Project Update: December 2020

After gathering data overall sites targeted during past months alongside with strong support of communities (leaders and volunteers) we prepare a new dataset having on its number of species, geolocalisation, habitat, and disturbance in situ combined with previous data archived to evaluate insect integrity within these ancient forests.

Our data follow IUCN Red List criteria to establish a real status of the threat. Results are undesirable but rise up an actual understanding of conservation status on such sensitive tiny insects.

Our first biological insight to denote was that such herbivorous insects are strictly associated with different types of vegetation. The majority of species reside within one of the most endangered ecosystems in the Americas, the Dry Tropical Forest, by human expansion and urbanization. Many of our target species have seriously been affected by these anthropogenic activities which might impact the forest and in fact, reduce insect biodiversity. We found fewer species than reported by the mid-twenty centuries. Unfortunately, evident leafhoppers reduction is not only in biomass even on species and genera numbers by the complete or partially eradication of native vegetation result of deforestation on this highly threatened dry tropical forest.

A strong trend in species decline was observed, -53% of total species, over 75 years in this endangered seasonally dry ecosystem. All localities surveyed in the dry tropical forest are disturbed largely indifferent degrees by modern human processes. Mexico harbours highly endemic leafhopper taxa with a large proportion of these inhabiting the dry forest. Our findings provide important data for conservation decision making and modelling of distribution patterns of this ecosystem. The information generated provides the first conservation assessment of this possibly endangered component of the biota.

Communication between teamwork, communities and colleagues continues remotely making a substantial progress with data and when necessary I and two team members are moving among sites to gather information needed to facilitate instrument and educational materials to community leaders associated. Finally, team was present at Entomological Collection Network



Leafhopper species occurring in the dry tropical forest of Mexico, the blue bars represent historical species occurrences in mid-twenty century and green bars show recent data taken in this project.



Map showing occurrence points throughout the seasonally dry tropical forest (SDTF) in Mexico. Black dots show total known localities with records



Image showing part of most common element's characteristics of dry tropical forest



Adilson and Mildred Torres taking biotic/abiotic data in situ



Meeting with international Auchenorrhyncha specialists



Clause of Entomological Collections Network event