

Report on the outcomes of a Short-Term Scientific Mission¹

Action number: CA17108

Grantee name: Sara Šiljegović

Details of the STSM

Title: *Dirofilaria* and bloodmeal analysis in invasive mosquitoes collected in Serbia

Start and end date: 12/09/2022 to 14/10/2022

Description of the work carried out during the STSM

Description of the activities carried out during the STSM. Any deviations from the initial working plan shall also be described in this section.

(max. 500 words)

DNA extractions were carried out on the mosquito samples using the Blood and tissue Dneasy Kit.

- PCR analysis were conducted on the extracted DNA to detect:
 - a) *Dirofilaria* spp presence
 - b) Bloodmeal host's specie

In the initial workplan, Host identification and *Dirofilaria* screening were supposed to be carried out using Real time PCR. After discussion with my supervisor, it was established that the analysis would be carried out using regular PCR.

Description of the STSM main achievements and planned follow-up activities

Description and assessment of whether the STSM achieved its planned goals and expected outcomes, including specific contribution to Action objective and deliverables, or publications resulting from the STSM. Agreed plans for future follow-up collaborations shall also be described in this section.

(max. 500 words)

- Samples were extracted and analysed for *Dirofilaria* screening (5 plates of 96 samples for non bloodfed specimens (pooled samples) and 4 plates of 96 samples for bloodfed specimens (individually)) and Bloodmeal Host detecting
- Regarding the primers that were used for detecting *Dirofilaria*, some non specific amplification

¹ This report is submitted by the grantee to the Action MC for approval and for claiming payment of the awarded grant. The Grant Awarding Coordinator coordinates the evaluation of this report on behalf of the Action MC and instructs the GH for payment of the Grant.

was appearing during the PCR reading for *Aedes albopictus*, and because of the size of the project and short stay period, the team at the IRD and my team will stay in touch in the upcoming weeks regarding the testing of potential new primers and the sequencing of the PCR products.

- The data gathered during this STSM will be used for future publication.
- During my stay at the IRD, I gained valuable experience regarding laboratory work such as:
 - a) Manipulating lab equipment (micropipets, thermocyclers, electrophoresis cuves...)
 - b) Learning proper laboratory etiquette
 - c) Using a DNA extraction kit
 - d) Performing PCR (ordering primers, programming a thermocycler, migrating the PCR products on agarose gel, quantifying suspended DNA using qBIT and Nanodrop...)
 - e) Organising data

Christophe Paupy

