

Project Update: October 2021

Update March-June

During this period, we spent strong fieldwork effort in the communities where we have head leaders and volunteers: Totolcintla, Xocomanatlan, and Quetzalcoatlán in Guerrero state and Tavela, Santa Maria, and Suchixtepec in Oaxaca state searching endemic species that according to the historic data known are the rarest. Presumably, four inhabiting the area and therefore since the 1930s to '40s have not been seen or reported. After 46 continuous days documenting these endemic species, we were able to report all species, *Neodonus piperatus*, *Pseudaligia nigropunctata*, *Retusanus apicatus*, and *Mesamia divisa* in small insolated populations in different locations and do not share the same forest resources, our data suggest recording them as Endangered following IUCN criteria. In addition, our survey found another species, *Duocrassana longula* an endangered species recently reported by us. Individuals were found inhabiting that type of habitat which is in part similar to the region a few km apart from the previous two already known habitats in 2018 (southern valleys of Oaxaca). In this new locality, its presence was minimal but highlighted because we observed feeding on *Bursera* plants, and after settling down several days searching individuals to prove food preference in other types of vegetation we proved that species is specialised only to feed on such host plants (new data not observed when it was described in 2016). However, *Bursera* trees are one of the most commonly cut resources in the whole region and unquestionably based on data taken and observations made the species is using that natural resource to disperse it because also overlapped exactly with the area where the host plant can be found. Unfortunately, the same geographic area comprising all localities known for both species, insect and tree, is highly threatened by industrialisation activities, constant deforestation, and livestock. This evident concern raised a need to advocate a wider framework for endangered insect species in such region.

At the same time while driving among target sites we capacitated four times our head leaders and volunteers in each community to keep monitoring target species we have found in the past with critical status as following IUCN proposes. And for the special case of *D. longula*, we started a discussion on how we will bord its management to enrich the framework we have done so far.



Neodonus piperatus, species recorded Xocomanatlan, Guerrero. Photo by Adilson Pinedo.



Duocrassana longula, a critical species recently re-evaluated living within a threatened habitat by modern activities surrounding it. Photo by Juan Cruzado.



Chlorotettix inscriptus, a Least Concern species according to criteria of data obtained living in forests of target sites in Oaxaca and Guerrero states.



Newly recorded habitat *in situ* for *Duocrassana longula*, Oaxaca. Photo by Adilson Pinedo



Sampling in Oaxacan forest. Photo by Diego Pinedo