

Project report on the Cameroon excursion 2015

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Since 2012 I am studying biology at the University of Tübingen but first in the 5th semester I had the opportunity to choose classes which I am most interested in. With my first class in parasitology at the Tropeninstitut in Tübingen I discovered my interest for this sector of biology. I attended more and more classes in parasitology and so I came to the seminar "Epidemiology and Vectorbiology" of DP Dr. Alfons Renz. Within the frame of this seminar he offered the excursion to his research station of Onchocerciasis in Ngaoundéré.

Africa, the black continent, is a place on earth that always fascinated me. So for me it was the perfect possibility to take part in this scientific excursion of Mr. Alfons Renz. As preparation I and all the others who were interested in the excursion visited a seminar which was leaded by Ms. Babette Abanda. Mr. Renz and his team which consists apart from Ms. Babette Abanda of Mr. PD Dr. Albert Eisenbarth welcomed us very warmly. We met once every week and the aim of the seminar was to familiarize a bit with Cameroon, it's people, the culture, the political situation and of course the health situation. This happened in the context of short presentations of the leaders and the participants. In my opinion, it is a good idea to let the students do presentations because during the research for my topic I learned a lot about the country I would travel to.

In addition to the seminar we took part in a laboratory practical over a timespan of two weeks which was also leaded by Dr. Albert Eisenbarth and Ms. Babette Abanda. There we learned some very helpful molecular technics, which we would need in the context of our projects.

With the end of this practical our journey to Cameroon started. I travelled together with another student, Albert Eisenbarth and Babette Abanda on the 10th of august. After two days of travelling we finally arrived at the Programme Onchocercoses research station in Ngaoundéré. All the staff was there to welcome us. They were all very kind and really gave us the feeling to be pleased that we are there now.



Group photo with the local workers of the lab, Albert Eisenbarth and Babette Abanda

The compound was quiet nice, with a big garden, the main house and the laboratory. We felt very comfortable because everything exists on this compound. We lived in the house and to the laboratory, which is in a good shape and well-resourced, it was only a few meters to walk. There was even a cook who prepared delicious traditional African food for us every day. Also a night watch and a dog live there, so we felt save at night.

But when we left the compound and entered the wide landscape of the Adamawa region, we experienced the beauty of this African country. During the rainy season everything is so green and full of life and it`s really impressing to observe the multiple weather changes during a day.

It was also very interesting to experience a bit the completely different way to live of the people there. It felt like we saw new scenes - you would never see in Germany - every day. Just things like the mopeds - their absolutely normal way of movement – and it`s obviousness that four or five persons drive together on one.

The aim of our travel were the several projects which everybody had. In my project I wanted to prove the vector compatibility of *Simulium hargreavesi* with *Onchocerca ochengi*. Therefore I collected – with the help of Albert Eisenbarth and the workers of the laboratory - larvae and pupae of *S. hargreavesi* at suitable waterholes. After the flies had hatched I sedated them (I tried different methods to find out which works best) and injected microfilariae of *O. ochengi*. I got the microfilaria from one worker of the laboratory who collected skin from cattle from the nearby slaughterhouse every day and extracted the microfilaria out of this skin. I wanted to know how good the microfilaria of *O. ochengi* can develop in *S. hargreavesi*, if they can develop to the infective L3 stage. Unfortunately I didn`t find a L3-larvae in the flies that were ready for dissection. But the plan is to continue this work I began in Cameroon.



Left: Me collecting larvae and pupae at the Ndjouroum. Right: Me working in the lab with microfilaria

One day me and the other student presented our research topics at the center of IRAD (Institut de Recherche Agronomique pour le Développement) at Wakwa to the chief of center and to students from the University of Ngaoundéré. That was a good experience for me.



Presentation at the IRAD, in the front the chef of center

Altogether I am very glad that I had the possibility to take part in this excursion, to get a view into the work at an African research station and for all the experiences I made and impressions I got in this time. It was a real adventure I will never forget and I would always recommend to everyone who is interested in parasitology. I would like to say a big thankyou to PD Dr. Alfons Renz, who made this experience possible for us and to Babette Abanda and Albert Eisenbarth, who went to Cameroon with us and were our supervisors during this time.

