

Information about the lecture

Speaker	Professor Ph.D. Zhao-long Wang
Title	Sponge Cities Program in China: Key Techniques for Sponge Grassland
Group of topics	20.06.2017 Rainwatermanagement
Language	english
Content	Rainwater permeation, retention, storage, purification, reuse, and drainage in situ are the six key words for Chinese sponge city construction. The best way to eliminate the phenomenon of urban flood, which is a serious problem in most Chinese cities, is to improve the water retention capacity of urban green space and absorb the runoff from the concrete all around. However, different plant species has various capacity of tolerance to flood and drought stresses. Most urban landscape plants have limited flood tolerance and some wetland plants used in the rain gardens or subsided green spaces also faces the drought problems during the dry season. Based on our previous studies on the flood tolerance of turfgrass scpecies, the improvement of saturated hydraulic conductivity and water retention of soil by various amendments, and the estimation and calculation of evapotranspiration of turfgrass, we will present key techniques in design of an ideal integrating grassland system, in that all rainwater can be stored in the soil layer during the rainy days and which will meet the plant growth without extra irrigation.