

MALARIA: A Health Challenge in Botswana

“Moving from 0.74 (per 1000 population) to elimination: 2030”

Resistance Management

Insecticide Resistance

- Bioassays

Molecular Assessment

- Kdr and Ace 1

Botanical Pesticides

“Swampy Okavango & Chobe”



Bti ✓ DDT ✗

Population Dynamics

Mosquito diversity

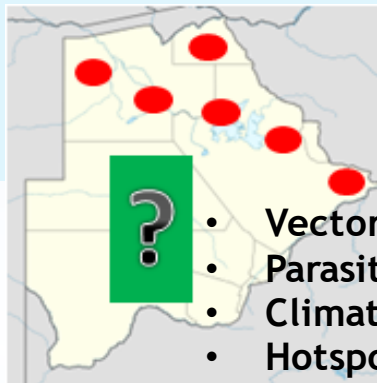
Vector Genetic Analysis

An. gambiae complex *An. funestus* group

Indoor Analysis

- Age
- Parity status
- Blood meal Index

Distribution & Mapping



- Vector distribution
- Parasite mapping
- Climatic modeling
- Hotspots & cases?

Vector Thermal Biology

An. arabiensis & other vectors

CTLs, SCPs, CCRTs, HKDTs, ULTs & LLTs

SIT in Malaria Vectors



- *Wolbachia* approach
- Low vector densities

Vector Chemical Ecology



Interference techniques



Mmabaledi Buxton (MSc)