The survey for '*Ca.* Liberibacter solanacearum' and psyllids in Scotland

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Entomologist

SASA

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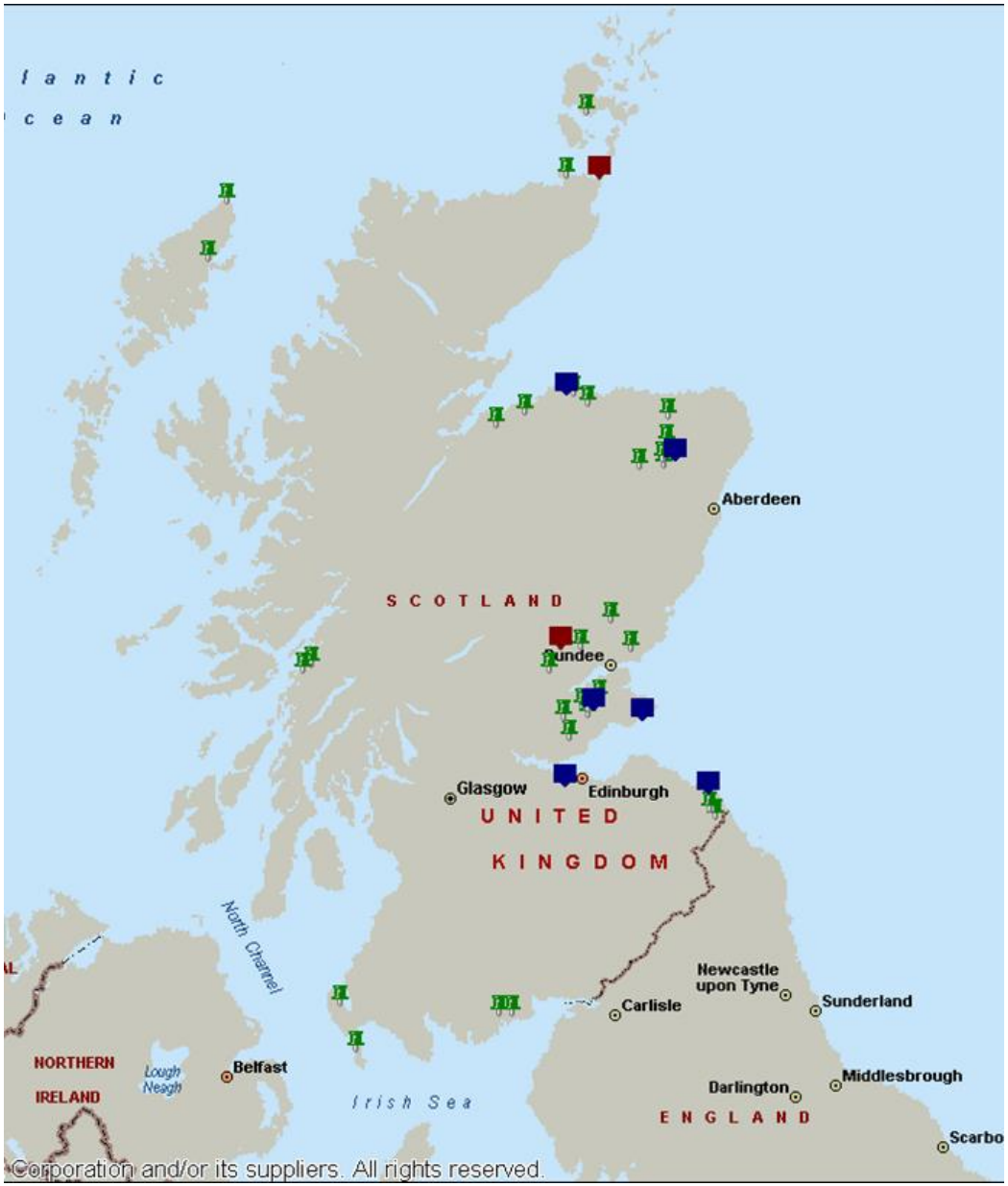
2012 survey

- Representative sample of carrot growers
- Request information from growers
- Identify volunteers
- Deploy traps



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Guidance prepared for volunteers

Psyllid Monitoring

instructions

Firstly, thank you for agreeing to help us survey Scotland for the presence of the Carrot psyllid (*Trioza apicalis*) and the disease that it has been found to transmit in some other countries, *Candidatus* Liberibacter solanacearum. This work is very important in identifying the risk it poses to Scottish agriculture.

Surveillance will take the form of two parts:

- keeping an eye out for symptoms (symptom sheet attached)
- actively monitoring for psyllids using yellow pan traps

Insert photograph. Carrot psyllid (*Trioza apicalis*) © Joe Botting

you will need

- trap plus pole
- water
- detergent
- bucket
- length of string slightly shorter than the circumference of the bucket
- elastic bands
- two pieces of gauze
- plastic tub
- label

WE RECOMMEND THAT YOU WEAR THICK GLOVES WHEN HANDLING THE FIBREGLASS POLES AS THEY CAN PRODUCE SPLINTERS AND CAUSE IRRITATION

This set of instructions should cover the basics of setting up and emptying the yellow traps, but if you have any questions or problems, please feel free to call us for help or advice on 0131 244 8817.

Using string and elastic band make a 'belt' to hold gauze in place over bucket.

Attach large gauze and belt to bucket, allowing a little sag to prevent spillage.

Dip small gauze in trap to dampen.

Then place it in centre of large gauze.

Remove trap from pole and pour contents through small gauze.

Carefully fold the small gauze around the catch and secure with elastic band.

Place it in the tub, ensuring the tub is fully sealed (may require a piece of tape).

Position trap back onto pole securely using white clip and fill trap back up to ridge mark.

It is fine to re-use the water from the bucket and top up as necessary.

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2012 results

Mail drop

- Two ‘symptomatic leaf’ samples received
- Both contained aphids; no symptoms of infection

Yellow water traps

- In operation until end October 2012
- No psyllids caught

‘Needle in a haystack’

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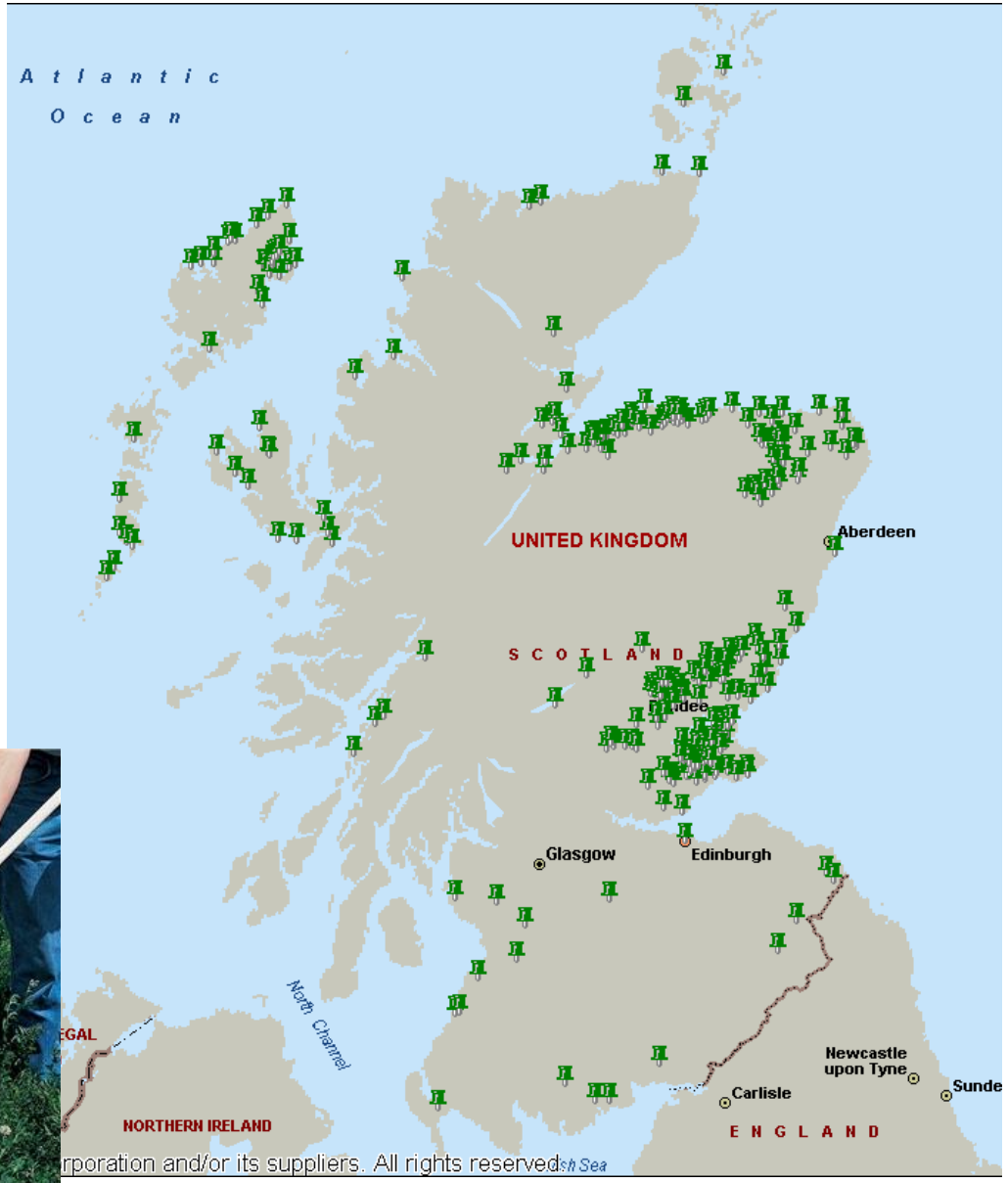
2013 survey

- Identify ALL carrot growers
- Request samples from growers
- Sweep net carrot crops, potato crop and field margins



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Results 2013

Mail drop

- Low response rate
- Two symptomatic crops identified
- Carolyn will discuss results later

Sweep netting

- Low number of *Trioza urticae*
- In carrot, potato and field margins
- No symptomatic plants identified

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Conclusions

- Using sampling methods described no infected crops or known vectors were identified
- *Ca.* Liberibacter solanacearum is not commonly present in Scottish carrot crops
- *Trioza apicalis* is not commonly present in Scotland
- Symptoms may possibly be mistaken for other conditions
- Patchy distribution/low levels of infection/vector unlikely to be picked up using these methods
- Disease/vector may not be present in Scotland
- Targeted/higher intensity surveillance may be required

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Thanks…

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