



BioForMoz: Support for environmental research AID 12089

BioForMoz Newsletter 5

July 1, 2022 – September 30, 2022

Dear colleagues and friends,

here is the fifth newsletter of the BioForMoz project (Support for Environmental Research - AID 12089), funded by 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 July 2022, we have been able to develop several actions.

The activities of the research projects related to the training and research grants that we listed in the previous newsletter of July are in progress. With the fellows, the review of the activity plans of the research projects and the congruity of the related spending plans were developed.

In July, Dr. Erica Tovela, from the Natural History Museum, left for the University of Parma, Department of Chemical Sciences, Life and Environmental Sustainability, for a 1-month internship, under the supervision of Prof. Francesco Nonnis Marzano and with Dr. Claudio Ferrari in the development of the project "From river to river and from genetic to genomics: the study of homing in freshwater fishes".

On 7 July, a scientific conference was held by Prof. Paola Bonfante of the Accademia Nazionale dei Lincei and member of the BioForMoz Scientific Council, on the theme: Plant Health and Plant Microbiota: the impact of beneficial microbes on the root-shoot axis.

On 21 July 2022, a second scientific conference was held by Prof. Guido Forni of the Accademia Nazionale dei Lincei and member of the BioForMoz Scientific Council, on the topic: COVID-19 VACCINES - Technological platforms and immune mechanisms.

On July 17 a mission was carried out in Beira by Dr. Fernando Caetano Nhasengo (master student) and Dr. Jussa Paulo Falique (CB) who in collaboration with the local INS staff (Carmen Lyra Chilengue) collected surface water samples for the study: Genomic evolution of *Vibrio cholerae* in the aquatic environment in the areas affected by cyclone IDAI in Mozambique.

In August, the activities of defining the structure of the EBMI Laboratory (Inhaca Marine Biology Station) were advanced to identify the plant site and the laboratory project. Together with the DMI (the Infrastructure Maintenance Department of the UEM), it was decided for a new building, made of masonry and with a volume greater than 1.5 times that of the current laboratory.

Important extraordinary maintenance activities were carried out on the instrumental equipment and systems of the Laboratory of the Biotechnology Center, the new offices and the new warehouse, built in the past semester, were equipped, and new informatic equipment was purchased. .

On 2 September an agreement was signed between the COMBAT Project (Controlling and Progressively Minimising the Burden of Animal Trypanosomosis) and BioForMoz to collaborate for the development of research for the control of infectious diseases, including zoonosis and the study



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of biodiversity at the Field Station in the area of Gala, Matutuíne District, Maputo Province, Mozambique. The COMBAT Project is a consortium of institutions from 5 European countries (including Italy) and 15 African countries (including Mozambique).

At the beginning of September, consultations began for coordination between the environmental area projects funded by AICS: BioForMoz, CoReBiom (from the University of Rome Sapienza) and ManGrowth (study of mangroves in Mozambique).

On 8 September the seminar of Prof. Rodolfo Negri, member of the BioForMoz Scientific Committee, molecular biologist of the Sapienza Univ. of Rome, was held, entitled: "Epigenetic Mechanisms of gene expression regulation and their relevance for biomedicine".

On 22 September the seminar was held by Prof. Francesco Cucca, member of the BioForMoz Scientific Committee, geneticist of the Univ. di Sassari, entitled: "Using genomics in the Sardinian model population to understand the biology of common diseases and identify therapeutic targets".

From 16 September a 1-month mission by Dr. Raquelina Ferreira of the Center of Biotechnology, at the University of Sassari and Biomedical Research (IRGB) - National Research Council (CNR), is underway, to develop, under the supervision of Prof Francesco Cucca and the collaboration of Dr. Maristella Pitzalis, the research project Profile of hemoglobinopathies in children of the central hospital in the cities of Maputo, Beira and Nampula.

Finally, from 22 September a mission was carried out by Dr. Simone Sabatelli of the Univ. Of Rome Sapienza, to develop at the Museum of Natural History, performing molecular tests and field samplings.

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