Project Update: September 2019

Establishment and micropropagation / December, 2018 – July, 2019

We selected A. *lurida* (common name "maguey de la Luna") and A. *guiengola* (common name "maguey plateado", because of their high susceptibility to the degradation of their populations by the human activity. Also, we chose to work with A. *cupreata* (common name "maguey mezcalero chino") and A. *tequilana* cv. Chato (common name "maguey chato or sahuayo") due to its cultural importance and also because commercial genotypes have slowly displaced them.



Figure 1. Processing of accessions and cleaning A)Parent plant and rizomatous shoots (eigth months) B) Selected genotypes C) cleaning and defoliation of the plant D) Cutting of roots E) Cutting of the distal part of the leaves F) Primary leaves and stem cut cubically. ©Lourdes Delgado-Aceves



Figure 2. Disinfection of accessions A) Washing of tissue B) Application of systemic fungicide C) Disinfection of explants in chlorine solution under laminar flow hood conditions D) y E) Removal of damaged tissue E) *In vitro* establishment in solid culture medium. **©Lourdes Delgado-Aceves**

Step 3

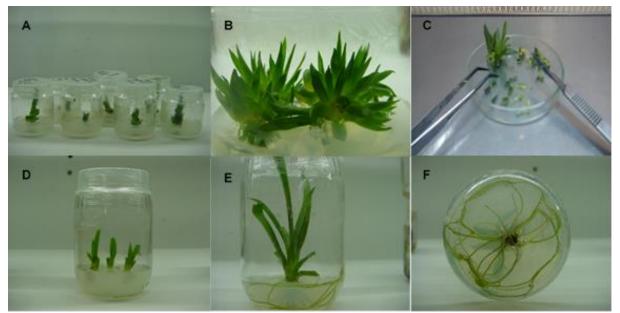


Figure 3. Micropropagation processing. A) Genotypes of the parent plant in the medium of proliferation B) Generation of shoots (40 days) C) Separation of shoots under laminar conditions C) Subculture to the medium of growth and rooting D) Seedling in growth and with root development (30 days) F) Young secondary roots. **©Lourdes Delgado-Aceves**

Step 2