# Survey of *Xylella* Vectors & Their Host Plant Preferences In Scotland

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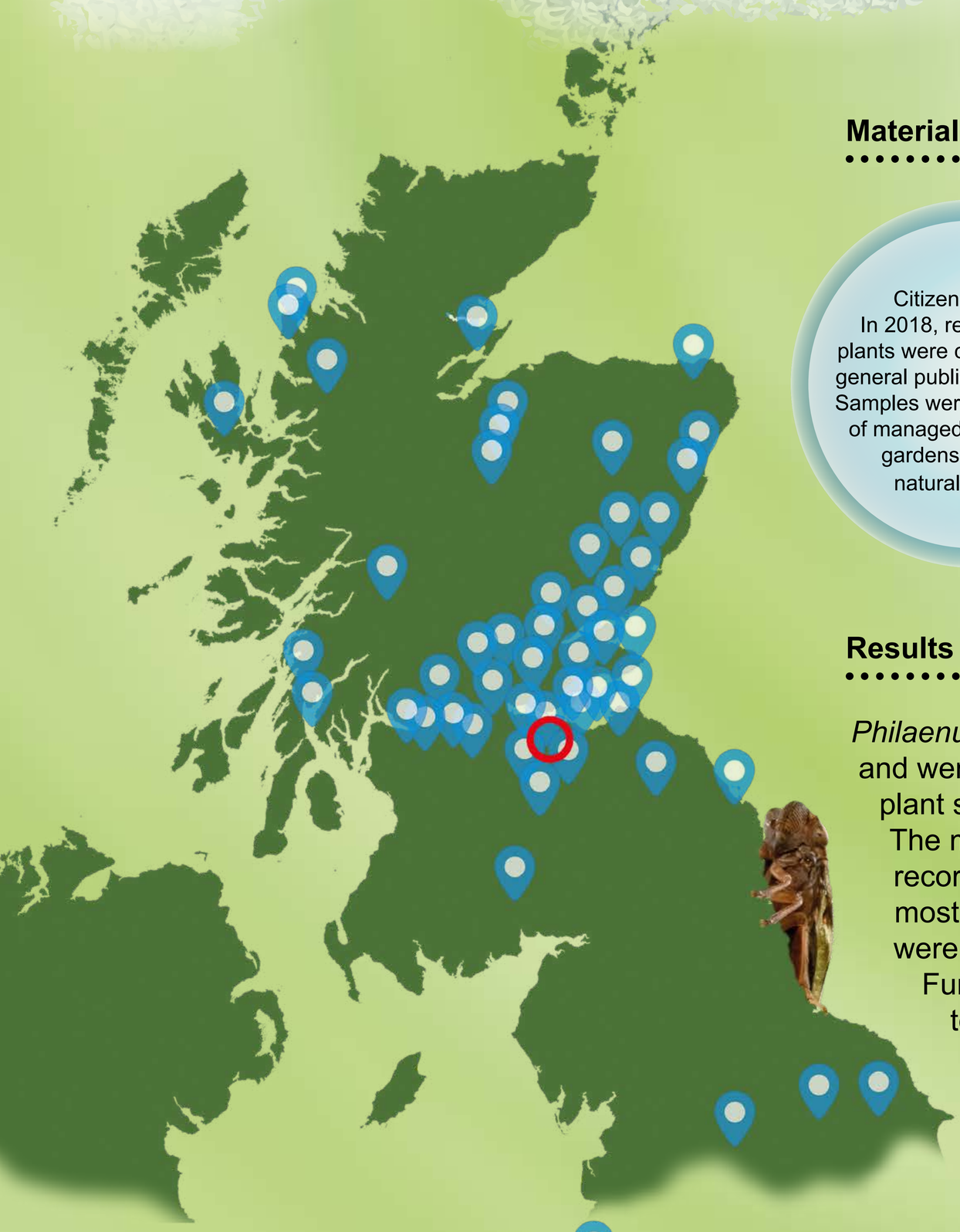
# #Spittlebughunt




## Introduction

The common froghopper or spittlebug *Philaenus spumarius* has been identified as the main vector of a bacteria called *Xylella* in Europe. *Xylella* is the cause of several serious plant diseases and has been recently identified as an emerging problem causing Quick Olive Decline Syndrome. The disease is not currently found in the UK but by improving our understanding of the biology of the vector we have a better chance of preventing the spread of the disease.

## Material and Methods

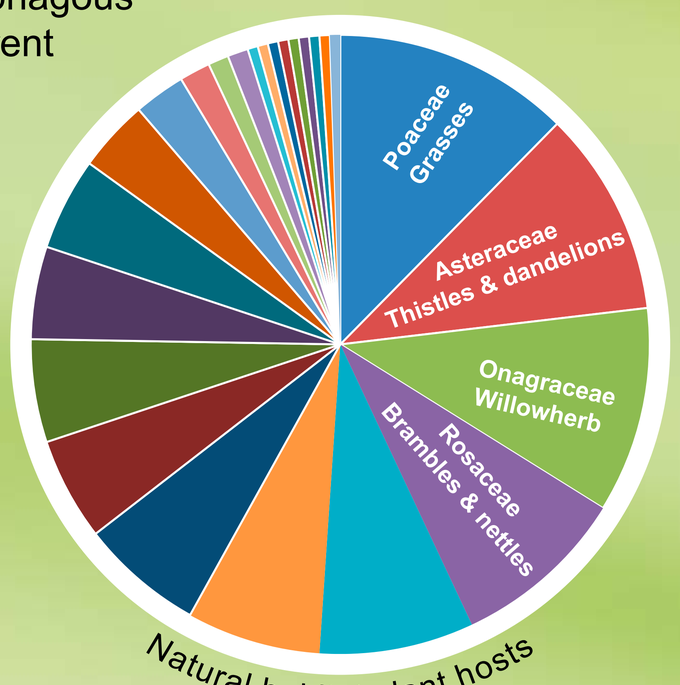
**Citizen Science:** In 2018, records of host plants were collected by the general public from 75 sites. Samples were from a range of managed habitats *e.g.* gardens as well as natural habitats.

**Chronological information:** Every 2 weeks 'spittle' was counted from 30 quadrats along 4 different 100m transects. Adults were sampled using a sweep net.

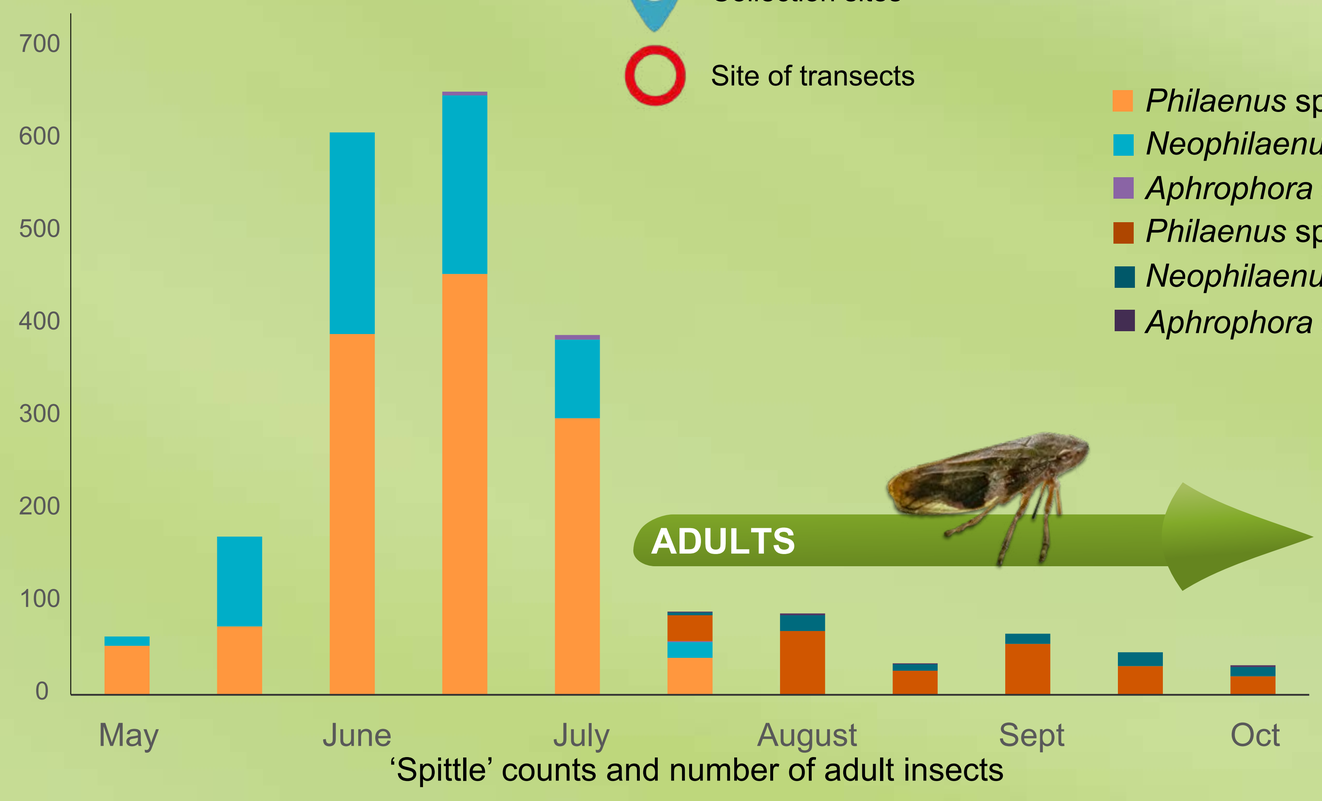
**Identification:** A combination of morphological identification and molecular barcoding of plants and insects.

## Results & Conclusion

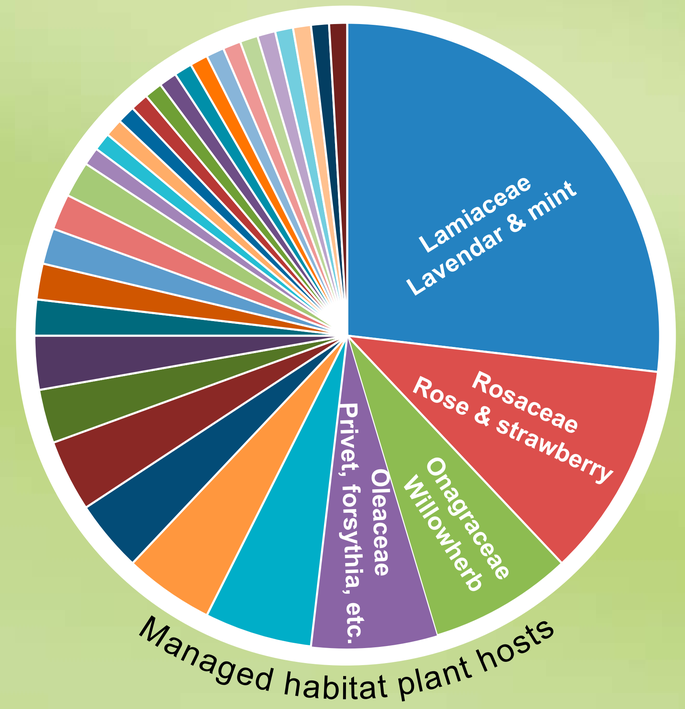
*Philaenus spumarius* are highly polyphagous and were identified on over 93 different plant species from 39 families. The most common garden host recorded was lavender and the most common natural hosts were grasses (Poaceae). Further work is still required to investigate if adults migrate into the tree canopy in the UK as they do elsewhere in Europe.



Natural habitat plant hosts



'Spittle' counts and number of adult insects



Managed habitat plant hosts

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