

Subject: In situ training in Podgorica, Radovici, Tivat and Lastva Grbaljska

Place: Podgorica, Montenegro

Date: 5th to 9th August, 2016

Procurement plan: Training, line 5

In situ training in South Montenegro, is intended for the employee of Centro Agricoltura Ambiente from Bologna, Italy: Romeo Bellini and Faculty of Agriculture Novi Sad, Serbia: Dusan Petric, as a part of WP2c.

Continuation of trainings from first and second research year - This activity is planned to support collaborative research on surveillance of MV/MBD and non-chemical control measures in Montenegro. Apart from direct involvement in research activities (WP1a and WP1e), international partners will provide specific practical training to MCM - implementation of mosquito surveillance, also providing *in situ* field training.

STUDY FOR THE RISK ASSESSMENT OF CHIKUNGUNYA, DENGUE AND ZIKA VIRUS OUTBREAK IN MONTENEGRO - 2016

OBJECTIVES

- To evaluate the *Ae. albopictus* population density in 3 urban areas of MNE during the seasonal peak period (August);
- To calculate the level of correlation between ovitrap data and human landing collection data in MNE;
- To estimate the risk of outbreak in case of introduction of Chikungunya, Dengue and Zika viruses throughout viremic travelers;
- To compare the observed level of correlations between ovitrap data and human landing collection data observed in MNE and in Northern Italy;
- To compare the risk of Chikungunya, Dengue and ZIKA viruses outbreak estimated in MNE and in Northern Italy.

PROTOCOL

- 3 urban localities of different dimensions have been chosen following the ovitrap data collected in 2012-13 (Radovici, Krasici and Krtole);
- in each locality the urban area under study has been defined and number of ovitraps fixed as follow:
 - Radovici: 20,73 ha – 10 ovitraps; Krasici: 40,59 ha – 15 ovitraps; Krtole: 28,2 ha – 12 ovitraps.
 - ovitraps are being positioned in vegetated shaded sites and left working for 9 days;
 - first positioning of ovitraps on 6th-9th July and the periodic inspections on 16th July, 25th July, 3rd August, 12th August, 21th August, 30th August;
 - in the period 4th-11th August albopictus females will be collected each day in the 3 urban areas, by manual aspirators (Human Landing Collection sessions of 15 min) during the peak activity

time (indicatively 5-7PM) by 4-6 persons. Each person will conduct 4 sessions during the indicated two hours period, by moving in different vegetated sites (obtaining 16-24 HLC data). Collected females will be released back to the field immediately after the 15 min session; Collecting will be performed in afternoon hours, while every morning determination and assortment of collected material (other mosquitoes than *Ae. albopicta*) will be done.

- Collected data will be processed to see the *Ae. albopictus* population density in the 3 urban areas of MNE during the seasonal peak period; the level of correlation between the ovitrap data and the HLC data; the risk of outbreak in case of introduction of Chikungunya, Dengue and ZIKA viruses throughout viremic travelers; the level of correlations between MNE and Northern Italy data.



Krtole



Radovici - 20.73 ha

Radovici



Krasici

Travel arrangements:

Romeo Bellini will departure from Bologna and Dusan Petric will departure from Novi Sad and both arrive in Tivat (Lustica) on 4th of August. They will return on 9th of August.