



BecA Laboratory Data Management

Edwin Rojas
Merc Kitavi
Luka Wanjohi

June, 2015

Mukono, Uganda

Use case with Barcode KIT: In Vitro Potato GMOs, avoid pen-based procedures.



Scan instead reading labels to eliminate delays and reduce human errors

Print instead writing on labels to eliminate pen-based procedures.



Use case with Barcode KIT: In Vitro Potato GMOs



Label Content:

Computer readable (barcode): Labcode + Medium Id

Human readable: AccNumb, Labcode, Medium, AcceName, Crop Abr., Biosafety Code, Date Regeneration, Health Status, Staff Id

Software type: On Line



Use case with Barcode KIT: In Vitro Potato GMOs



Label Content:
Computer readable (barcode): Location Number
Human readable: Location Number
Software type: On Line



Use case with Barcode KIT: In Vitro Potato GMOs



Equipment setup:

Database already setup

Client to be setup where necessary

Hand gun scanner and desktop to be bought if necessary

Automation of daily procedures increases efficiency and allow personnel to be employed in other activities

Barcode increase accuracy by reducing the likelihood of human errors from:

- Mislabeled (when write on labels)
- Misread germplasm ID (when read labels)



Barcode KIT components

Innovation to improve research Labs. activities, providing cutting edge technology

Mobile Computer for Labs



Product: PocketPC for Labs
Manufacture: Motorola
Model: Series MC55A0
Classification: IP64

Mobile Barcode Printer



Product: Mobile Barcode Printer
Manufacture: Zebra
Model: RW220
Classification: IP64

Mobile Computer for Field



Product: PocketPC for Field
Manufacture: Motorola
Model: Series MC9590
Classification: IP67

[Video 1](#)

[Video 2](#)

Barcode KIT components

Barcode Scan Reader



Product: Handheld Scanner
Manufacture: Motorola
Model: DS6707SR
Classification: IP41

Desktop Barcode Printer



Product: Desktop Barcode and RFID Printer
Manufacture: Zebra
Model: Series ZT400
Classification: Rugged metal frame and case for demanding activities

Barcode KIT components

Labels with Barcode: Germplasm Identification

Product: Polypropylene Labels
Manufacture: Zebra

General features: Designed for barcodes, resistant labels for different environments like cold chambers and greenhouses, use pre-cut labels, select labels with glue removable or permanent, use label colors to facilitate germplasm groups identification.

