

## LIST OF CONTENTS

Foreword	ix
Preface	xiv
List of contents	xv
List of authors	xix
<b>VII International Conference on Landscape and Urban Horticulture</b>	
Urban agriculture research and interdisciplinarity: solving the puzzle <i>E. Sanyé-Mengual</i>	1
New sustainable approach for historical garden restoration: the case study of Ludwig Winter's Gardens in Liguria Region <i>P. Gullino, M. Devecchi and F. Larcher</i>	9
Demographic variation in an urban community assessed for traditional ecological knowledge <i>K. Prinsloo, R. Kleynhans, R. Jansen, L. Morey and F. Calitz</i>	15
Perceptions of hospital patients and staff, a tool to inform the design of healing gardens <i>A.T. Paraskevopoulou, A. Papadopoulou, A. Kantartzis and A. Papadopoulou</i>	23
The potential use of a wildflower meadow in a vineyard to enhance the local rural landscape character <i>A.T. Paraskevopoulou, E. Pappous, K.F. Bertsouklis, K. Biniari, I. Daskalakis and D. Perdikis</i>	29
Green spaces in Italy from subsistence agriculture to public parks: the city of Bologna from 13 <sup>th</sup> to 20 <sup>th</sup> century <i>G. Bazzocchi, F. Casadei and G. Gianquinto</i>	39
Promoting education and training in urban agriculture building on international projects at the Research Centre on Urban Environment for Agriculture and Biodiversity <i>G. Pennisi, F. Magrefi, N. Michelon, G. Bazzocchi, L. Maia, F. Orsini, E. Sanyé-Mengual and G. Gianquinto</i>	45
Increasing food security through extension master gardener programming in northeast Ohio <i>J. Kowalski and E. Barrett</i>	53
Managing urban greening for improving well-being in European cities <i>L. Battisti, L. Pille, F. Larcher, S. Butenschön and I. Säumel</i>	59
Pruning practices differentially alter biomass allocation and leaf morphology of two southwest landscape shrubs <i>C.A. Martin</i>	67
Perception of improvement in people with disabilities who cultivate plants <i>T.P. Silva and A.M.S. Araújo</i>	75

Gardening and nutrition education interventions improve nutritional knowledge and fruit and vegetable preferences of grade 3 learners in Pretoria, South Africa <i>O.G. Moletsane, B. Matsiliza-Mlathi, W.B. Van Averbeke and C.J. Louw</i>	81
Study on application of <i>Cerasus cerasoides</i> L. in rocky desertification ecological restoration area <i>L. Kun, F. Shuxin, G. Junhong, W. Sijia and D. Li</i>	89
Exploring hydraulic redistribution for water management in gardens <i>S.V. Lourenço and M.I. Ferreira</i>	97
The influence of food source plants' application on bird communities in Beijing Olympic Forest Park <i>J. Han and L. Dong</i>	103
El Jardín de la Alameda in Murcia, Spain: origin and transformations of a public tree-lined boulevard <i>F. Medina and J. Ochoa</i>	109
Assessment of the watering needs of an interior vertical garden through the use of a weighting lysimeter <i>J. Ochoa, S. Bañón, D. Bañón and J.M. Molina-Martínez</i>	113
Urban home garden design in Ga-Rankuwa, City of Tshwane, South Africa <i>M. Jansen van Vuuren, W.B. Van Averbeke and M.M. Slabbert</i>	117
Effect of temperature and salinity on substrate moisture measurements made with dielectric soil sensors <i>J. Ochoa, J. Miralles, D. Bañón and S. Bañón</i>	125
Influences of family culture and garden life on landscape development in classical gardens on Yangtze Delta – a case study of Jichang Garden, Wuxi, China <i>X.Y. Shu, P.Y. Hao, Y. Wang, X.W. Chen, X.M. Shen, H. Kuai and L. Dong</i>	131
Using greenhouse to simulate urban conditions for plants experimentations <i>E. Chantoiseau, P.E. Bournet, S. Sakr, F. Rodriguez, P. Cannavo and L. Huché-Thelier</i>	139
<b>IV International Conference on Turfgrass Management and Science for Sports Fields: Bridging the Needs and Research on Turfgrass at the Age of Climate Change</b>	
Productivity of <i>Cynodon dactylon</i> (bermudagrass) grown on copper and nickel mine tailings amended with sewage sludge <i>I.A. Legwaila, B. Chunga and T. Mathowa</i>	147
Evaluation of vegetative bermudagrasses for traffic tolerance <i>S. Sever Mutlu, D. Irkörücü, B. Sancar and T. Bahar</i>	153
Establishment phase characteristics of Brazilian native grasses for use in turfgrass <i>S.Á.C. Gomes da Silva, A.G. dos Santos, S.S.L. Silva, F.H.D. de Souza and V. Loges</i>	159

Selection of <i>Axonopus</i> and <i>Paspalum</i> accessions based on vegetative propagules tolerance to low temperature storage <i>A.G. dos Santos, S.Á.C. Gomes da Silva, S.S.L. Silva, F.H.D. de Souza, A.C.R. Castro and V. Loges</i>	165
Taxonomic classification and identification of fine leaved fescues collected from Eastern Anatolia of Turkey using flow cytometer <i>G. Savas Tuna, E.C. Yilmaz, N. Ulutas, B. Sahin, I. Nizam, G. Yucel, E. Cabi, S. Sever Mutlu and M. Tuna</i>	173
School turf movement in Japan <i>K. Fujisaki</i>	183
<b>II International Symposium on Mechanization, Precision Horticulture, and Robotics</b>	
Computer and electronic research trends for horticulture <i>J.K. Schueller</i>	191
Transitioning from precision to decision horticulture: technology landscape <i>L.R. Khot</i>	195
Is machine learning efficient for mango yield estimation when used under heterogeneous field conditions? <i>J. Sarron, C.A.B. Sané, P. Borianne, E. Malézieux, T. Nordey, F. Normand, P. Diatta, Y. Niang and E. Faye</i>	201
Comparing deep-learning networks for apple fruit detection to classical hard-coded algorithms <i>K. Bresilla, G.D. Perulli, A. Boini, B. Morandi, L.C. Grappadelli and L. Manfrini</i>	209
RGB imaging for monitoring quality parameters of sweet potato during drying <i>D.I. Onwude, N. Hashim, K. Abdan, R. Janius, S.N. Che Adan and A. Jalaluddin</i>	217
Vision-based system for detecting grapevine yellow diseases using artificial intelligence <i>Y. Ampatzidis, A. Cruz, R. Pierro, A. Materazzi, A. Panattoni, L. De Bellis and A. Luvisi</i>	225
Proximal detection using robotics for vineyard monitoring: a concept <i>C. Poblete-Echeverría, A.E. Strever, Y. Barnard and M.A. Vivier</i>	231
Do multispectral and thermal IR high-resolution UAS-borne imagery help in phenotyping the tree response to water stress at field? Case studies in apple diversity population and varietal assays <i>M. Delalande, D. Gómez-Candón, A. Coupel-Ledru, S. Labbé, E. Costes and J.L. Regnard</i>	239
Studying spatial and temporal variability of a 'Barbera' vineyard with traditional and precision approaches <i>M. Gatti, C. Squeri, E. Kleshcheva, A. Garavani, M. Vincini and S. Poni</i>	247
Long-term assessment of variable rate N-fertilization in a <i>Vitis vinifera</i> L. 'Barbera' vineyard <i>M. Gatti, A. Garavani, C. Squeri, T. Frioni, P. Dosso and S. Poni</i>	255

Early detection of disease infection in chilli crops using sensors <i>L.A. Atshan, P. Brown, C. Xu and S. White</i>	263
Detection of crop water status using UAV mounted sensor <i>J. Coulombe, P. Brown, S. White, C. Xu and R. Koech</i>	271
Micro-irrigation in India: an option for improving water productivity and profitability <i>H.P. Singh and B. Singh</i>	279
Design and implementation of a low cost microcontroller in controlled environment agriculture <i>A.P. Montoya, M. Kacira and F.A. Obando</i>	287
Analysis of aerodynamic problems of domestic greenhouses and development of educational VR (virtual reality) simulator <i>U.H. Yeo, R.W. Kim, S.Y. Lee, J.S. Kang and I.B. Lee</i>	295
Non-invasive "Electroplantogram" (EPG) of greenhouse crops for real-time detection of water deficit <i>C. Camps, C. Plummer and N. Wallbridge</i>	303