

BioForMoz: Support for environmental research AID 12089

## **BioForMoz Newsletter 10**

## December 20, 2023 – March 11, 2024

Dear colleagues and friends,

here is the tenth newsletter of the BioForMoz project (you may find the previous newsletters on our site https://www.bioformoz.org/), 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.

Work is underway for the construction of the new research laboratory of the Marine Biology Station on the island of Inhaca which we hope will be inaugurated in May 2024.

The collaboration with the COMBAT project of the European Union for the control of the trypanosome continues. Dr. Hermogenes Mucache is developing the doctoral thesis "Assessment of Trypanosome Diversity and Integrated Control Methods for Animal Trypanosomosis in Southern Mozambique" at the Gala Field Station of the Biotecnology Center, in the buffer zone of the Maputo National Park, and collected so far 822 cattle samples.

On 22 December 2023, Dr. Marilia Mazivele's doctoral project "*Establishment of diagnostic techniques for the detection of maize lethal necrosis disease (MLND) and related virus in the central and Northern region of Mozambique*" was evaluated positively. In collaboration with the Institute for Sustainable Plant Protection - CNR, Italy

From 14 January to 14 February 2024, Dr. Nadia Namunaua carried out an internship at the Montelibretti Water Research Institute (IRSA-CNR) in Italy, as part of the research "Assessment of contaminants emerging in the Umbeluzi river: their occurrence and effects on fish".

From 04 to 13 February 2024, a mission was carried out in Mozambique by BioForMoz coordinator Dr. Elisa Taviani, of the University of Genoa, to supervise the research activities at the CB-UEM and the MHN.

In the same period, Dr. Simone Sabatelli's mission took place at the Natural History Museum in collaboration with the Corebiom project, for the development of the project "*Review and identification of taxon, morphology and molecular biodiversity of Himmenoptera, pollinators from the Insect Collection of the Natural History Museum of Maputo, Mozambique*" and "*Evaluation of the genetic characteristics of the African buffalo in Mozambique, respecting the biogeographical regions*"

We remind you that BioForMoz is developing together with the Biotechnology Center and the Natural History Museum 13 main research projects dedicated to: corn viruses, buffalo



population, rift valley fever, river water quality, biological indicators of environmental contamination, insects hymenoptera, mycotoxins, trypanosome vector fly, environmental cholera, bacterial drug resistance, hemoglobinopathies, genetic characterization of eels, characterization of medicinal plants.

From 10 February to 03 March 2024, a sampling mission was carried out in the Provinces of Gaza and Inhambane, by Dr. Charmila Mussagy, as part of the research "Molecular *Characterization, and Mycotoxin Profile of Toxigenic Fungi Isolated from Maize and Peanut in South region of Mozambique*".

The public presentation seminar of the Biobank of Animal Biodiversity was held on February 15th in the auditorium of the Natural History Museum. The seminar, presented by the Rector of the UEM, saw the participation of representatives of the National Administration of Conservation Areas (ANAC), Oceanographic Institute of Mozambique, National Institute of Health, Criminal Investigation Service (SERNIC), Agrarian Investigation Institute of Mozambique (IIAM), and other important institutions dedicated to conservation of Biodiversity, in the presence of around seventy guests.

On 27 and 28 February the thesis protocols of the 13 students of the 7th cycle of the Master in Biotechnology were presented, of which 6 benefit from BioForMoz scholarships.

From 7 to 17 March, Dr. Alice Massingue of the UEM Botanical Garden is travelling to Nampula for specific sampling as part of the research project "*Molecular characterization and taxonomic revision of the endemic and medicinal plants from two biodiversity hotspots* (*Maputaland and Inhambane Endemism center*) preserved at Eduardo Mondlane University Herbarium, Maputo-Mozambique".

We thank you for your attention