

Report: Internationalization Fund

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MSc Tropical and International Forestry

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Host-Institution: Centro de Investigaciones Tropicales (CITRO), Universidad Veracruzana (Xalapa, Mexico)

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Project

The objective of this project was to assess epiphyte biodiversity and regeneration on isolated remnant trees in agricultural land.

The data collection was part of a Masters thesis, as it was later to be compared to data from surrounding forest sites. This allows the visualization of not only effects anthropogenic changes had on the populations and biodiversity of epiphytes, but also to what extent remnant host trees are able to resist or buffer such an interference.

The data were taken along a gradient in Cofre de Perote, Xalapa, Central Veracruz, Mexico from July 16th to November 14th.

The transect included elevational levels from 500 m asl to 3000 m asl, data were collected in steps of 500 m in elevation. In each elevation 5 oak trees were selected as study objects. The focus on oak trees was due to the second project that took place alongside my project, which focused on tree characteristics.

The methodology is presented in Krömer & Gradstein 2016, promoting an assessment of epiphytes by climbing the tree crown. Climbing the tree facilitates a thorough inventory of epiphytes. Samples were collected in the inner and outer canopy differentiating into the five Johansson zones.

The first step towards field work included a brief visit of the broad study sites, to evaluate the suitability with our project. As we searched for isolated oak trees on agricultural land this was not an easy find, especially along a gradient that houses diverse regions with different land uses. The previous study sites from this project were within the forest, as we want to compare previous data, we searched for our study sites in the vicinity of those forests, to have similar environmental conditions. Another selection criteria in epiphyte studies is to pick trees with a high epiphyte cover, which are rare if they are isolated trees. In this selection process the people from CITRO supported us with local knowledge and expertise in the field.

At the university the plants were identified and dried for the herbarium. In all families of epiphytes there was a scientist in CITRO who could assist with the correct identification. This took approximately two months, finishing field work, laboratory work and the herbariums with a correct identification of species.



Professional benefits of working in Mexico

All in all it was an invaluable experience to be able to work and live in Xalapa in the course of this project. We made great contacts and had the opportunity to see how life and studying is in Mexico.

Surprisingly for me, along the gradient the local people were very curious about our project, mostly people wanted to help and also they were interested in the results of our studies. Just one land owner did not want us to enter his premises, all the others were happy to show us suitable trees and get to know more about the epiphytes that we studied. For me it was great to experience all the variables that determine your studies, to see that it is not only sufficient to pursue a plan, but also take into account accessibility of the sites and local perception of your project.

We were also given the possibility to give a seminar, in which we could explain what we do in Mexico and in the context of the cooperation between universities talk about the TIF- program at the university in Göttingen. There were professors and students participating, showing interest in both the project as well as the international cooperation which we could promote in that way. It was also a nice opportunity to practice presenting skills as well as getting feedback about our project from local scientists and students.

The greatest challenge was communication, as only few Mexicans speak English on a scientific level. Therefore it was necessary to have at least a basic knowledge of Spanish, to be able to work in the field. Also for this it is very helpful to have a field guide, that knows the local accent and is familiar with the people. Throughout the stay I was able to improve my Spanish speaking skills, which was one of the reasons for me to work in a Spanish speaking country. As I aim to work internationally, speaking another language will facilitate work in diverse regions. Especially in Spanish speaking countries few people feel comfortable speaking English so that it is important to be able to communicate in Spanish.



Assessing the stay in Mexico

Opposed to my expectations, our contacts in Xalapa were exceptionally helpful with regard to organization of our stay there. This was in terms of things that we needed for our work as well as in private needs as accommodation and phone contracts.

At the university we were introduced to all co-workers and got access to all resources needed for our work, such as the laboratory, the library and the herbarium. In case of problems with our project we were introduced to the experts within CITRO. This facilitated our work in many ways. In preparation for the field work, a field guide had to be contacted, who knew the area and could point out suitable study sites. For this we found that an old student of the faculty (CITRO) was willing to help. This was organized in cooperation with our local contact. Furthermore a car was needed to reach the study sites. Also in this matter we got great help from staff members from CITRO. On arrival we were housed by those contacts and with their help we found housing and a car in short time.

Therefore the field work was running very smoothly thanks to the support of all the people in CITRO. There were no problems in accessing resources or our sites. We could also seek help with our studies at another university in Xalapa, the INECOL. Contacts there assisted us with identification of oak species and we got access to their herbarium, which is bigger and houses more species than the one in CITRO.

Thus, in terms of organizing a stay there and to be able to plan in advance, CITRO definitely provides perfect conditions. Even though they have less resources than the German university and most devices there are owned privately by the professors working there, everything that we needed for our studies was provided.

In respect of living in Mexico it is clear that the country is far less safe than Germany, but all in all, if the basic safety rules are considered, such as not taking a taxi on your own and not to walk the streets alone after 10 pm, life is fairly easy as a tourist there.

The cooperation between the universities was recently renewed, so I hope there will be more people participating and experiencing all it has to offer.

