicides for Management of Weeds in Sweet Basil (<i>Ocimum basilicum</i>).....	150
<i>Dezhi D. Sui*, Dennis C. Otero, Richard N. Raid, and William M. Stall</i>	
Evaluation of Acibenzolar-S-Methyl and Silicic Acid for control of Phytophthora Blight Caused by <i>Phytophthora capsici</i> in Squash.....	154
<i>Shouan Zhang*, Waldemar Klassen, Xiaodan Mo, Pingsheng Ji, and Amanda J. Gevens</i>	
Reduced Incidence of Tomato Plants with Symptoms of <i>Tomato yellow leaf curl virus</i> Infection Grown on Ultraviolet-reflective Soil Mulch.....	162
<i>David J. Schuster*, James P. Gilreath, Roberto Cordero, and Phyllis R. Gilreath</i>	
Snap Bean Variety Evaluation on Yield and Postharvest Quality in Florida Sandy and Muck Soils.....	166
<i>Crystal A. Snodgrass*, Monica Ozores-Hampton, Richard Raid, Eugene McAvoy, and David Sui</i>	

Growing and Marketing Beets at Local Green Markets in Southeast Florida, 2007–2011	170
<i>Kenneth D. Shuler*, Daniel G. Shuler, and Deanna V. Shuler</i>	
Use of Real-time Florida Automated Weather Network Data in Support of Strawberry Cold Protection and Irrigation Scheduling.....	174
<i>Kelly T. Morgan* and William R. Lusher</i>	
Growing and Marketing Dandelion Greens at Local Green Markets in Southeast Florida, 2003–2011	177
<i>Kenneth D. Shuler*, Pei-Ann N. Shuler, Deanna V. Shuler, Daniel G. Shuler, and Stephen J. Shuler Nie</i>	
Bell Pepper Production under Protective Structures: Evaluation of Soilless Media and Container Types.....	182
<i>Emmanuel A. Torres*, Bielinski M. Santos, and Carlos A. Zambrano</i>	
Effects of Cell Size on the Production of Containerized Strawberry Transplants in Florida	184
<i>Pei-wen Huang*, Bielinski M. Santos, and Vance M. Whitaker</i>	
Evaluation of Freeze Protection Methods for Strawberry Production in Florida.....	188
<i>Bielinski M. Santos*, David N. Moore, Teresa P. Salame-Donoso, Craig D. Stanley, and Alicia J. Whidden</i>	
Evaluation of Planting Densities and Shoot Pruning Practices for Indeterminate Bell Pepper Production in Dominican Republic, Honduras, and Costa Rica.....	191
<i>Bielinski M. Santos*, Teresa P. Salame-Donoso, Henner A. Obregon-Olivas, Jessie E. Inestroza, Ricardo Galeano, Marco V. Saenz, Jose E. Monge-Perez, Maria G. Cuevas, Emmanuel A. Torres-Quezada, and Carlos J. Mendez-Urbaez</i>	
Characterization and Management of Lenticel Disorders during Storage of Table Stock Potatoes (<i>Solanum tuberosum</i> L.).....	194
<i>M.N. Makani*, S.A. Sargent, D.J. Huber, and J.A. Bartz</i>	
Estimating Strawberry Yield and Sting Nematode Impacts Using Counts of Plant Sizes and Fruit Stems.....	197
<i>Joseph W. Noling*</i>	

HANDLING & PROCESSING SECTION

Effect of Fruit Size and Huanglongbing Disease on Orange Juice Attributes.....	202
<i>C.O. Ipechukwu, C.A. Sims, M.D. Danyluk, T.M. Spann, and R.M. Goodrich*</i>	
Stability of Headspace Volatiles in a ‘Fallglo’ Tangerine Juice Matrix System at Room Temperature	207
<i>Jinhe Bai, Elizabeth A. Baldwin*, and Anne Plotto</i>	
Environmental Conditions Encountered during Distribution from the Field to the Store Affect the Quality of Strawberry (‘Albion’)	213
<i>Yun-Pai Lai, Jean-Pierre Emond, and Maria Cecilia do Nascimento Nunes*</i>	
Potential for Grading, Sanitizing, and Hydrocooling Fresh Strawberries	221
<i>Angelo P. Jacomino, Steven A. Sargent*, Adrian D. Berry, and Jeffrey K. Brecht</i>	
Detection of Fluorescent Compounds in Citrus Leaf Cankers	227
<i>John A. Manthey* and Jan A. Narciso</i>	

Trichoderma Rot on ‘Fallglo’ Tangerine Fruit in Florida	232
<i>Cuifeng Hu, Mark A. Ritenour*, and Erin Roskopf</i>	
Development of a Chromatography System for Simultaneous Measurement of Atmospheric Gas Components: Use in Measurement of Oxygen, Carbon Dioxide, Nitrogen, Argon, and Ethylene within Individual Fruit and in the Storage Atmosphere	235
<i>Jinhe Bai*, Robert Graves, and Yan Wang</i>	
Establishing CO ₂ Tolerance of Pink Tomatoes in Modified Atmosphere Packaging at Elevated Handling Temperatures	241
<i>Angelos I. Deltsidis, Eleni D. Pliakoni, and Jeffrey K. Brecht*</i>	
Shelf Life of Cluster Tomatoes (<i>Lycopersicon esculentum</i>) Stored at a Non-chilling Temperature and Different Relative Humidity Levels	246
<i>Debra Chilson, Astrid Delgado, and Maria Cecilia N. Nunes*</i>	
Bell Pepper Bruising Increases with Lower Temperature and Higher Turgidity	256
<i>Jeffrey K. Brecht* and Steven A. Sargent</i>	
Sensory Evaluation of Tangerine Hybrids at Multiple Harvests	260
<i>Anne Plotto*, Elizabeth Baldwin, Greg T. McCollum, and Frederick G. Gmitter, Jr.</i>	

ORNAMENTAL, GARDEN & LANDSCAPE SECTION

Effects of Production Shade Levels and Cultivar Selection on Potted and Cut Caladium Performance in Interiorscapes	264
<i>Robert H. Stamps* and Heidi M. Savage</i>	
Designing an Edible Landscape or Eat Your Yard	268
<i>Anita S. Neal*</i>	
Creating a Native ID Garden to Teach Sustainable Landscaping Concepts	270
<i>Michael Orfanedes*</i>	
Reinforcing Green Industry Best Management Practices through an Interactive Landscape Field Day	274
<i>Edward Skvarch*, Daniel Culbert, Christine Kelly-Begazo, Henry Mayer, and William Schall</i>	
Fertilizer Selection as a pH Management Tool in Floriculture Production	276
<i>Connie N. Johnson, Paul R. Fisher*, and Jinsheng Huang</i>	
Efficacy of Copper Sanitizers in Subirrigation Tanks	281
<i>Gavin S. Mohammad-Pour, Dale W. Haskell, Jinsheng Huang, and Paul R. Fisher*</i>	
Review of Efficacy Tests for Chlorination of Irrigation Systems ..	285
<i>Rosa. E. Raudales, Paul R. Fisher*, Carrie Lapaire Harmon, and Bruce R. MacKay</i>	
Disinfectant Chemicals to Control Waterborne Pathogens Are Deactivated by Peat Particles in Irrigation Water	289
<i>Jinsheng Huang*, Dustin P. Meador, Paul R. Fisher, Danilo B. Decio, and W.E. Horner</i>	
Components of Sustainable Production Practices for Container Plant Nurseries	294
<i>Alex Bolques*, Gary Knox, Matthew Chappell, Linda Landrum, and Edwin Duke</i>	
Successful Implementation of Florida-Friendly Landscaping™ in a Community Setting	299
<i>Lynn A. Barber* and Brian Niemann</i>	

Weevil Problems in the Landscape with Emphasis on <i>Myllocerus undatus</i> (Sri Lanka Weevil).....	301
<i>Henry Mayer* and Catharine Mannion</i>	
Performance of Soil Solarization and Methyl Bromide in Sites Infested with Root-knot Nematodes	303
<i>Robert McSorley*, Harsimran K. Gill, Heidi N. Hanspetersen, Erin N. Roskopf, and Nancy Kokalis-Burelle</i>	
Countertop Production of Predatory Mites for Public Distribution	308
<i>Juanita Popenoe*, William Schall, and Lance Osborne</i>	
Effect of Different Inorganic/Synthetic Mulches on Weed Suppression during Soil Solarization	310
<i>Harsimran K. Gill* and Robert McSorley</i>	
Efficacy of Fungicides for Control of <i>Colletotrichum gloeosporioides</i> on Dendrobiums	314
<i>Robert T. McMillan, Jr.*</i>	
Evaluation of Ten Groundcovers as a Landscape Banker Plant for <i>Amblyseius swirskii</i>	317
<i>Mary E. Henry*, Sydney Park Brown, Steven Arthurs, and Lance S. Osborne</i>	
A Severe Outbreak of <i>Xanthomonas</i> on <i>Ficus elastica</i> in South Florida	321
<i>E. Vanessa Campoverde*, and Aaron J. Palmateer</i>	

POSTER PAPERS AND ABSTRACTS SECTION

Beginning Farmers: Hmong Grower Meeting Series.....	323
<i>M.E. Henry, C. Snodgrass, and A. Whidden</i>	
Field Evaluation of Blueberry Pruning Techniques	324
<i>R.A. Atwood and G.K. England</i>	
Fungicidal Management of Alternaria Leaf Spot on Parsley	325
<i>D.D. Sui and R.N. Raid</i>	
Making Impacts with the Annual Hay Field Day	326
<i>C.B. Sanders, B.J. Wilder, D.L. Barber, J.W. Breman, M.S. Sweat, B. Burbaugh, D. Fenneman, S.A. Gaul, D.B. Nistler, E.M. Toro, and T.W. Wilson</i>	
Pesticide Formulations: The Benefit of Interactive CORE Workshops	327
<i>E.E. Harlow</i>	
Rain Lilies for Central Florida.....	328
<i>M. D’Abreau, Z. Deng, R. Rixom, D. Schwaninger, and N. West</i>	
Remove the Confusion of Pesticide Licensing	329
<i>S. Haddock</i>	
Vegetable Growers in the Suwannee Valley Optimize Fertilizer Use by Implementing Best Management Practices.....	330
<i>D. Fenneman, E. Toro, R. Hochmuth, M. Bauer, and C. Vann</i>	
Using Lawn and Landscape Best Management Practices Training to Improve Water Quality	331
<i>J.V. Morse*</i>	
Using TurningPoint Technology to Train and Evaluate Limited Commercial Landscape Maintenance Participants	331
<i>J.V. Morse*</i>	