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Pr. Magda BOU DAGHER KHARRAT Guest Editor

Department of Life and Earth Science, Saint Joseph University, Beirut, Lebanon.

Ecological restoration is defined as the process for assisting the recovery of an ecosystem that has been destroyed, damaged or simply degraded.

Recovery can sometimes be realized by simply stopping degradation causes like overgrazing or intense recreational activities. However, activities that assist recovery are often more complex and are designed to accelerate natural succession or to bypass intermediate successional phases. They are aimed to reach a presumed historical composition, structure, function, productivity and species diversity of an ecosystem present at a site.

The first step in recovery consists of an approach aiming at restoring suitable abiotic conditions that allow passive recolonization of species. The second step aims at regrouping the biological community consisting of organisms that interact and share the same environment.

Given time constraints and resources, the second step is very often limited to plants reintroduction ignoring soil biota, pollinators and seeds dispersers that insure the sustainability of the ecological restoration projects. In order to have a comprehensive and lasting recovery of an ecosystem, scientists should look beyond plant reintroduction.

With regards to plants reintroduction, scientists have achieved tremendous success by privileging the use of native species in ecosystem restoration. Over the long run, native plants will, in most cases, form self-sustaining plant communities that do not require sustained maintenance. Because they are adapted to their local ecosystem, they resist better than exotic species, injury from drought, exceptional freezing, common diseases, and herbivores if planted in that same local region. They also induce the reestablishment of specific associations with mycorrhizae, pollinators, and seeds dispersers among other benefits.

Native plant species provide the foundation elements for ecosystem restoration. Their use should be promoted and encouraged. The project ECOPLANTMED: "ECOlogical use of native PLANTs for environmental restoration and sustainable development in the MEDiterranean region" is a joint Mediterranean initiative based on the collaboration among seed banks, research institutes and institutions working with native plant conservation and management. This project aims at promoting the conservation, enhancement and sustainable use of Mediterranean native plants for habitat restoration and for the development of new economic sectors, by improving the management capacity of local actors.

In this special issue of Plant sociology, we assembled selected papers issued from the International Conference, "Ecological Restoration Challenges and opportunities" that was held in October 2015 at Saint Joseph University in Beirut and in October 2015 organized to coincide with the conclusion of the ECOPLANTMED¹ project.

Papers on ecological restoration of Mediterranean type habitats (forests, coastal/ dune habitats, arid areas, wetlands, etc.) and related themes were selected and published in this issue of EIC.

¹ http://www.ecoplantmed.eu