

BioForMoz Newsletter 7

April 1 – June 20, 2023

Dear colleagues and friends,

here is the seventh newsletter of the BioForMoz project (Support for Environmental Research - AID 12089), funded by the Italian Agency for Development Cooperation (AICS), entrusted to the Department of Biomedical Sciences of the University of Sassari to collaborate with the Biotechnology Center of the E. Mondlane University of Maputo in Mozambique, together with Dept. Biology and Biotechnology C. Darwin, Sapienza University of Rome and the Department of Earth, Environment and Life Sciences, University of Genoa.

Since the last newsletter of April 2022, we have been able to develop several actions.

As part of the field activities relating to ongoing research, we point out the following actions:

From 11 to 24 April 2023, an insect sampling mission was carried out in the Province of Manica in the **Serra Chimanimani** by Drs. Sheila Nhassengo, Domingos Sandramo and Bernardo Muatinte as part of the research projects "*Review and Taxonomic and Molecular Identification of Hymenoptera biodiversity from the insect collection of the Natural History Museum of Maputo*" and "*Use of DNA barcode for estimating specific and phylogenetic biodiversity in Diptera (Syrphidae) pollinators in the National Reserve of Chimanimani*".

Dr. Joelma Buchir of the CB-UEM in the context of the project "*Evaluation of emerging contaminants in the Umbeluzi river: their presence and effects on fish*", carried out water sampling in the study area. As part of this research, an agreement was signed on April 13 with **the Water Research Institute, National Research Council**, Montelibretti, Italy. Currently Dr Buchir is at the Montelibetti Institute for a training internship (June 5 - July 7), scientific collaboration and participation in the course "Water pollution: Holistic approach and natural base solutions".

On 12 April 2023, the **Seminar for the presentation of the intermediate results** of 10 research projects and 6 dissertation works of the 6th Cycle of Masters in Biotechnology was held in Maputo, financed through our research and training grants

20 April 2023 the sampling activity was launched for the project "*Necrose Letal do Milho- uma potencial doença emergente do milho em Moçambique*." Conducted by Dr. Marilia Mazivele Titoce in collaboration with Dr. Massimo Turina, CNR, **Institute for Sustainable Plant Protection**, Padua, with the Departamentos de Agricultura and Sanidade Vegetal de Maputo, Niassa and Cabo Delgado.

26 April and 10 May, field missions for sampling were carried out in **Matutuine** by DRs. Lucinda de Araújo and Vanessa Comé, as part of the research "*Epidemiology and Molecular Characterization of the RVFV and Establishment of Molecular Techniques for detection of RVFV in Mozambique*".

25 and 28 April and 17 and 20 May 2023, sampling missions of Dr. Hermógenes Neves Mucache were carried out in **Matutuine** as part of the research "*Estudo longitudinal para avaliar estratégias de controle integrado da trypanossomose animal na interface animais selvagens-domésticos no Parque Nacional de Maputo and control of the glossine fly*".



AGENZIA ITALIANA
PER LA COOPERAZIONE
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BioForMoz: Support for environmental research AID 12089

From 30 April to 6 May **Prof. Daniele Dessí**, University of Sassari, held the module *General concepts and mechanisms of microbial pathogenesis* while from 7 to 13 May **Prof. Pierluigi Fiori**, University of Sassari held the *Basic Immunology module* of the 7th cycle of the Master in Biotechnology

On May 2, together with the management of the CB-UEM, we inaugurated the **new offices and a warehouse**, built as part of BioForMoz. The Rector and the 2 Vice-Rectors, from the Italian side, the Ambassador of Italy and the Director of the Maputo office of AICS were present for the EMU.

From 7 to 20 May, Dr. Fernando Nhassego in **Beira e Dondo** carried out a water sampling as part of the research "*Evolução genómica de Vibrio cholerae no ambiente aquático em áreas afectadas pelo cyclone Idai em Moçambique*".

From 16 to 19 May 2023, Dr. Erica Tovela and Prof. Mauro Colombo carried out a study and sampling in the **Maputo National Park** as part of the research "*From river to river and from genetic to genomics: the study of homing in freshwater fishes*".

On May 17, Dr. Lucinda de Araújo and Vanessa Comé carried out a sampling of blood and faeces in domestic animals, in the **Matutuine district** as part of the research "*Caracterização do perfil de resistência antimicrobiana de estirpes de Escherichia coli isoladas em animais domésticos que habitam proximo de áreas de conservação*".

From 24 May to 25 June Dr. Carlos Bento (BioBank manager of MHN-UEM) participates in the **Oceanographic Expedition Survey**, "*Fishery resources southern and central Mozambique*" on the research vessel Dr Fridtjof Nansen. Duration: 24 May to 24 June 2023. Objective research is "*Marine biodiversity with an ecosystem approach of the coasts of Mozambique*" with collection of fish samples. Funded and coordinated by FAO.

Finally on June 14th Prof. Mauro M. Colombo together with Dr. Fernando Chanisso carried out a survey of the installations of the **Gala Field Station** of the Biotechnology Center in Gala, Matutuine, financed by the international COMBAT Project, in order to evaluate a commitment by BioForMoz for the rehabilitation of the lodge structures from use as a training center for biodiversity and zoonoses.

We thank you for your attention and we greet you cordially.