Plant Health in the Twittersphere: Identifying new approaches to rapid dissemination of plant health information in Scotland

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Introduction

Twitter is becoming an increasingly popular tool for people to share and access information. Often used as a mobile app, Twitter offers users the ability to share and access information in real time.

Twitter can be used as a tool for direct communication by scientists and policy-makers in the plant health sector who need to share accurate information quickly and to a large number of people. Likewise, Twitter can also be used by non-experts to share incorrect information.

This research project seeks to better understand the influence that top scientists, policy-makers and stakeholders have on Twitter as it relates to plant health information in Scotland.

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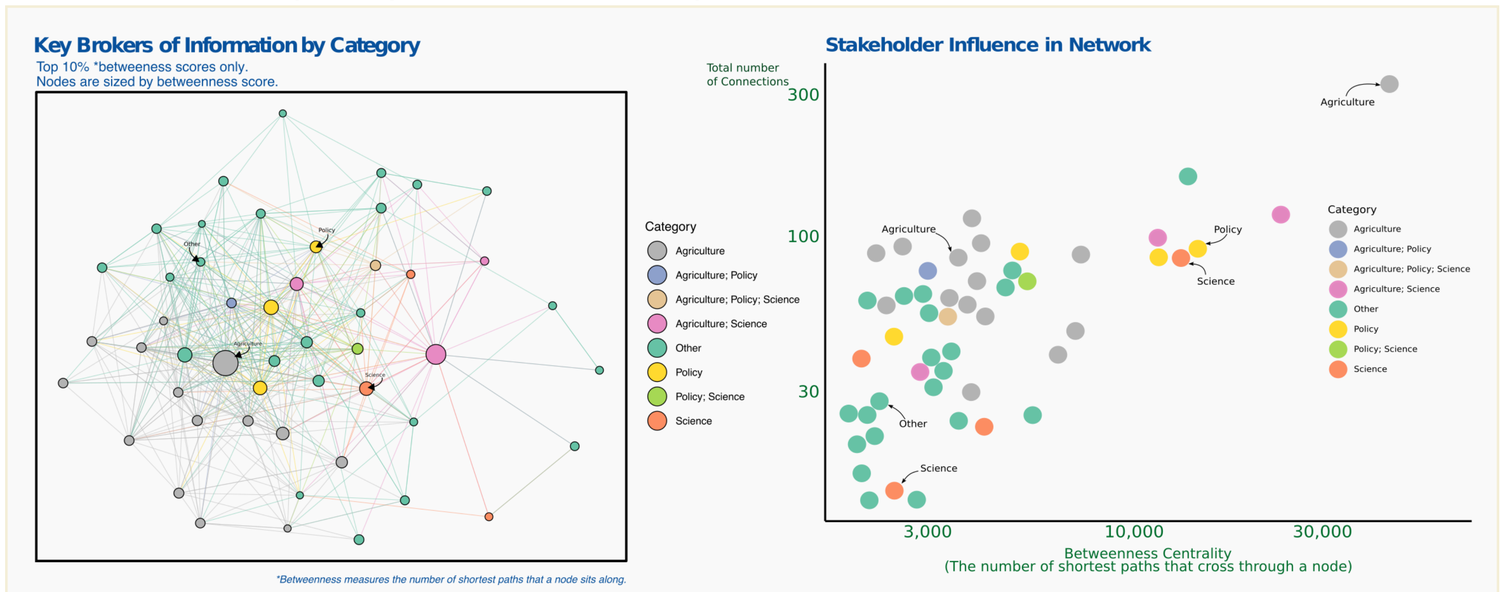
Objectives

- To map influential stakeholders on Twitter and determine their influence in the network.
- To determine the most influential actors in the network and categorise them.
- To identify best approaches for scientist and policy-makers to increase their influence on social media.

Project outcomes

- Data was collected daily from key stakeholders using a method called 'network jumping'. Starting stakeholders include: @FASScot; @ScotGovSASA; @PlantHealthScot; and @NFUStweets.
- There are about 186,000 tweets in the database and about 20,000 different users. About 80% of users are located in Scotland.
- Users categorised as 'Agriculture' are most influential on Twitter in plant health networks.
- Users categorised as 'Science' are discussing plant health issues most frequently – though these users risk being excluded from reaching the largest audience.
- Bridging the gap into the farmer networks will greatly expand the reach of scientists and policy-makers in the plant health sector on Twitter.



Key messages

- There are active discussions regarding important issues in the plant health sector happening online. The largest and most dense stakeholder group is comprised of farmers and agriculture users. Sharing information directly with these users is the fastest and most efficient way to spread reliable information to Twitter users in Scotland.
- Individual researchers are best placed to spread reliable information to Twitter users in Scotland. These individuals are likely to be highly trusted, and they can easily engage with other users in real time.