# Strengthening potato production in Malawi

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The James Hutton Institute

# Key activities

 Introduction and evaluation of new potato cultivars

This project is funded by the Scottish Government's International Development Fund

## **Progress in year 1**



- Training in seed potato field evaluation techniques and diagnostics
- Pest and disease monitoring to identify field sites for seed tuber multiplication
- Renovation of seed storage and screen house facilities in Malawi stations



The team at Byumbwe

Mini tubers of cv Atlantic and Maris Bard were supplied to Blantyre and Bembeke stations for propagation and field evaluation



Field plots at Bvumbwe station showing infection by bacterial wilt and potato virus Y









Field of farmers' preferred variety Violet growing crop out of season

- To increase the availability of varieties available to farmers for the fresh and processing markets we supplied mini tubers of two varieties. More will follow in years to come
- The tubers will be planted and evaluated for growth in the different

Irrigated fields in Bembeke sub station where mini tubers will be propagated out of season to try to avoid disease contamination

Potato plants in Bvumbwe field plots showing symptoms of bacterial wilt

Potato leaves with symptoms of PVY recombinant strain N-Wi (confirmed by sequence analysis at JHI)

### Facilities to be renovated – diffuse light seed store and screen house at Byumbwe



The research station at Byumbwe has received support from Irish Aid funded projects through CIP to establish a tissue culture lab but other facilities (below) require upgrading and will be done with SG funding.





Diffuse light store for seed tubers

Screen house

potato production regions. We have also supplied diagnostic reagents for use in surveys for virus disease and to identify fields free of the soil-borne disease bacterial wilt, one of the major constraints to potato production in Malawi

### Acknowledgements

Special thanks go to Dr John Kerr and colleagues at SASA for delivering the training in field inspection techniques and diagnosis and Mr Robert Doig Old Fargie, Glenfarg for taking the time to show our trainees his seed potato production business

## **Training in Scotland June 2011**

Malawian scientists visited Scotland in June 2011 for 10 days.

They received training in field inspection techniques, lab diagnostics and learnt about the Scottish seed tuber classification scheme. The photo was taken during a visit to a commercial seed farm to see the business side with farmer Robert Doig.

