



INDEX Arboriculture & Urban Forestry Volume 46, 2020

Acer spp. diversity in Massachusetts, USA, 27 Acimovic, Srdjan. See Doccola, Joseph J. age groups regarding LSQI mean comparisons between, 96 agroforestry systems natural regeneration and seed dispersal of Persian walnut (Juglans regia L.) in, 174 Aiken, John Joseph. See Doccola, Joseph J. air pollution removal by dry deposition processes, 287 air-quality improvement heritage trees effects on, 109 American elms (Ulmus americana) internal decay under regular fungicide injection, 1 ANSI Z standards safety requirements and recommendations for arboricultural operations, 67 Apple scab influence of inducing resistance (IR) agents on, 358 Arabomen, O. (and P.W. Chirwa, and F.D. Babalola), Understanding Public Willingness to Participate in Local Conservation Initiatives of Urban Trees in Benin City, Nigeria, 247 Araújo, Yuri Rommel Vieira (and T.F. Melquíades, M. Carvalho, and L.M. Coelho Jr.), Time Series Analysis of Urban Forest Waste in João Pessoa (Northeast Brazil), 163 arboricultural operation incidents implications for safety training, 67 Austrian pines (Pinus nigra) phenotyping for resistance to D. sapinea, 276 systemic tree injection of propizol in, 44 Autoregressive Integrated Moving Average (ARIMA) of urban forest waste, 163 Babalola, F.D. See Arabomen, O. Badalamenti, Emilio. See da Silveira Bueno, Rafael Ball, John (and S.J. Vosberg, and T. Walsh), A Review of United States Arboricultural Operation Fatal and

Nonfatal Incidents (2001-2017): Implications for Safety Training, 67 bark-included junctions load-bearing capacity assessment in Crataegus monogyna Jacq., 210 Barone, Ettore. See da Silveira Bueno, Rafael **Bartlett Tree Experts** sensitivity analysis of, 402 basal area canopy cover modeling as function of, 12 Bassuk, Nina L. See Cowett, F.D. Beezley, Kenneth E. (and G.A. Dahle, J. Miesbauer, and D. DeVallance), Strain Patterns Across the Root-Stem Transition Zone in Urban Trees, 321 Benin City, Nigeria conservation initiatives of urban trees in. 247 Bin quantile regression analysis of i-Tree Eco modules for, 287 biogenic volatile organic compound (BVOC) emissions VD analysis of, 287 biomass age, and ecosystem services, relationships among, 109 urban pruning waste in João Pessoa, 163 Bonello, Pierluigi (Enrico). See Conrad, Anna O. Brazee, Nicholas J. (and R.E. Marra), Incidence of Internal Decay in American Elms (Ulmus americana) Under Regular Fungicide Injection to Manage Dutch Elm Disease, 1 Bridges, Lee E. (and S.C. Grado, J.S. Gordon, D.L. Grebner, and J.D. Kushla), The Influence of Canopy Cover on Property Values in a Small Southern US City, 262 Cairone, Andrea. See da Silveira Bueno, Rafael Campbell, Lindsay K. See Huff, Emily S. canopy cover before and after housing redevelopment, evaluation of, 12

influence on property values, 262 relationship with variables, 84 canopy growth before and after housing redevelopment, 12 carbon sequestration DBH role in, 287 heritage trees effects on, 109 carbon storage DBH role in, 287 by heritage trees, 109 Carvalho, Monica. See Araújo, Yuri Rommel Vieira Central Pennsylvania, USA IVM along electrical ROW in, 395 Chirwa, P.W. See Arabomen, O. Chojnacky, Cindy C. See Chojnacky, David C. Chojnacky, David C. (and E.K. Smith-McKenna, L.Y. Johnson, J.A. McGee, and C.C. Chojnacky), Evaluating Urban Canopy Cover Before and After Housing Redevelopment in Falls Church, Virginia, USA, 12 climate change influence on Juglans regia naturalization, 174 Coelho, Luiz Moreira Jr. See Araújo, Yuri Rommel Vieira **Colorado Tree Coalition (CTC)** sensitivity analysis of, 402 Conrad, Anna O. (and C. Villari, P. Sherwood, and P. (Enrico) Bonello), Phenotyping Austrian Pine for Resistance Using Fourier-Transform Infrared Spectroscopy, 276 conservation initiatives of urban trees in Benin City, 247 Contreras, Ryan. See Petter, Joshua correlation matrix with canopy cover, schedule of day, and season as variation sources, 84 Cowett, F.D. (and N.L. Bassuk), Street Tree Diversity in Massachusetts, USA, 27 cross-sectional vibrational mode monitoring in palm tree trunk, 307

Dahle, Gregory A. See Beezley, Kenneth E. Daniluk-Mosquera, Gustavo. See Ponce-Donoso, Mauricio D'Antonio, Ashley. See Petter, Joshua da Silveira Bueno, Rafael (and E. Badalamenti, E. Barone, A. Cairone, A. La Mantia, G. Sala, and T. La Mantia), First Assessment of Natural Regeneration and Seed Dispersal of Persian Walnut (Juglans regia L.) in Mediterranean Agroecosystems, 174 data collection method resilience concept in urban forestry, 185 decay in American elms (Ulmus americana) under regular fungicide injection, 1 Delagrange, Sylvain. See Perrette, Guillaume DeVallance, David. See Beezley, Kenneth E. digital image correlation (DIC) imagery of strain patterns, 321 dinotefuran within-plant distribution and efficacy for EAB suppression, 347 Diplodia sapinea phenotyping Austrian pine for resistance to, 276 Diplodia tip blight (Diplodia pinea) Propizol efficacy for control of, 44 diversity indices at species and genus levels, 27 Doccola, Joseph J. (and J.J. Aiken, M. Waindle, D.M. Grosman, and S. Acimovic), Systemic Tree Injection of Propizol (14.3% wt./wt. propiconazole ME) in Austrian Pine (Pinus nigra) for Control of Diplodia Tip Blight (Diplodia pinea), 44 Doccola, Joseph J. (and S.L. Smith, J.B. Fischer, and B.L. Strom), Evaluation of Stem-Injected TREE-äge® (4% Emamectin Benzoate) for Protecting Western White Pines (Pinus monticola) from Mountain Pine Beetle (Dendroctonus ponderosae Hopkins)(Coleoptera: Curculionidae: Scolvtinae), 333 dry deposition processes air pollution removal by, 287 Dutch elm disease (DED) management of American elms (Ulmus americana) under fungicide injection, 1 ecological approach to resilience in urban forestry, 185 ecosystem services age, and biomass structure, relationships among, 109

perceptions of respondents on, 247 sensitivity analysis (SA) of i-Tree Eco, 287 electrical lines reduction pruning of trees under, 432 right-of-way, noncompatible trees species along, 395 electrical-resistance tomography (ERT) internal decay in American elms, 1 electrical rights-of-way (ROW) vegetation management methods selective herbicide use and, 395 elm leaf beetle (ELB) grazing of elms heat wave effects on. 135 emamectin benzoate (EB) as protective treatment for western white pines, 333 Emami, Farzin. See Hami, Ahmad emerald ash borer (EAB) systemic neonicotinoid applications for suppression of, 347 environmental variables and urban trees, relationships between, 84 epicormic branch development intensity and timing of reduction pruning on, 432 estimation error for UTC and land cover types, 51 Eucalyptus camaldulensis trees heat wave effects and mistletoes on, 135 failure kinematics of bark-included branch junctions, 210 fatal and nonfatal incidents of arboricultural operation in United States, 67 Fischer, Joseph B. See Doccola, Joseph J. forecasting urban forest waste generation in João Pessoa, 163 forestry management epicormic branch establishment and development in, 432 Fourier-transform infrared spectroscopy phenotyping Austrian pine for resistance using, 276 fungicide injection for control of Diplodia tip blight (Diplodia pinea), 44 for Dutch elm disease of American elms (Ulmus americana), 1 fungicide (penconazole) spray program for apple and pear scab control, 358 genus diversity of street trees in Massachusetts, USA, 27 geospatial methods for tree canopy assessment, 51

Ghosh, Subhadip. See Ow, Lai Fern globe temperature tree shade and turf effects on, 228 Gordon, Jason S. See Bridges, Lee E. Grabosky, Jason, Editor's Note: Seeing the Forest for the Trees, 388 Grado, Stephen C. See Bridges, Lee E. Grebner, Donald L. See Bridges, Lee E. green infrastructure contributing to urban resilience, 185 Grosman, Donald M. See Doccola, Joseph J. Hami, Ahmad (and M. Tarashkar, and F. Emami), The Relationship Between Women's Preferences for Landscape Spatial Configurations and Relevant Socio-Economic Variables, 96 hawthorn (Crataegus monogyna Jacq.) load-bearing capacity of branch junctions in, 210 hazards of arboricultural operation, 67 heat wave effects on urban tree pests in Melbourne, 135 Hedonic Pricing Model (HPM) for Lakeland, Tennessee, USA, 262 herbicide treatment trees and native compatible flowering plant species, 395 heritage trees in Macau, 109 Huff, Emily S. (and M.L. Johnson, L.A. Roman, N.F. Sonti, C.C. Pregitzer, L.K. Campbell, and H. McMillen), A Literature Review of Resilience in Urban Forestry, 185 Hume City Council (HCC) sensitivity analysis of, 402 Hwang, Won Hoi (and P.E. Wiseman), Geospatial Methods for Tree Canopy Assessment: A Case Study of an Urbanized College Campus, 51 image classification of urban tree canopy (UTC), 51 Iman Conover method for correlation structure of input variables, 287 imidacloprid within-plant distribution and efficacy for EAB suppression, 347 inducing resistance (IR) agents efficacy as scab protectants, 358 Ingram, Benjamin. See Ponce-Donoso, Mauricio integrated vegetation management (IVM) along electrical rights-of-way (ROW), 395

interviews of tree crews in relation to wood recovery program, 197 **ISA certification** influence on tree species selection decision, 148 isoprene and monoterpenes, emissions of VD analysis of, 287 *i*-Tree Canopy for UTC assessments, 51 Jim, C.Y. See Lai, Po Ying João Pessoa time series analysis of urban forest waste in, 163 Johnson, Laura Y. See Chojnacky, David C. Johnson, Michelle L. See Huff, Emily S. Kenyon method sensitivity analysis of, 402 Kloster, Danielle P. (and A.T. Morzillo, J.C. Volin, and T.E. Worthley), Tree Crew Perspectives on Wood Product Recovery from Utility Vegetation Management, 197 knowledge of ecosystem services demographic measures of respondents based on, 247 Kroll, Charles N. See Lin, Jian Kushla, John D. See Bridges, Lee E. Lai, Po Ying (and C.Y. Jim, and H. Zhang), Heritage Trees in Macau: Relationships Among Biomass Structure, Age, and Ecosystem Services, 109 Lakeland, Tennessee urban forest canopy cover impact on property values in, 262 La Mantia, Andrea. See da Silveira Bueno, Rafael La Mantia, Tommaso. See da Silveira Bueno, Rafael land cover classes for photo interpretation of urban tree canopy, 51 landscape spatial quality indicators (LSQIs) women's preferences for, 96 leaf-on season versus leaf-off season main-stem reduction during, 432 Lefoe, G. See Moore, G.M. Lin, Jian (and C.N. Kroll, and D.J. Nowak), Ecosystem Service-Based Sensitivity Analyses of i-Tree Eco, 287 literature review of resilience in urban forestry, 185 load-bearing capacity assessment bark-included junctions in Crataegus monogyna Jacq., 210 logit model descriptive measures in, 247

Lokman, Mohamed. See Ow, Lai Fern Macau heritage trees in, 109 Mahan, Carolyn G. (and B.D. Ross, and R.T. Yahner), The Effects of Integrated Vegetation Management on Richness of Native Compatible Flowering Plants and Abundance of Noncompatible Tree Species on a Right-of-Way in Central Pennsylvania, USA, 395 Mann-Whitney U test of tree species selection criteria, 148 marginal implicit price for percent tree cover, 262 Marra, Robert E. See Brazee, Nicholas J. Massachusetts, USA street tree diversity in, 27 Matheny and Clark (MandC) method sensitivity analysis of, 402 McGee, John A. See Choinacky, David C. McMillen, Heather. See Huff, Emily S. Meadows, Dean (and D. Slater), Assessment of the Load-Bearing Capacity of Bark-Included Junctions in Crataegus monogyna Jacq. in the Presence and Absence of Natural Braces, 210 mechanical load transfer through root-stem transition zone (RSTZ), 321 mechanical vegetation management approaches trees and native compatible flowering plant species present on ROW, 395 Mediterranean agroecosystems natural regeneration and seed dispersal of Persian walnut (Juglans regia L.) in, 174 Melbourne, Australia heat wave effects on urban tree pests in. 135 Melquíades, Thiago Freire. See Araújo, Yuri Rommel Vieira Messier, Christian. See Perrette, Guillaume Miesbauer, Jason. See Beezley, Kenneth E. mistletoes (Amyema miquelii and A. pendula) growing on Eucalyptus camaldulensis trees, heat wave effects on, 135 monetary value of ecosystem services of urban forests, 109 **Monte Carlo simulation** of tree risk assessment methods, 402 Monte Carlo simulation with Latin hypercube sampling (LHS-MC) for correlation structure of input variables, 287 Moore, G.M. See Norris, M.B.

Moore, G.M. (and G. Lefoe), The Effect of a Heat Wave on Urban Tree Pests in Melbourne, Australia: Examples that May Inform Climate Change Tree Management, 135 Morris one-at-a-time method (MOAT) for correlation structure of input variables, 287 Morzillo, Anita T. See Kloster, Danielle P. mountain pine beetle (MPB, Dendroctonus ponderosae Hopkins) emamectin benzoate as protective treatment for western white pines against, 333 municipalities street tree inventories from, 27 tree inventory and city size, relationship between, 148 tree species diversity in, 371 native flowering plant species richness on electrical rights-of-way (ROW), 395 natural braces effect on failure kinematics of barkincluded branch junctions, 210 naturalization and seed dispersal of Persian walnut (Juglans regia L.), 174 neonicotinoid insecticides within-plant distribution and efficacy for EAB suppression, 347 New York City (NYC) i-Tree Eco module sensitivity analysis for, 287 noncompatible trees species, abundance of under electric transmission line rightof-way, 395 nondestructive rot detection methods for rot attacks, 307 Norris, M.B. (and G.M. Moore), How Tree Risk Assessment Methods Work: Sensitivity Analyses of Sixteen Methods Reveal the Value of Quantification and the Impact of Inputs on Risk Ratings, 402 Nowak, David J. See Lin, Jian occupational injuries to arborists involving fatal or nonfatal injuries, 67 Olson, David G. (and L.H. Townsend, E. Roemmele, and L.K. Rieske), Another Look at Systemic Neonicotinoid Applications for Emerald Ash Borer Suppression, 347 ordinary least squares (OLS) regression for Hedonic Pricing Model estimation, 262 Oregon

tree selection survey in, 371

Ouis, Djamel, Monitoring of a Cross-Sectional Vibrational Mode in the Trunk of a Palm Tree, 307 ovalling mode of vibration in palm tree trunk, 307 Ow, Lai Fern (and S. Ghosh, M. Lokman, and M. Yusof), The Benefits of Tree Shade and Turf on Globe and Surface Temperatures in an Urban Tropical Environment, 228 palm tree trunk cross-sectional vibrational mode monitoring in, 307 partial least squares regression (PLSR) of transformed FT-IR spectra, 276 pear scab influence of inducing resistance (IR) agents on, 358 Percival, Glynn C., The Influence of Inducing Agents Applied by Soil Drenches on Disease Severity of Apple and Pear Scab, 358 Perrette, Guillaume (and S. Delagrange, and C. Messier), Optimizing Reduction Pruning of Trees Under Electrical Lines: The Influence of Intensity and Season of Pruning on Epicormic Branch Growth and Wound Compartmentalization, 432 Persian walnut (Juglans regia L.) natural regeneration and seed dispersal of. 174 Petter, Joshua (and P. Ries, A. D'Antonio, and R. Contreras), A Tree Selection Survey of Tree City USA Designated Cities in the Pacific Northwest, 371 Petter, Joshua (and P. Ries, A. D'Antonio, and R. Contreras), How Are Managers Making Tree Species Selection Decisions in the Pacific Northwest of the United States?, 148 phloem consumption and EAB survival, differences in, 347 photo interpretation (PI) method of urban tree canopy (UTC) assessments, 51 physiological tree response after reduction pruning treatments, 432 plant hardiness zones for Massachusetts, 27 plants' spatial configuration women's perception of, 96 plant vitality measurements towards cessation of growing season, 358 Ponce-Donoso, Mauricio (and O. Vallejos-Barra, B. Ingram, and G. Daniluk-Mosquera), Urban Trees and

Environmental Variables: Relationships in a City of Central Chile, 84 power line clearance standards and reduction pruning treatments, 432 Pregitzer, Clara C. See Huff, Emily S. propizol efficacy for control of Diplodia tip blight (Diplodia pinea), 44 psyllid infestation heat wave effects on, 135 public participation in conservation initiatives of urban trees, 247 **QTRA and QTRA W Version** sensitivity analysis of, 402 quadratic mean diameter (qmd) canopy cover, 12 receiver operating characteristic (ROC) curve for support vector machine analysis, 276 reduction pruning of trees under electrical lines, 432 relative size class distributions of inventoried street trees in Massachusetts, 27 residential redevelopment urban canopy cover before and after, 12 resilience in urban forestry, 185 Ries, Paul. See Petter, Joshua Rieske, Lynne K. See Olson, David G. risk ratings impact of inputs on, 402 Roemmele, Eric. See Olson, David G. Roman, Lara A. See Huff, Emily S. root drenches IR agents as, against scab diseases, 358 root growth direction and strain magnitude in RSTZ, 321 root-stem transition zone (RSTZ) strain patterns across, 321 Ross, Bradley D. See Mahan, Carolyn G. rupture tests branch junctions in hawthorn, 210 safety concerns for wood product recovery, 197 safety training implications of arboricultural operation incidents for, 67 Sala, Giovanna. See da Silveira Bueno, Rafael scab diseases IR agents as root drenches against, 358 seasons and area measurements of environmental variables by, 84

seed dispersal in Persian walnut (Juglans regia L.), 174 sensitivity analysis (SA) of i-Tree Eco, 287 of tree risk assessment methods, 402 Sherwood, Patrick. See Conrad, Anna O. single-family residential property values urban forest canopy cover impact on, 262 Slater, Duncan. See Meadows, Dean Smith-McKenna, Emily K. See Chojnacky, David C. Smith, Sheri L. See Doccola, Joseph J. social-ecological systems (SES) approach to resilience in urban forestry, 185 socio-economic variables impact on women's preferences for landscape spatial quality indicators, 96 soft independent modeling of class analogy (SIMCA) of transformed FT-IR spectra, 276 soil drenches needed for scab protection, 358 sonic tomography (SoT) internal decay in American elms, 1 Sonti, Nancy F. See Huff, Emily S. southern United States urban forest canopy cover impact on property values in, 262 strain patterns induced in root-stem transition zone, 321 street tree diversity in Massachusetts, USA, 27 strip attacks by MPB in TREE-äge® trees, 333 Strom, Brian L. See Doccola, Joseph J. support vector machine (SVM) analysis to classify trees as resistant or susceptible, 276 surface temperature tree shade and turf effects on, 228 Talca, Chile relationships between urban trees and environmental variables in, 84 Tarashkar, Mahsa. See Hami, Ahmad **Threats method** sensitivity analysis of, 402 time series analysis of urban forest waste in João Pessoa. 163 tissue extraction for chemical fingerprinting, 276 Townsend, Lee H. See Olson, David G.

translocation of neonicotinoid insecticides, 347 TRAO method sensitivity analysis of, 402 TREE-äge® efficacy to protect trees against MPB, 333 tree biology elements in tree risk assessment, 402 tree canopy assessment geospatial methods for, 51 tree crews perspectives on wood product recoverv program, 197 tree injection emamectin benzoate as protective treatment against MPB, 333 of propizol in Austrian pines (Pinus nigra), 44 tree inventories influence on tree species selection by municipalities, 148 tree mortality as per Shea protocols, 333 tree protective treatments against beetle pressures, 333 tree risk assessment sensitivity analysis of, 402 tree responses to mechanical stress, 321 trees natural bracing in, 210 tree selection survey of tree city USA designated cities in Pacific Northwest, 371 tree shade effect on surface temperature and globe temperature, 228 tree species diversity in municipalities, 371 tree species selection factors influencing, 148 tree worker incidents fatal and nonfatal. 67 TRE Oualitative (TRE OL) sensitivity analysis of, 402 TRE Quantitative (TRE QT) sensitivity analysis of, 402 Tukey multiple comparison test for variables mean and source of variation, 84 turf cover effect on surface temperature and globe temperature, 228 **United States** arboricultural operation fatal and nonfatal incidents in, 67 urban canopy cover before and after housing redevelopment, evaluation of, 12

urban forest management tree species selection, 148 urban forest managers tree selection survey by, 371 urban forest model ecosystem service-sensitivity analysis (SA) of, 287 urban forestry geospatial methods for UTC assessment. 51 resilience in, 185 urban canopy cover before and after housing redevelopment, 12 urban forest waste time series analysis of, 163 urban parks women's preferences for landscape spatial quality indicators, 96 urban tree canopy (UTC) assessments geospatial methods for, 51 urban trees conservation initiatives in Benin City, 247 and environmental variables, relationships between, 84 pests, heat wave effects on, in Melbourne, 135 strain patterns across root-stem transition zone in, 321 urban tropical environment tree shade and turf effects on surface temperature and globe temperature in, 228 **USDAFS 1 and USDAFS 2** sensitivity analysis of, 402 utility vegetation management wood product recovery from, 197 Vallejos-Barra, Oscar. See Ponce-Donoso, Mauricio variance-based decomposition method (VD)for correlation structure of input variables, 287 vegetation effects on urban heat island (UHI) effect, 228 verbenone and green leaf volatile (GLV) blend Bole application of, 333 Villari, Caterina. See Conrad, Anna O. Virginia, USA urban canopy cover before and after housing redevelopment in, 12 Volin, John C. See Kloster, Danielle P. voluntary conservation initiatives (VCIs) willingness to participate in, 247 Vosberg, Shane J. See Ball, John Waindle, Marianne. See Doccola, Joseph J. Walsh, Timothy. See Ball, John

Washington tree selection survey in, 371 western white pines (Pinus monticola) emamectin benzoate (EB) as protective treatment for, 333 Wiseman, P. Eric. See Hwang, Won Hoi within-plant distribution of neonicotinoids used for EAB management, 347 wood density from apices of tested branch junctions and periphery of parent stems, 210 wood product recovery from utility vegetation management, tree crew perspectives on, 197 Worthley, Thomas E. See Kloster, Danielle P. wound compartmentalization intensity and timing of reduction pruning on, 432 Yahner, Richard T. See Mahan, Carolyn G. Yusof, Mohd. See Ow, Lai Fern Zhang, Hao. See Lai, Po Ying