

## **Project Update: February 2021**

Activities done focus: (1) on processing data and disseminate news in Spanish/English through local and international journals; and (2) capacitation to volunteers involved with the project.

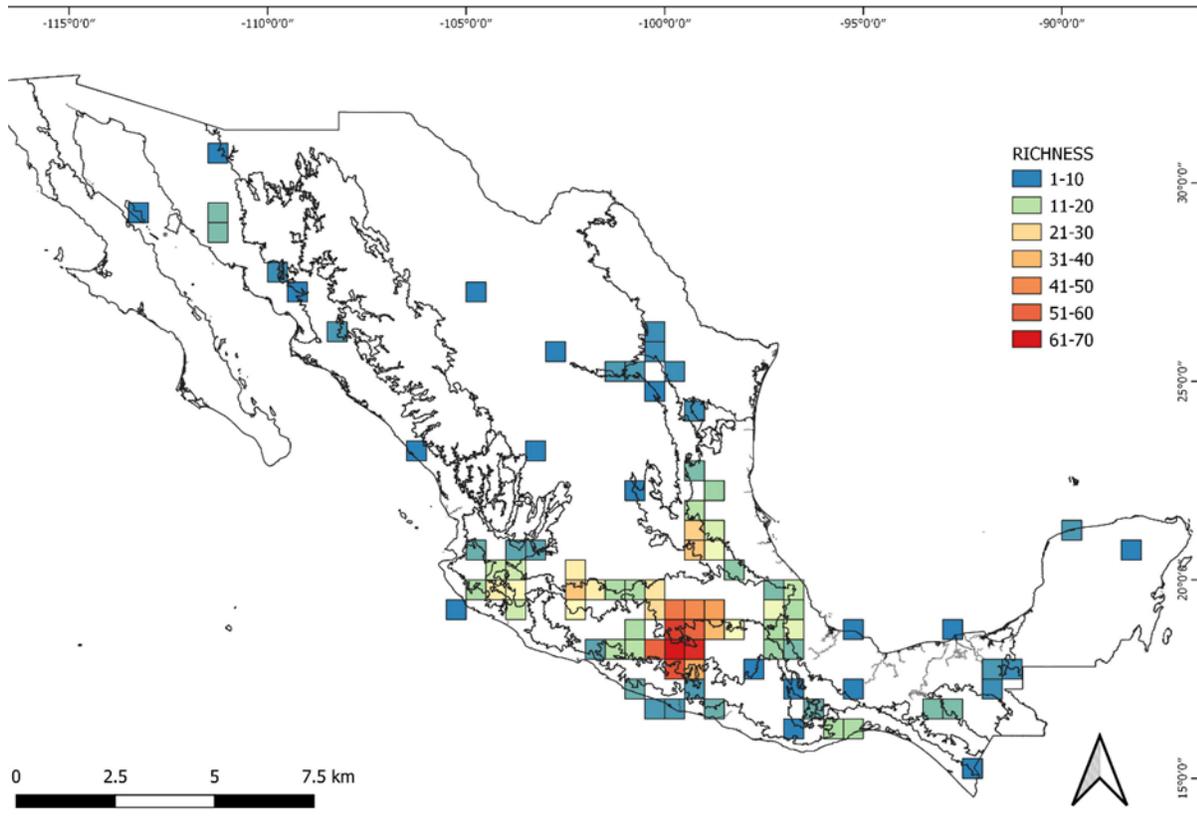
- 1- We ran a multiscale analysis using species richness, distribution, types of vegetation, altitudinal preference, endemism, and bioregionalisation in Mexico to led basis conservational information on this peculiar insect sap-sucker family in Mexico.

Successfully, our results met IUCN criteria to promote reliable status on key species for the first time in the Americas on this very sensitive insect family to human perturbation strongly related with endangered forests in the country.

Additionally, our results found 164 species inside Mexican forests, of which 145 species are considered to be endemic. The Mexican state of Guerrero has the most species records found (48%) and the highest numbers of species were concentrated along the Mexican Transition Zone (MTZ) within which the Transmexican Volcanic Belt province (TVB) has the most species records. The number of strict species to inhabit Mexican forests showed two different geographical patterns but similar species composition among them with overlapping species number over the MTZ. The distribution across vegetation types was not uniform, with most species were concentrated in the dry tropical forest (65%), as early noted by team in field.

Surprisingly, species were found at elevations between sea level and 3,200 m a.s.l. with three altitudinal preference classes (every 500 m). Conservation assessments applying IUCN criteria categorised a majority of species (145 in total) in some risk category, endangered or critically endangered.

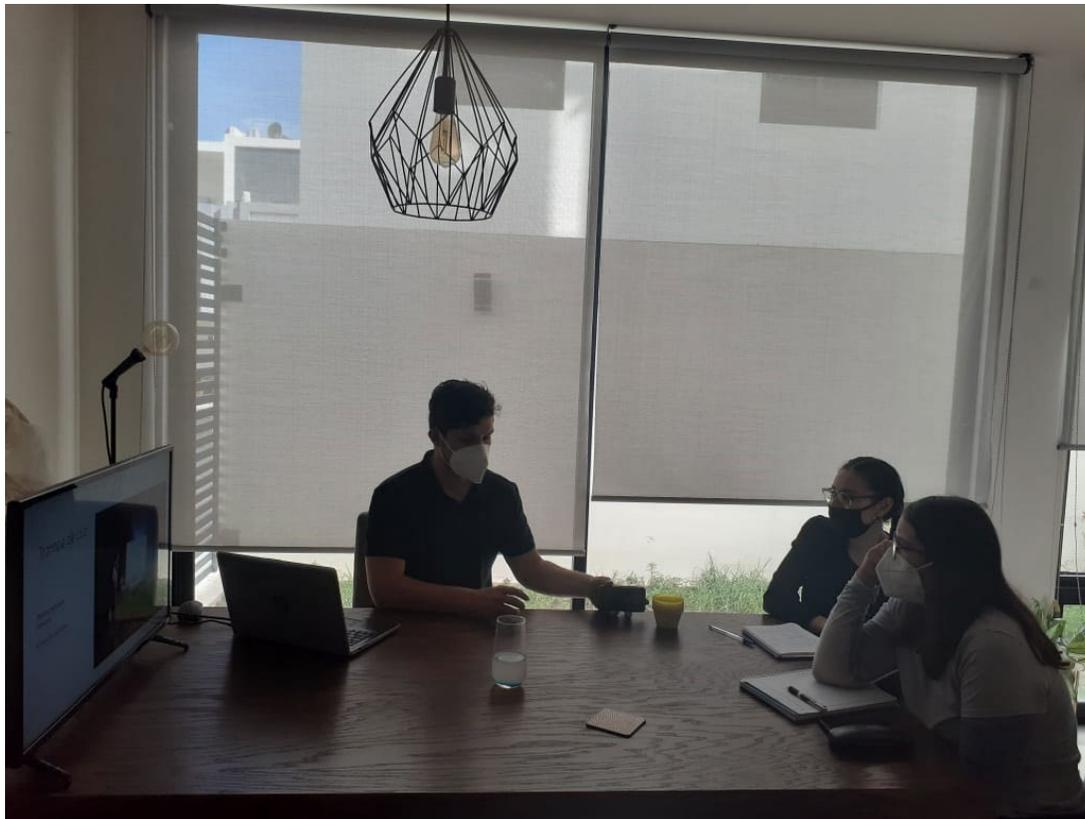
- 2- Frequent meetings with volunteers were conducted following international protocols of care health (Covid-19) over reduced people groups. Every meeting included all results of the project, new monthly goals for next 6 months, surveys of local people, dates for deliver new equipment, and additional supplies to people taking photos and monitoring leafhopper populations constantly.



Map of species richness by grid cell over Mexican polygon



Red list status of Mexican species, number indicate species number in such risk category following IUCN criteria: critically endangered (red), endangered (orange), least concern (green), and data deficient (grey).



Meeting with volunteers giving updates of the project

