## Project Update: February 2019

Since the beginning of the project a total of five successful trips totaling 43 days have been done. At the moment a total of around 147 morpho-species have been collected with 116 species identified (some with help from specialists) and 13 new records for the park and three new records for the country (one publication under revision and another until the end of the project) have been confirmed.

A population and forest composition preference analysis of the Celaque National Park endemic specie *Ctenis leonii* A. Rojas has been finished and a draft is being prepared for further publication, as the pending plots are at altitudes where the species has not been reported or personally seen during extensive exploration.

Some very curious observations have been made on the apparent distribution pattern of the ferns in the park (as with 55 plots a pre-analysis is possible) but this will be explored at the end of the project. Problems with the Arduino micro-stations have delayed the capture of climate data but as stated before the ChelsaClimate model has been successfully retrieved and would serve as the backbone of the correlation analysis and explanation of the distribution pattern.



Left to right: Assistant Ali Rubio, Researcher Johan Reyes, MAPANCE Volunteer Juan Rodriguez and Zamorano University Biology Practitioner Nichole Sikaffy at Celaque National Park main entrance.



Assistant Ali Rubio taking population notes during rain at the October trip.



Assistant Enrique Segura at Don Thomas camp at a January trip.