

O-51 (169)**URBAN LANDSCAPE ECOLOGY: COMMON GROUNDS FOR HORTICULTURISTS AND LANDSCAPE PLANNERS AND DESIGNERS IN CITIES**

Prof. Mohsen Kafi, University of Tehran, College of Agricultural & Natural Resources, Department of Horticultural Sciences, Tehran, Iran; mkafi@ut.ac.ir (Presenting author)

Mahdi Khansefid, Department of Horticulture Science, and Landscape Engineering, University of Tehran, Karaj, Iran; mahdi_khansefid@yahoo.com

This viewpoint paper investigates the application of landscape ecological approaches to find common grounds for horticulturists and landscape designers in urban environments. Considering the unprecedented population growth and consequently widespread urban developments and global climate change around the world and the need for new paradigms and practices to face these challenges, this novel approach utilizes a transdisciplinary design approach towards cities, compared to the classical perspective in urban planning and design which is merely based on socio-economic land suitability and compatible land uses. This applied urban ecological approach is helpful in defining sustainable urban development, aiming for a balance between physical and natural systems in reclaiming and retrofitting existing urban areas as well as planning and designing new cities. Urban planning and design schemes and solutions, such as continuous productive urban landscapes (CPULs), edible landscapes, urban horticulture at metropolitan, regional, neighborhood and local household scales, and even horticultural urbanism by environmental restoration and enhancement projects using cultivation patterns and processes are among the opportunities that can be brought to the cities within this paradigm. The application of landscape ecological principles in the built environment projects and promoting urban landscape ecological strategies and solutions help to secure a wide range of ecosystem services which is discussed in this paper, within a broader urban ecosystem framework, for enhancing urban ecosystems, creating urban green infrastructure, encouraging biophilic urban planning and design, and ultimately Presenting propositions for planning, designing, constructing, and maintaining horticultural landscapes within cities.

Keywords: Landscape ecology, urban horticulture, ecosystem services, urban ecosystems