

The use of mobile technology to enhance plant health monitoring and awareness

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Introduction

Plant health is a major issue worldwide with many pests and diseases threatening different plant-based sectors; forestry, agriculture, environment and horticulture.

Mobile technologies are being used in a range of circumstances to enhance awareness of pest and disease threats, and facilitating identification, monitoring of outbreaks and mapping geographic spread of new introductions.

The aim of this project is to review existing mobile technologies (tools), essentially web-sites and mobile apps, currently used in the plant health sector.

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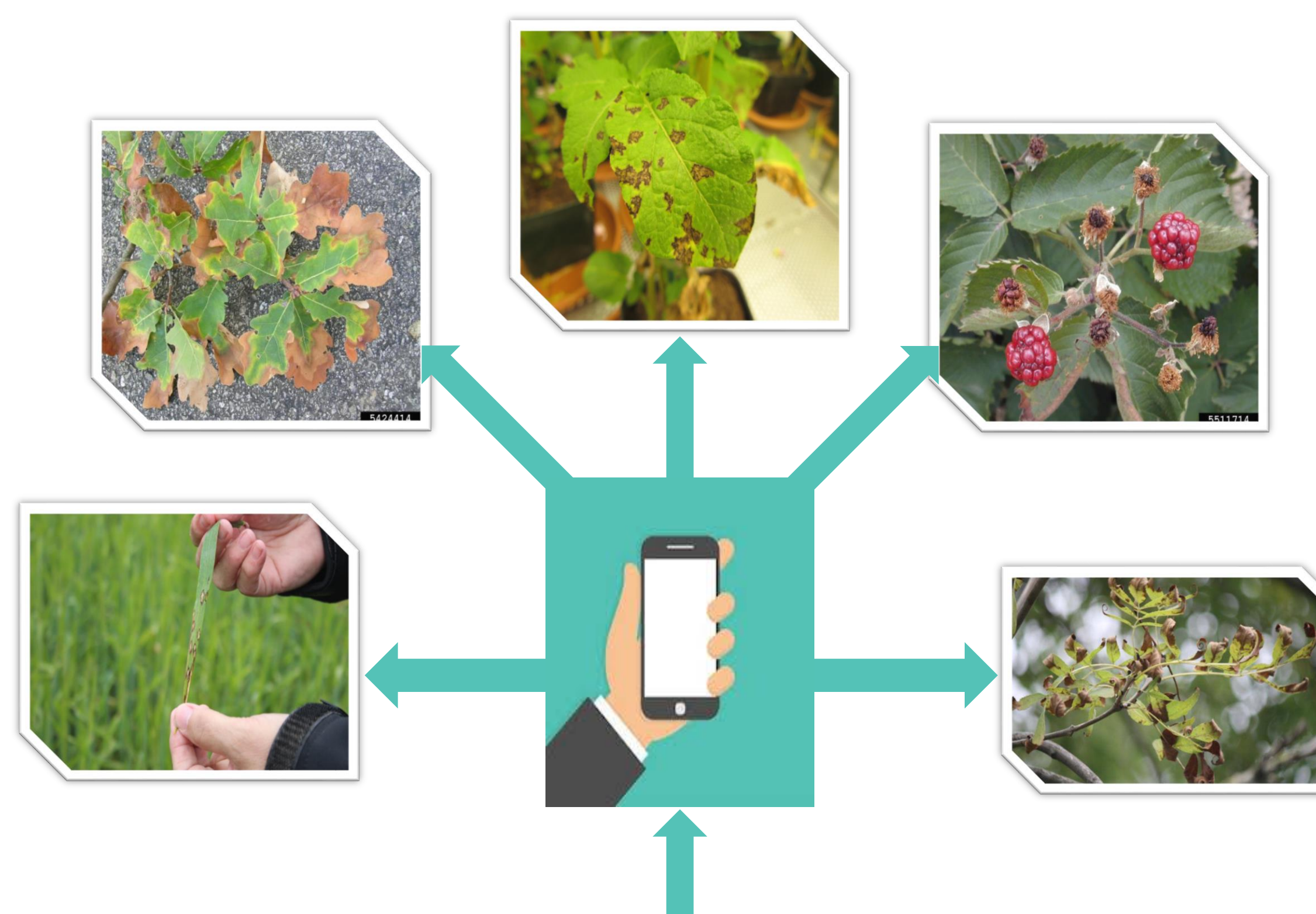


Objectives

- What options are available in terms of mobile technologies for plant health?
- What is their primary purpose?
- Who is the target audience?
- Which plant health sectors do they cover?
- Are they reliable and accurate?
- Is information submitted to a database? If so, how is this information used?
- Could they be used globally, or are they limited to certain geographic regions?

Project outcomes

- Information pertaining to risks to plant health in Scotland is available on web-sites, principally DEFRA'S UK Plant Health Risk Register. However, this information is not in an easy to access mobile format and lacks clear signposting on how to report suspected pest and disease outbreaks.
- Covering a wide range of threats relevant to the forestry sector "Tree Alert" is a comprehensive web-based tool that could be used as a model for other sectors.
- For a very specific threat, the "Asian Hornet Watch" app is an excellent example of combining a pest alert, identification guide, reporting links and distribution maps with direct action in response to verified identifications.



Pest and disease alerts
Pest and disease identification guides
Report/notification links
Pest and pathogen distribution maps
Control options

Key messages

- The diverse requirements between and within sectors means no that single mobile tool is suitable for all plant health needs.
- This was reflected in stakeholder engagement which revealed that stakeholders interact with plant health issues in a diverse range of ways.
- There are excellent examples of mobile tools that could be adapted for other sectors/specific threats if required.
- If interactive functions are incorporated into a mobile tool it is essential that resources to underpin the processing and management of data are available.