SHORT TERM SCIENTIFIC MISSION (STSM) SCIENTIFIC REPORT

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

Action number: CA18221 - PEsticide RIsk AssessMent for Amphibians and Reptiles

STSM title: Refinement of housing techniques and of different kind of performance tests on hatchling, juveniles and adults of lizards

STSM start and end date: 28/06/2021 to 02/07/2021

Grantee name: Gianpaolo Montinaro

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| **PURPOSE OF THE STSM:** |
| Aims of the STSM was learning new housing techniques and how to carry out performance tests on lizard species.  The planned period of 5 days made it possible to achieve the set goals. |

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| **DESCRIPTION OF WORK CARRIED OUT DURING THE STSMS AND OF THE MAIN RESULTS OBTAINED** |
| The scientific staff of the Department of Sciences of the University of RomaTre (Dr. Leonardo Vignoli and Dr. Giulia Simbula) provided all the information to realize performance tests on hatchlings, juveniles and adults of lizards. Inside the laboratory of the university was possible to see and try the equipment is needed to realise performing tests on lizard. A special session was dedicated to use the programs to analyse the videos and to get information on how the lizards are used for the tests (positioning of the animals, interval between tests and feeding before / between / after tests).  The scientific staff of the “Fondazione Bioparco di Roma” (the former zoo of Rome) provided basic information for a correct captive holding of lizards showing the equipment and the indoor and outdoor enclosures for housing the lizards. Particular attention was paid to the explanation of the daily procedures for the care of animals and the accessories to be included in the enclosures to ensure proper housing of the individuals. The product of this further collaboration was the creation of a protocol especially to refine the techniques of temporary detention of females for reproductive purposes.  The achievement of the objectives set by STSM has made it possible to improve the work protocol to apply in the current study on sand lizards in Germany from the next reproductive season. Rifcon already has outdoor enclosures, rooms and permits to keep wildlife (micro-mammals) in captivity and has trained staff to ensure their proper housing. The achievement of the objectives set by this STSM increase our expertise and give the possibility to apply for further permits for the detention in captivity of reptiles in case of ecotoxicology studies. |

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| **FUTURE COLLABORATIONS** |
| The collaboration between the University (RomaTre) and our company (Rifcon) will soon contribute through common publications to the development of methods that improve the efficacy of the whole scheme of Environmental Risk Assessment of pesticides. Dr. Giulia Simbula was a guest in June of our company inside another STSM to learn telemetry techniques on sand lizards in vineyards. The study currently underway will be a first concrete opportunity for publications. |