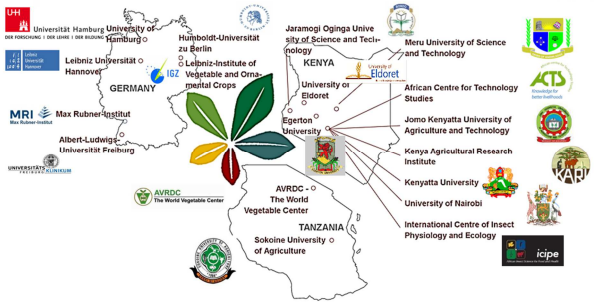
HORTINLEA
DIVERSIFYING FOOD SYSTEMS

HORTINLEA

SP5: Impact of African leafy vegetables on human health

Projektlaufzeit:

2013 bis 2018



Beteiligte externe Organisationen:

19 Partner aus Deutschland und Ostafrika

Mittelgeber:

BMBF

Zusammenfassung:

HORTINLEA is a research project addressing food security in East Africa, particularly in Kenya. The overall goal is to improve the livelihood and nutritional situation of the rural and urban poor. The project is embedded in a funding initiative for global food security (GlobE) of the Federal Ministry of Education and Research and the Federal Ministry for Economic Cooperation and Development.

Contamination of agricultural products with aflatoxins from Aspergillus fungi is a serious problem in developing countries. While acute high aflatoxin B1 (AFB1) exposure results in liver failure (aflatoxicosis), chronic exposure to AFB1 not only affects the incidence and severity of infectious diseases due to immunosuppression, but also leads to liver cancer. Consequently, AFB1 exposure accounts for about 40 % of disease burden in developing countries, where a short lifespan is prevalent. Indigenous African leafy vegetables (ALVs) are rich in bioactive phytochemicals with suggested preventive effects against non-communicable diseases.

The objective of the sub-project at the University Medical Center Freiburg is to improve the current nutrition situation of the population in Eastern Africa by investigating the potential of AIVs to protect against aflatoxin induced diseases.