

YERSIN PROJECT NEWSLETTER 8



The eighth semester started with the joyous occasion of the 12 month adult mosquito survey finishing in Côte d'Ivoire. A football competition and dinner was organized by the Yersin team to celebrate the successful progress with the villagers. With new found energy in 2017, the larval collections were started in the same study areas where the adult mosquito survey was conducted. In Lao PDR, a strategy plan was written on the communication of our recommendations. Currently, the adult survey data and the repellence comparison data are being analysed for scientific publications. The extensive results will be presented in the next newsletter. Next semester, the larval survey will continue to be done monthly and a stakeholders meeting will be organised in Côte d'Ivoire. The focus in Lao PDR will be on communicating our recommendations to the stakeholders and local population.

Roadmap Yersin project

	Y 1				Y2				Y3			
Protocol and SOP writing	CI	CI		L	L	C/L						
Renovation		CI										
Purchasing equipment		CI	CI		L							
Sensitization population			CI		L	CI						
Fieldwork adult collection			CI	CI	CI	CI/L	CI					
Fieldwork larval collection								CI	CI	CI	CI	
Analysis						L	L	CI/L	L	CI/L	CI	CI
Communication to stakeholders							CI/L	CI/L	CI/L		CI/L	CI/L

 to be conducted

 In process

 Completed

CI: Côte d'Ivoire
L: Lao PDR

Communication of recommendations in Lao PDR

The fieldwork in Lao PDR was finished last year. The final year of the project will, therefore, be focused on sharing our recommendations with the local population and the stakeholders. In the beginning of May a stakeholders meeting will be organized in Luang Prabang city for people from the health and agricultural departments. Representatives from Vientiane capital, provincial capital and our study districts will be invited to participate. Focus of this stakeholders meeting will be on presenting our recommendations on 'how to protect people from mosquito-borne diseases in the rubber plantations'. We will present our results and combine this with current knowledge in the region regarding vector control. During the meeting, there will be room to discuss current bottlenecks in vector control and disease prevention. Moreover, with the help of the Focus Group Discussions that were conducted last year, we identified radio as one of the pivotal methods with which local villagers are informed of the current affairs. We are therefore planning to record several short and simple messages of our recommendations to be broadcasted in the three main languages used in our study area (Lao loun, Khamou and Hmong). We have identified several provincial and local radio stations where our messages will be broadcasted.

Activities of the 8th trimester

- ✓ Start larval survey in Côte d'Ivoire
- ✓ Continue analysis of the comparison study data from Lao PDR

Activities 9th trimester

- ☐ Continue larval survey in Côte d'Ivoire
- ☐ Continue analysis of the data from Lao PDR and start analysis on data from Côte d'Ivoire
- ☐ Organize stakeholders meetings in both countries
- ☐ Communicate recommendations in Lao PDR



Celebrations of adult mosquito survey finale

With the successful conclusion of the adult mosquito survey in Dabou area in December 2016, the Yersin team organized a celebratory dinner and football match for the different villages that helped collect mosquitoes. The Yersin and other teams played football against each other throughout the day, with the village elders looking on from the shade of the trees. Some teams even wore matching outfits! All in all, everyone had a great day.



Fieldwork in Côte d'Ivoire

For the control of mosquito-borne diseases, it is important to identify the main breeding sites of the different mosquito species. Mosquitoes breed in water, so water bodies need to be surveyed for mosquito larvae and pupae. The important waterbodies can be controlled by removing them, covering them or treating them with insecticides to decrease the number of immature vector mosquitoes. The decrease in suitable waterbodies for immature vector species, decreases the number of adult vector mosquitoes and therefore the number of disease cases.

In Côte d'Ivoire, larval surveys are currently being conducted in the same areas where the adult surveys were done. The inspections have successfully been conducted in January and February 2017. A total of 683 waterbodies were surveyed of which 53 % (362/683) were found positive for mosquito larvae. Additional surveys will be done in March, May, June and July 2017. The six months of larval survey data will result in clear recommendations of which waterbodies need to be controlled in the different habitats. Apart from the larval survey, Focus Group Discussions will be conducted in the study villages to identify the most important methods with which recommendations can be communicated. Furthermore, a stakeholders meeting will be organized in April to communicate the preliminary results from the adult survey and update them on the current activities in the field.

The Yersin project on Radio RFI 'Le voix du monde'

Many media outlets are interested in vector-borne diseases, such as malaria and dengue. One such example is RFI, a radio station to which approximately 34.5 million listeners around the world tune in every week. In a radio program focusing on 'Priorité santé' a special broadcast was made on the 15th of December 2016 regarding the dengue situation in Lao PDR. During this broadcast Dr. Paul Brey (Director of Institut Pasteur du Laos and principal investigator of the Yersin project) discussed the successful South-South cooperation between Lao PDR and Côte d'Ivoire, which has been achieved by the Yersin project supported by the Michelin Corporate Foundation. Dengue is a disease which is causing a high number of outbreaks in both Africa and Asia. Mosquitoes and disease pathogens know no borders. Sharing knowledge and experience between both continents is an important step in making vector control efforts more efficient and effective.

Link to broadcast can be found on the RFI-website, 16 minutes into the program:

<http://www.rfi.fr/emission/20161215-dengue-laos>



The panelists during the meeting, with Dr. Paul Brey seated in the middle

The Yersin project at Les Rendez-vous de Vientiane

On the 25th of January 2017, Dr. Paul Brey was invited as a panelist and speaker to a scientific panel discussion organized by Les Rendez-vous de Vientiane. Les Rendez-vous de Vientiane is a platform for sharing knowledge and discussing issues on economy, science, culture and sports between numerous stakeholders in Lao PDR. During the discussions Dr. Paul Brey discussed the Yersin Project supported by the Michelin Corporate Foundation in the context of a South-South cooperation between Lao PDR and Côte d'Ivoire. The importance of collaboration between both countries was highlighted.