



A model for ecological restoration of semidesert landscapes in the state of Queretaro, Mexico.

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The Cadereyta Regional Botanical Garden maintains an extensive wild area inside its boundaries. This wild area has a xerophytic scrub as the main type of vegetation, degraded by human activities over the last decades. Although this shrubland has an interesting species assemblage, composed by several botanical families (Asteraceae, Poaceae, Solanaceae, Verbenaceae, Euphorbiaceae, Cactaceae and Fabaceae), it is also suffering the invasion of noxious species such as *Melinis repens* (Willd.) Zizka, *Mimosa aculeaticarpa* Ortega and *Mimosa monancistra* Benth. A portion of the wild area is infested with them and ecological processes are being affected. In this scenario, the Botanic Garden proposes a model of assisted ecological restoration, with an agroforestry approach, through the implementation and monitoring of native vegetation mosaics. This practice will ensure the rehabilitation of soil and will contribute to the improvement of the structure in the plant community and the functional capacities of the ecosystem. The model will also generate useful products, obtained from native species. Throughout its history, the Cadereyta Regional Botanical Garden has developed propagation protocols of native species. Part of the production will be used in the model described.

Key words: sustainable use, *in situ* conservation, ecological restoration, ecosystem services, agroforestry.