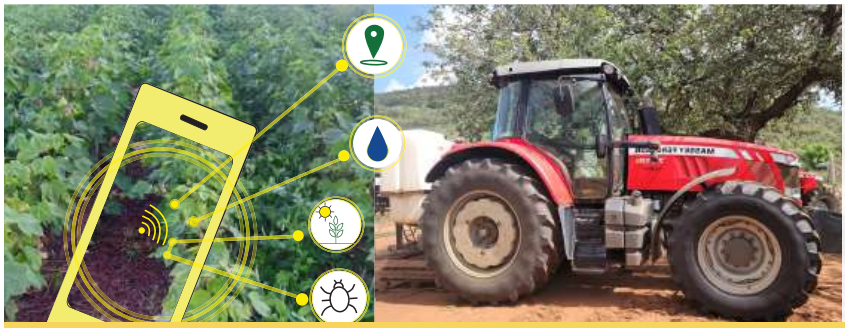

UNIVERSIDADE EDUARDO MONDLANE

IIAM

ISPG

ISPM

13th African Crop Science Society Conference

AFRICAN CROP SCIENCE SOCIETY

Building Africa's Future

Crop Research and Innovation for Agricultural Transformation, Resilience, and Inclusion

BOOK OF ABSTRACTS

16th–19th September

Venue: Eduardo Mondlane University Main Campus
Maputo, Mozambique

Republic of Mozambique

THE WORLD BANK IBRD • IDA

USAID FROM THE AMERICAN PEOPLE

iDE Powering entrepreneurs to end poverty

ideialab

ACDI VOCA Expanding Opportunities Worldwide

SOCODEVI

In partnership with Canada

AATF Prosperity through Technology

IITA Transforming African Agriculture

CGIAR

AID-I Mozambique

13th African Crop Science Society Conference

Building Africa's Future:
Crop Research and Innovation for Agricultural Transformation, Resilience, and Inclusion

BOOK OF ABSTRACTS

16th – 19th September 2024

Venue: Eduardo Modlane University Main Campus
Maputo, Mozambique

Title: Book of Abstracts, 13th African Crop Science Society Conference

Year: 2024

Editing: Editorial Unit of UEM Scientific Journal, Eduardo Mondlane University

Editor in Chief: Aidate Mussagy

Cover design: Elton Macuacua, Faculty of Agronomy, Eduardo Mondlane University

Layout: Nelton Gemo, Centre of Comunication and Marketing, Eduardo Mondlane University

EDUARDO MONDLANE UNIVERSITY (UEM)

Rector: Prof. Doutor Manuel Guilherme Júnior
Vice-Rector: Profª. Doutora Amália Alexandre Uamusse
Vice-Rector: Prof. Doutor Joel das Neves Tembe

RECTORATE BUILDING
Julius Nyerere Avenue, 3453, Main University Campus
Maputo, Mozambique
www.uem.mz

© Copyright: Eduardo Mondlane University, Maputo, 2024

13th African Crop Science Society Conference

The Conference is organized by the Faculty of Agronomy and Forestry Engineering, Eduardo Mondlane University, in collaboration with the Agriculture Research Institute of Mozambique (IIAM), the Higher Polytechnic Institute of Gaza (ISPG), The Higher Polytechnic Institute of Manica (ISPM) and the African Crop Science Society (ACSS).

Under the Auspicious of the Steering Committee

Prof. Amália Uamusse (CHAIR)
Vice-Rector, Eduardo Mondlane University

Prof. Zélia Menete
Director, Mozambique National Institute of Agricultural Research

Prof. Sarrok Talhada
Director, The Higher Polytechnic Institute of Manica

Prof. Mário Matangue
Director, The Higher Polytechnic Institute of Gaza

Dr. Rachida Mamade
Deputy Director, Ministry of Science and Technology and Higher Education

Dr. João Carlos Frade
Confederação das Associações Económicas de Moçambique (CTA)

Prof. Ernesto Uetimane
Dean, Faculty of Agronomy and Forestry Engineering, Eduardo Mondlane University

Prof. Emílio Tostão
Director, Scientific Directorate Eduardo Mondlane University

Dr. Luis Neves Domingos
Director, Informatic Center Eduardo Mondlane University

MSc. Adão Matimbe
Director, Center for Communication and Marketing, Eduardo Mondlane University

MSc. Estácio Rajá
Director, Finance Directorate, Eduardo Mondlane University

Prof. Aidate Mussagy
Editor in Chief, Editorial Unit of UEM Scientific Journal, Eduardo Mondlane University

Prof. Manuel Chenene
Director, Cooperation Office Eduardo Mondlane University

Local Organizing Committee

Chairman, ACSS 2024

Prof. Amélia Sidumo

Budget and Fund-Raising sub-Committee

Prof. Luisa Santos (Coordinator)
Dr. António Chamuene
Lic. Cheila Klironomos Sequeira
Prof. Custódio Ramos Tacarindua
Dr. Alcebiades Hlunguane
Dra. Albertina Alage
dr. Orlando Cossa
dr. Clara Petrosse
Lic. Irondina Cardoso
Dr. Luis Santos

Scientific Sub-Committee

Prof. Lucas Tivana (Coordinator)
Prof. Sebastião Famba
Prof. Meizal Popat
Dra. Celestina Jochua
Prof. Luis Artur

Communication Sub-Committee

dr. Elton Macuacua (Coordinator)
Lic. Mikhxon Mungoi
Lic. Ana Matola
Lic. Denilson Manhique

Registration and IT Sub-Committee

Lic. Francisco Munguambe
Lic. Eulália Timana
Lic. Momade Abdul
Lic. Ilídio Ricardo

Technical Logistic Sub-Committee

MSc. Teodora Agostinho (Coordinator)

General Logistic Sub-Committee

Dr. Laura José (Coordinator)
Lic. Eddy Mudlovo

Protocol and Secretariat Sub-Committee

Dr. Arsénio Ndeve (Coordinator)
Lic. Helena Moisés
Lic. Elvira Joaquim
Dr. Albasini Caniço
Lic. Cremildo Chiconela
Ms Jennifer Langa
Ms. Shelcia Sérgio
Dr. Ricardo Malamba

ASSESSMENT OF FARMER'S KNOWLEDGE ABOUT FUNGI AND MYCOTOXIN IN SOUTHERN MOZAMBIQUE

João Bila[1,2*] | jbilay@gmail.com

Custódia Mucuamule[3], Amina Bombe[1], Maria Isabel Ribeiro[4], Armando Venâncio[5,6]

Sandra Afonso[7] and Paula Rodrigues[4,8]

[1]UEM-Universidade Eduardo Modlane, Faculdade de Agronomia e Engenharia Florestal, Maputo, Mozambique

[2]Centre of Excellence in Agri-food Systems and Nutrition (CE-AFSN), UEM, Maputo, Mozambique

[3]UEM-Universidade Eduardo Modlane, Faculdade de Veterinária, Maputo, Mozambique

[4]Centro de Investigação de Montanha (CIMO), Instituto Politécnico de Bragança, Campus de Santa Apolónia, 5300-253 Bragança, Portugal

[5]CEB - Centre of Biological Engineering, University of Minho, 4710-057 Braga, Portugal;

[6]LABBELS – Associate Laboratory, Braga/Guimarães, Portugal; [7] Instituto Superior Politécnico de Cuanza Sul, Angola

[8]Laboratório Associado para a Sustentabilidade e Tecnologia em Regiões de Montanha (SusTEC), Instituto Politécnico de Bragança, Campus de Santa Apolónia, 5300-253, Bragança, Portugal

Mycotoxins find their way into the human and animal body through the consumption of mycotoxin contaminated foods, which may result in acute or chronic intoxication. This study aimed to assess knowledge about fungi and mycotoxins among farmers in the provinces of Gaza and Inhambane, in southern Mozambique. Data were collected using quantitative study based on non-probabilistic questionnaire, covering 180 farmers from Gaza (90) and Inhambane (90) Provinces, from October to November 2022. Data were subjected to descriptive and statistical analysis. The majority of farmers were aged 36 or over (75.0%), were female (75.2%), had no education or only had primary education (80.6%) and had been a farmer for longer 15 years old (64.4%). The level of knowledge about fungi and mycotoxins is mainly explained by the province of residence, followed by the level of education, age and gender, with producers with higher levels of education and of male gender recording a higher level of knowledge. Regarding mycotoxins, most farmers have never heard about these toxic compounds. Likewise, regardless of the province, a significant number of farmers did not know or have never accounted

for production losses or income losses due to fungal and mycotoxin contamination. The number of farmers who knew the consequences of consuming food contaminated by mycotoxins is residual. Hence, there is a significant proportion of farmers who use contaminated products for animal feed. Concerning knowledge about the conditions that promote fungal contamination after harvest, 33.3% and 23.3% of farmers in Gaza and Inhambane respectively, reported that did not know. However, the majority assumes that they knew, pointing out as the main causes are humidity, storage of harvest with high moisture content or recently harvested for long periods, existence of insects, rodents and birds, and the lack of ventilation in the storage area. Sociodemographic and geographic variables were predictors of the level of knowledge about fungi and mycotoxins. The low level of knowledge about fungi and mycotoxins, including the consequences of consuming mycotoxin-contaminated food to human and animal reported, increase the vulnerability and risk-exposure of producers and consumers for mycotoxin intoxication, which call for increased awareness campaigns.

Keywords: Fungi, farmers, farmer's Knowledge, mycotoxins.