

OR079*Ants and urbanization: the case of Parma (Italy)***Fiorenza Spotti**, Cristina Castracani, Donato Grasso, Alessandra Mori

Urban development is transforming natural ecosystems, inducing deep changes at landscape level. As the process of urbanization is not homogeneous, different urban land uses may affect all the ecosystem components to various extents. Studying plant and animal assemblages in anthropogenic habitats may help to better plan urban growth in the perspective of a sustainable development that preserves biodiversity. Ants have been frequently used as bioindicators in ecological studies and monitoring programs because they respond rapidly to environmental change, represent a variety of trophic levels and they are easy to collect. Moreover, several studies show that ants are widespread in urban environments. In this work, we used the town of Parma as a model to study the effects of urbanization on ant community structure. We selected 6 types of green spaces classified according to management and human exploitation: residential, industrial, business, agriculture, park and greenway. In each sampling area, pitfall traps associated with food baits were used to gather information on species richness, abundance and interspecific hierarchies of food dominance. Samplings were conducted during summers 2012/2013, recording 30 species. Our results suggested that different urban environments support different ant assemblages. The high biodiversity degree we observed in this work highlights the importance to lead studies on urban areas in order to allow the conservation of key habitats and their species.