

Teagasc Carrot Fly Webinar – 26 January 2021

Questions & Answers

- Prof. Rosemary Collier, Warwick University (RC)
- Colin Noble, Vegetable Consultancy Services Ltd. (CN)

1. Are there any trap cropping options available?

(RC) This is a good question. Some of my colleagues at Wellesbourne did a large study many years ago to determine how well carrot fly would survive on a range of wild and cultivated hosts but they didn't look at in the context of trap cropping. Off the top of my head I would think that carrot is such a preferred host that it would be hard to find something more preferred.

(CN) I believe some work has been done to look at sacrificing the headland area growing a low density of early carrots which was then covered completely after the first generation with insect netting to trap the second generation when they emerged, but I'm not aware this is currently being practised anywhere.

2. Are crops that have a poor emergence and lack vigour, stem and leaf bulk and have a poor colour, more prone to attack vs very healthy looking crops?

(RC) We haven't done any work on this but I think if the carrot fly are there and they don't have a choice they would lay their eggs anyway.

- 3. Has any work been on onion oil in the UK?
 - (RC) Not as far as I'm aware. I assume you mean as a deterrent for carrot fly?
- 4. Would applying Diatomaceous earth have any affect on deterring adults laying eggs? (RC) We have not done any work on this but I doubt it would have an effect.
- 5. Thinking back to Rosemary's IPM diagram and the potential for resistant varieties to be a first defence against pests are there particular organic carrot varieties that may be more resistant to carrot root fly?

(RC) There is a range of susceptibilities amongst commercial varieties and many years ago my colleagues used to screen a selection each year and come up with a list. Unfortunately we don't do that anymore - although we could at Wellesbourne in theory. I'm not sure anyone else does this.

(CN) Commercially most organic producers use untreated seed of the same main varieties that are grown conventionally as at the end of the day the packed yield is still greater, but we keep trialling new varieties as they come along.

6. What's the program for willow aphid now that Biscaya is gone? One for Colin?

(CN) Currently it will be based around Benavia, Movento, Teppeki (if approved) and Flipper as a knockdown early on, possibly using more vigorous varieties or early open ground drillings also possibly extending the fleece covers into the early open crops where virus can be an issue.

7. If you irrigate does it encourage aphids?

(RC) Another good question! I think probably irrigation will have the reverse effect on aphids. It may knock them off the plant (depends how it is applied I would imagine) and also the increase in humidity may encourage the development of fungal diseases of aphids which can take off when the humidity is high.

(CN) I tend to find aphids are not a great fan of water.