INDEX
Arboriculture & Urban Forestry
Volume 40, 2014

Acer spp. (maple)
- branch dynamics on open-grown tree, 125
- crown structure and dynamic properties, 218
- increased growth with improved soil quality, 319
- pruning buttress roots, 230

anchoring landscape trees, 27

apple scab
- phosphate for control, 237

ash (Fraxinus spp.)
- failure criteria in branch members, 36
- patterns of herbivory by borers, 332

ash borer, emerald
- patterns of herbivory, 332

Avalos, Javier (and A. Sánchez),
- Evaluation of failure criteria in branch members under torsion and bending moment, 36

Banks, Jonathan M. (and G.C. Percival),
- Failure of foliar-applied biostimulants to enhance drought and salt tolerance in urban trees, 78

beech (Fagus spp.)
- biostimulants to enhance drought and salt tolerance, 78

beetle, longhorned
- host trees, 143

bending stress
- anchorage of container-grown mahogany, 27
- failure criteria, 36

Betula spp. (poplar)
- increased growth with improved soil quality, 319

biomechanics
- crown structure and dynamic properties in maple, 218
- literature review, 1
- white paper, 309

biostimulants
- drought and salt tolerance enhancement, 78

book reviews
- The Life of a Leaf, 49
- Methods in Forest Canopy Research, 187
- The Practical Science of Planting Trees, 112

Tree Health—A Practical and Precise Estimation Method, 351
Wasp and Bee Management: A Common-Sense Approach, 46

borer, emerald ash
- patterns of herbivory, 332

branches
- dynamics on open-grown tree, 125
- failure criteria evaluation, 36

Bryant, Gregory. see Noukoun, Chanthammavong

California Million Trees LA, 286
campuses
- tree condition and value for, 165
cankerworm
- effect of sticky bands, 135

collective action
- neighborhood-planted trees, 84

compost
- to improve soil quality, 319

container stock
- anchorage of mahogany, 27

root ball morphology, 16
Cowett, F.D.,
- Methodology for spatial analysis of municipal street tree benefits, 112
crown structure
- and dynamic properties in maple, 218

Custic, Melissa. see Watson, Gary W.

Dahle, Gregory (and J. Grabosky, B. Kane, J. Miesbauer, W. Peterson, F.W. Telewski, A. Kooser, and G. Watson),
- Tree biomechanics: A white paper from the 2010 international meeting at research summit at The Morton Arboretum (Lisle, Illinois, U.S.), 309 see also James, Kenneth R.
defoliation
cankerworm, 135

Delshammar, Tim. see Nielsen, Anders B.
demographics
- tree planting programs, 70

Detter, Andreas. see James, Kenneth R.

Donovan, Geoffrey H. (and J. Mills),
- Environmental justice and factors that influence participation in tree planting programs in Portland, Oregon, U.S., 70
drought tolerance
- biostimulants to enhance, 78

emerald ash borer
- patterns of herbivory, 332

environmental justice
- tree planting programs, 70

Fagus spp. (beech)
- biostimulants to enhance drought and salt tolerance, 78

Fertilizer and Fertilizing
- trees in field soil, 178

Fraedrich, Bruce R. see Smiley, E. Thomas

Frank, Steven D. see Noukoun, Chanthammavong

Fraxinus spp. (ash)
- failure criteria in branch members, 36
- patterns of herbivory by borers, 332

fungi
- apple scab, 237

Gilman, Edward F. (and C. Harchick),
- Root system morphology influences lateral stability of Swietenia mahagoni, 27

Gilman, Edward F. (and M. Paz),
- Container production strategies influence root ball morphology, 16

Gilman, Edward F. (and M.D. Marshall),
- Fertilizer rate and number of applications impact growth of trees in field soil, 178 see also Miesbauer, Jason W.

Giurcanu, Mihai. see Miesbauer, Jason W.

Gradosky, Jason. see Dahle, Gregory;
- James, Kenneth R.
ground scanning
- single-tree level data collection, 96

- Comparative assessment of phosphate formulations for apple scab (Venturia inaequalis) control, 237

Harchick, Chris. see Gilman, Edward F.

Hewitt, Angela M. see Watson, Gary W.
holly (Ilex spp.)
- biostimulants to enhance drought and salt tolerance, 78

Holmes, Liza. see Smiley, E. Thomas

human impacts
- mitigating impacts on root systems, 249
hurricanes
low cycle fatigue failure in hurricane winds, 272

Ilex spp. (holly)
biostimulants to enhance drought and salt tolerance, 78

Indiana
neighborhood-planted trees, 84

James, Kenneth R., A study of branch dynamics on an open-grown tree, 125

James, Kenneth R. (and G.A. Dahle, J. Grabosky, B. Kane, and A. Detter), Tree biomechanics literature review: Dynamics, 1

Kane, Brian. see Dahle, Gregory; James, Kenneth R.

Kooser, Andrew. see Dahle, Gregory

Kulhavy, David L. (and D. Wu, D.R. Unger, I-K. Hung, and J. Sun), Comparison of tree condition and value for city parks and Stephen F. Austin State University in Nacogdoches, Texas, U.S., 165

Leigh, Warren B., Low cycle fatigue failure of a Sitka spruce tree in hurricane winds, 272

Lo, Marvin. see Watson, Gary W.

longhorned beetle
host trees, 143

mahogany (Swietenia spp.)
anchorage of container-grown, 27

manganese, 345

maple (Acer spp.)
branch dynamics on open-grown tree, 125
crown structure and dynamic properties, 218
increased growth with improved soil quality, 319
pruning buttress roots, 230

Marshall, Michael D. see Gilman, Edward F.

Martinson, Holly M. (and C. Sargent and M.J. Raupp), Tree water stress and insect geographic origin influence patterns of herbivory by borers in green (Fraxinus pennsylvanica) and Manchurian (F. mandshurica) ash, 332

McPherson, E. Gregory, Monitoring Million Trees LA: Tree performance during the early years and future benefits, 286

micronutrients, 345

Miesbauer, Jason W. (and E.F. Gilman and M. Giurcanu), Effects of tree crown structure on dynamic properties of Acer rubrum L. ‘Florida Flame;’ 218 see also Dahle, Gregory


Moore, G.M., Wind-thrown trees:
Storms of management? 53

Nielsen, Anders B. (and J. Östberg and T. Delshammar), Review of urban tree inventory methods used to collect data at single-tree level, 96

Nilsson, Johan. see Sjöman, Henrik

Noukoun, Chanthammavong (and G.A. Dahle, J. Grabosky, B. Kane, and A. Detter), Tree biomechanics literature review: Dynamics, 1

Percival, Glynn C. see

parching of buttress roots, 230

Peterson, Ward. see Dahle, Gregory

phosphate
for apple scab control, 237

Phytophthora
and yew, 345

Picea spp. (spruce)
low cycle fatigue failure in hurricane winds, 272

plant nutrition
tissue testing for optimal, 345

planting initiatives
Million Trees LA, 286

poplar (Betula spp.)
increased growth with improved soil quality, 319

pruning buttress roots, 230

Quercus spp. (oak)
biostimulants to enhance drought and salt tolerance, 78

Rhode Island
spatial analysis of street tree benefits, 112

roots
influence of morphology on anchorage, 27
influence of soil in urban and suburban settings, 193
mitigating human impacts, 249
pruning buttress, 230
root ball morphology influenced by container production, 16 and windthrow, 53

rowan (Sorbus spp.)
biostimulants to enhance drought and salt tolerance, 78

salt tolerance
biostimulants to enhance, 78
Sánchez, Adolfo. see Avalos, Javier
Sargent, Chris. see Martinson, Holly M.
Scharenbroch, Bryant C. (and G.W. Watson), Wood chips and compost improve soil quality and increase growth of Acer rubrum and Betula nigra in compacted urban soil, 319
Smiley, E. Thomas (and L. Holmes and B. Fraedrich), Pruning of buttress roots and stability changes of red maple (Acer rubrum), 230

soil
improving compacted urban, 319
influence on root growth in urban and suburban settings, 193

Sorbus spp. (rowan)
biostimulants to enhance drought and salt tolerance, 78

spatial analysis
street tree benefits, 112

spruce (Picea spp.)
low cycle fatigue failure in hurricane winds, 272

storms
low cycle fatigue failure in hurricane winds, 272
windthrow damage, 53

street trees
single-tree level data collection, 96 spatial analysis of benefits, 112

surveys
single-tree level data collection, 96

Swietenia spp. (mahogany)
anchorage of container-grown, 27

©2014 International Society of Arboriculture
systemic induced resistance
phosphite for apple scab control, 237

_Taxus spp._ (yew)
managing in the landscape, 345

Taylor, Matthew D., Preventing
death and _Taxus_: Review and
recommendations for managing
_Taxus_ in the landscape with overview
on _Phytophthora cinnamomii_, soil ,
and nutrition status, 345

Telewski, Frank W. _see_ Dahle, Gregory

**Texas**
tree condition and value for parks and
university, 165

**tissue testing**
for optimal plant nutrition, 345

**tree failure**
evaluation in branch members, 36
low cycle fatigue in hurricane winds,
272
white paper, 309

**tree inventories**
for parks and campuses, 165
single-tree level data collection, 96

**tree planting**
neighborhood-planted trees, 84
program participation, 70

**trees**
biomechanics, 1
host for longhorned beetle, 143
influence of fertilizer rates and
number of applications on growth,
178
valuation for parks and campuses, 165

Unger, Daniel R. _see_ Kulhavy, David L.

Vogt, Jessica M. _see_ Mincey, Sarah K.

**water**
management for mature yew, 345
neighborhood-planted trees, 84
stress and patterns of herbivory, 332

Watson, Gary W. (and A.M. Hewitt, M.
Custic, and M. Lo), The management
of tree root systems in urban and
suburban settings: A review of soil
influence of root growth, 193

Watson, Gary W. (and A.M. Hewitt, M.
Custic, and M. Lo), The management
of tree root systems in urban and
suburban settings II: A review of
strategies to mitigate human impacts,
249

 _see also_ Dahle, Gregory;
Scharenbroch, Bryant C.

**wind**
causes of windthrow, 53
low cycle fatigue failure in hurricane
winds, 272
tree biomechanics, 1

**wood chips**
to improve soil quality, 319

Wu, Di. _see_ Kulhavy, David L.

**yew (Taxus spp.)**
managing in the landscape, 345

**zinc**, 345