

SHORT TERM SCIENTIFIC MISSION (STSM) SCIENTIFIC REPORT

This report is submitted for approval by the STSM applicant to the STSM coordinator

Action number: **CA17108 (ECOST-STSM-Request-CA17108-46786)**

STSM title: **Synthesis of the Pan-European Survey on increasing our understanding regarding integrated vector management approaches**

STSM start and end date: **08/03/2020 to 16/03/2020**

Grantee name: **Mihaela Kavran**

PURPOSE OF THE STSM:

In an effort to better understand *Aedes* surveillance, control and citizen-science approaches at the European level, a survey consisting of a questionnaire was distributed to the experts in public health, medical entomology, veterinary science and pest control. The core team of experts of WG3 analysed these questionnaires and synthesized a first draft of the report. More than a one person is required to proceed formatting and to finalize report. Therefore, I was invited to join Dr Angeliki Martinou in Cyprus for the period of 8-16 March 2020 in order to complete and finalise above mentioned document. I was invited speaker to give the talk about West Nile virus surveillance in Serbia and to share my experience gained through persistent work on this topic in Serbia at the Cyprus University of Technology in Environmental Engineering Department of Chemical Engineering in Limassol, Cyprus.

DESCRIPTION OF WORK CARRIED OUT DURING THE STSMS

Before my arrival to Akrotiri, Cyprus, large number of data and analyses were carried out. The survey was implemented by using a simplified version of the Delphi procedures (REF) which essentially involved an iterative revision of the questions in collaboration with a subset of respondents prior to implementing the questionnaire itself. Draft questions were sent to a set of 15 'super users, each specialists in the field of mosquito surveillance or control. Each was asked to complete the draft questionnaire and to identify errors, gaps and potential sources of confusion and to suggest any changes they considered necessary. The super user responses were then collated, assessed, and the questionnaire revised accordingly. The questionnaire is very complex – with 27 questions, the majority being multipart, and most with comments. Given this complexity, it was decided that simply sending it to respondents and asking them to complete and return it, would not work. Accordingly, it was decided to administer the questionnaire at a series of dedicated workshop sessions, which would allow each question, and the rationale behind it, to be explained directly to the respondents. The revised questionnaire was therefore prepared in three formats – hardcopy, Office document, and as an online version compiled using the EUSURVEY tool (www.ec.europa.eu/eusurvey). The resulting survey could be completed on any platform with a browser – and is automatically formatted for Mac, windows or android operating systems, and for desktop, mobile phone

platforms. The tool is also free and accessible to anyone with an EU login. Respondents were sent the questionnaire in advance of the workshops, so that they had time to gather any information needed. Two workshops were held, one by EMCA with approximately 30 respondents, one by AIMCOST with approximately 110 respondents. One of the questions asked for suggestions of additional potential respondents, which yielded approximately 80 contacts who were then emailed and asked to complete the online questionnaire. A final tranche of ECDC approximately 30 national focal points were also requested by ECDC to complete the questionnaire. The workshops yielded 115 answers out of a possible 140, whilst the emailed requests resulted in a further 40 answers out of a possible 110. The final number of answers was thus 155. The analyses performed for this report are essentially simple reports of the frequency of each answer. The EUSURVEY tool performs an automated frequency summary that can also be performed on subsets of the data filtered by the answers to particular questions. Three filters can be applied at once if needed. More detailed reports were performed manually for selected questions by geographic location and respondent category as reported in questions 1 to 2, in order to produce results more accurately tailored to the questionnaire objectives set out in the previous sections. By default all responses were included in the frequency counts. In some instances however, efforts were made to correct geographic or aspects of respondent type bias. These are reported with the results. Some answers consisted of textual answers or text comments. These were interpreted manually as required.

An anonymised dataset is available from the project directorate on request. Facing the fact that the Questionnaire was analyzed by experts from eight countries it was expected that collected material is not going to be analyzed in the same form and style. It is crucial to correct all mistakes, simplify the report and uniform it for the users. Therefore, Dr Martinou and I were working persistently for a seven days to finalize this important document, which is an outcome of hard work and efforts of eminent European group of experts.

Additionally, I was invited to give a talk at the Cyprus University of Technology in Environmental Engineering Department of Chemical Engineering in Limassol, Cyprus about West Nile virus and its surveillance in Serbia as well as to share my experience and knowledge about *Aedes* invasive mosquitoes and how to communicate their impacts to children of primary and secondary schools.

Due to the Corona virus the universities in Cyprus were closed on Friday the 13th of March when my talk was scheduled. Dr Martinou rescheduled my talk this time in order to be held at the Akrotiri Environmental Education Centre however the centre also closed a few days prior to my talk due to COVID-19. Finally, we arranged for the talk to take place at the hotel where I was staying with a small group of people who were very interested in the topic. Although it was a small audience we had some intense discussions. .

DESCRIPTION OF THE MAIN RESULTS OBTAINED

My STSM contribution towards working group 3 within the AIM COST project CA17108. Outcome of this Short Term Scientific Mission is finalized very valuable report which will be available to all experts who have interest in topic of surveillance/monitoring of mosquitoes and arboviruses, mosquito control and citizen science. The dissemination activities as the questionnaire/report are of the main deliverables for WG3 furthermore. During my stay in Akrotiri increased my experience and enhance my scientific competence in science communication and raising awareness about mosquitoes and their medical and veterinary significance.

Collaboration with Dr Angeliki Martinou was very valuable for me because I improved knowledge and experience in mosquito monitoring and mosquito control during our together working hours. I consider also working on report very useful experience because I learnt how difficult that type of work can be. Presenting data to the wide range of users on the global level is delicate and if it is not done properly (simplified to understandable level), users are not going to be able to understand it and in that case, huge work done by all eminent experts would be useless.

FUTURE COLLABORATIONS (if applicable)

Collaboration will be continued through the international projects planned for future. Results synthesized in this report are planned to be published in a peer-reviewed journal in the near future.

Confirmation by host of the successful execution of the mission

I herein, confirm the present report regarding Short Term Scientific Mission conducted by Mihaela Kavran AIM COST CA17108



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