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**PEST CATERPILLARS OF LETTUCE CROPS – 14 October 2021**

Page	Contents
2	Introduction
2	Information that will be available in 2021
3	Silver Y moth citizen science sightings 2021
5	Pheromone trap captures of silver Y moth at Wellesbourne
8	Historical information from 2020
13	Tests on insecticide resistance status of silver Y moths in 2018



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## Introduction

The caterpillars of two of species of moth and butterfly can be pests of lettuce crops:

Species	Activity periods	Importance
Silver Y moth ( <i>Autographa gamma</i> )	Migrant and can arrive at any time	Sporadic pest – caterpillars hard to detect. Pheromone traps available to monitor adults.
Turnip moth (cutworm) ( <i>Agrotis segetum</i> )	Late May-early July, sometimes a second generation in later summer – forecast available	Sporadic pest – caterpillars hard to detect. Pheromone traps available to monitor adults.

## Information that will be available in 2021

This year, these types of information will be available:

- Information on sightings of silver Y moth from citizen science web sites is summarized on this web page: [Silver Y moth sightings 2021 \(warwick.ac.uk\)](https://warwick.ac.uk/pests/silver-y-moth-sightings-2021)
- Pheromone trap captures in Warwickshire.
- Information from the Syngenta Brassica Alert [Brassica Alert | Syngenta](#)
- There is information about **TURNIP MOTH** in the Pest Bulletin sheet on cutworms.



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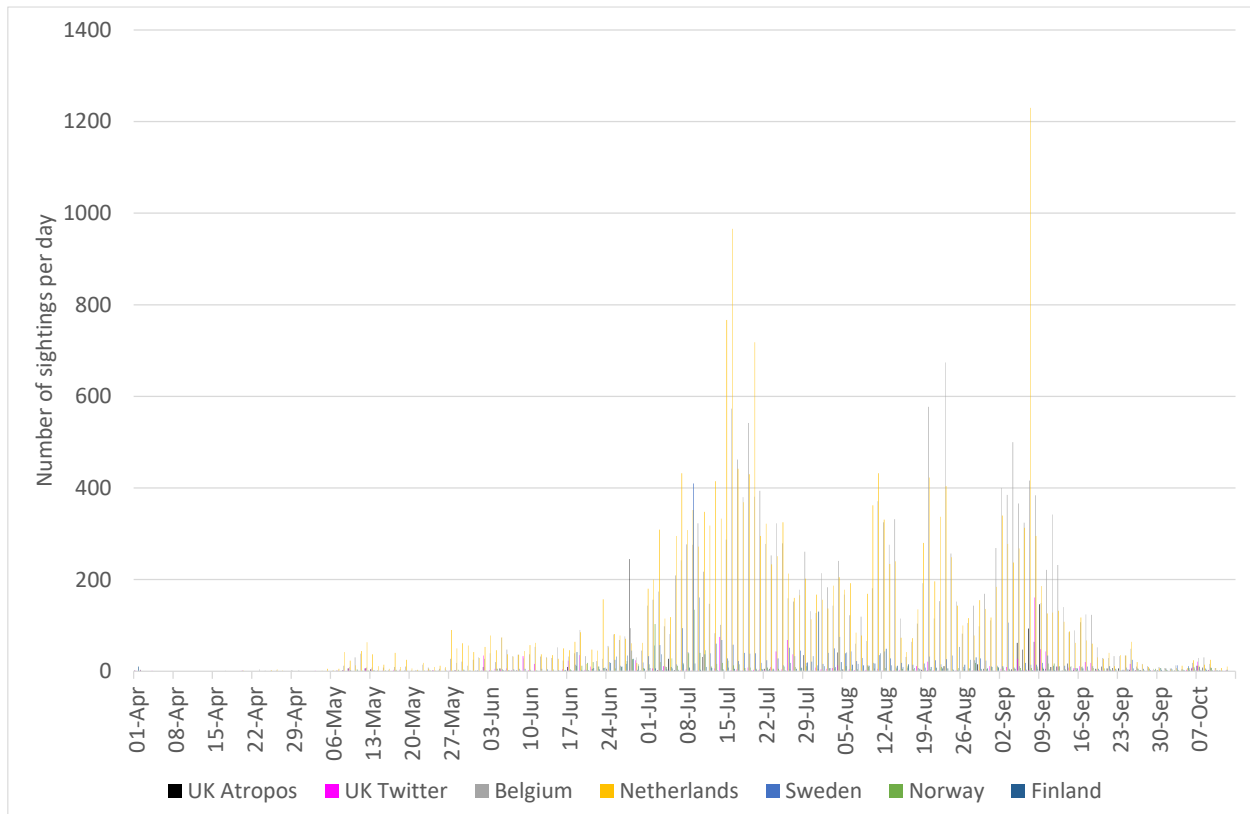


### Silver Y moth citizen science sightings 2021

You can see the citizen science counts here:

<https://warwick.ac.uk/fac/sci/lifesci/wcc/research/pests/silvery/sysightings2021>

The graph below shows sightings by citizen scientists in 2021.



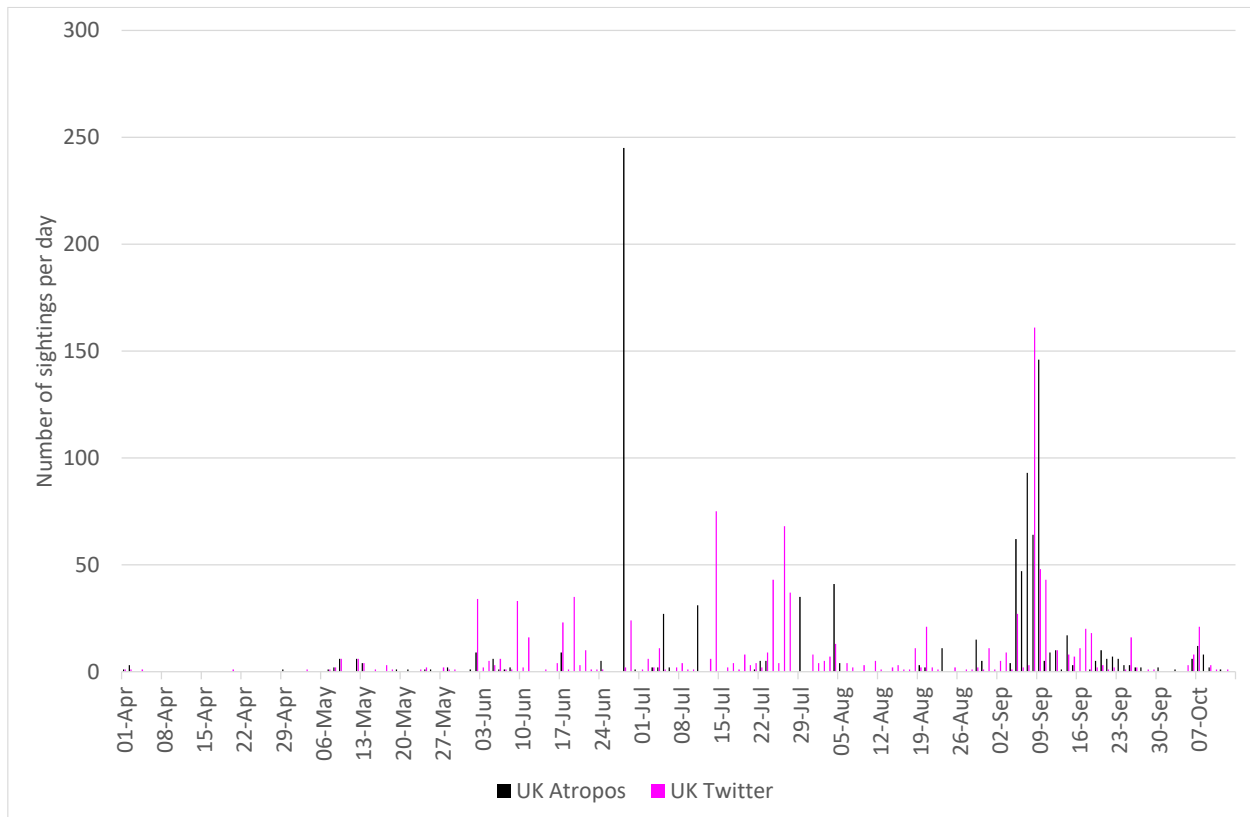


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### Silver Y moth citizen science sightings 2021

The graph below shows sightings by citizen scientists in the UK in 2021.





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### Pheromone trap captures of silver Y moth at Wellesbourne

Date	Number of moths (2 traps)
11 May	0
14 May	1
18 May	0
21 May	0
25 May	0
28 May	0
1 June	1
4 June	0
8 June	0
11 June	1
15 June	0
18 June	0
22 June	1



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### Pheromone trap captures of silver Y moth at Wellesbourne

Date	Number of moths (2 traps)
25 June	0
29 June	0
2 July	0
6 July	0
9 July	1
13 July	0
16 July	0
20 July	0
23 July	0
27 July	0
30 July	0
3 August	0
6 August	0
10 August	0
13 August	0
17 August	0



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### Pheromone trap captures of silver Y moth at Wellesbourne

Date	Number of moths (2 traps)
20 August	0
24 August	0
27 August	0
31 August	0
3 September	0
7 September	0
10 September	0
14 September	0
17 September	0
21 September	0
24 September	0
28 September	1
1 October	0
5 October	0
8 October	0
12 October	0



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## Historical information from 2020

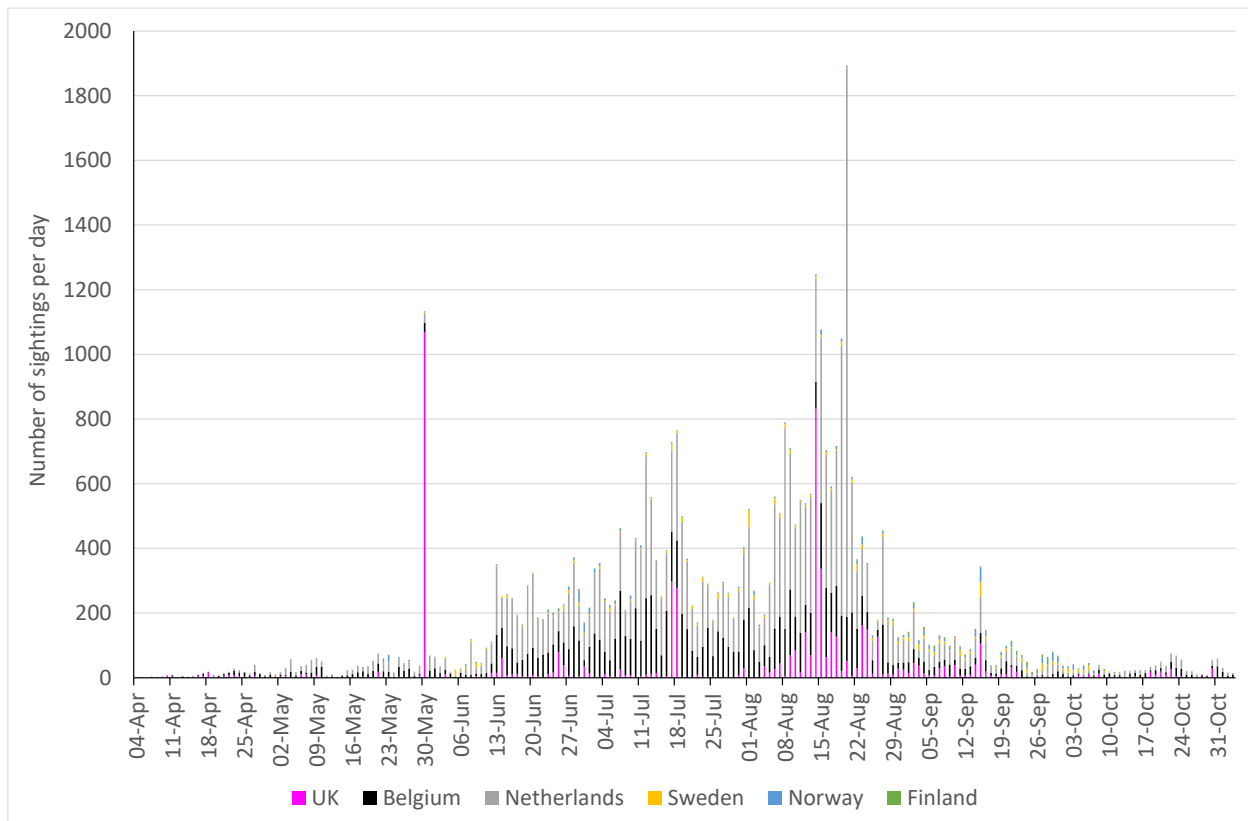
### Monitoring information 2020

#### Silver Y moth

You can see the daily counts by citizen scientists here:

<https://warwick.ac.uk/fac/sci/lifesci/wcc/research/pests/silvery/sysightings2020>

The graph below shows sightings by citizen scientists in 2020.







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**Pheromone trap captures of silver Y moth at Wellesbourne – traps set up 19<sup>th</sup> May**

Date	Number of moths	Number of traps	Moths per trap
22 May	0	2	0
26 May	0	2	0
29 May	0	2	0
2 June	0	2	0
5 June	0	2	0
9 June	1	2	0.5
12 June	0	2	0
16 June	0	2	0
19 June	1	2	0.5
23 June	0	2	0
26 June	0	2	0
30 June	0	2	0
3 July	0	2	0
7 July	0	2	0

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**Pheromone trap captures of silver Y moth at Wellesbourne – traps set up 19<sup>th</sup> May**

Date	Number of moths	Number of traps	Moths per trap
10 July	0	2	0
14 July	1	2	0.5
17 July	2	2	1
21 July	0	2	0
24 July	0	2	0
28 July	0	2	0
31 July	0	2	0
4 August	0	2	0
7 August	0	2	0
11 August	0	2	0
14 August	1	2	0.5
18 August	0 (6 in 3 yellow water traps)	2	0
21 August	5	2	2.5
25 August	3 (2 in 3 yellow water traps)	2	1.5

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**Pheromone trap captures of silver Y moth at Wellesbourne – traps set up 19<sup>th</sup> May**

Date	Number of moths	Number of traps	Moths per trap
28 August	4 (4 in 3 water traps)	2	2
1 September	7 (4 in 3 water traps)	2	3.5
4 September	2	2	1
8 September	0	2	0
11 September	1	2	0.5
15 September	0	2	0
18 September	0	2	0
22 September	0	2	0
25 September	0	2	0
29 September	2	2	1
2 October	0	2	0
6 October	1	2	0.5
9 October	1	2	0.5
13 October	0	2	0



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**Pheromone trap captures of silver Y moth at Wellesbourne – traps set up 19<sup>th</sup> May**

Date	Number of moths	Number of traps	Moths per trap
16 October	1	2	0.5
20 October	1	2	0.5
23 October	1	2	0.5
26 October	0	2	0
30 October	1	2	0.5
3 November	0	2	0

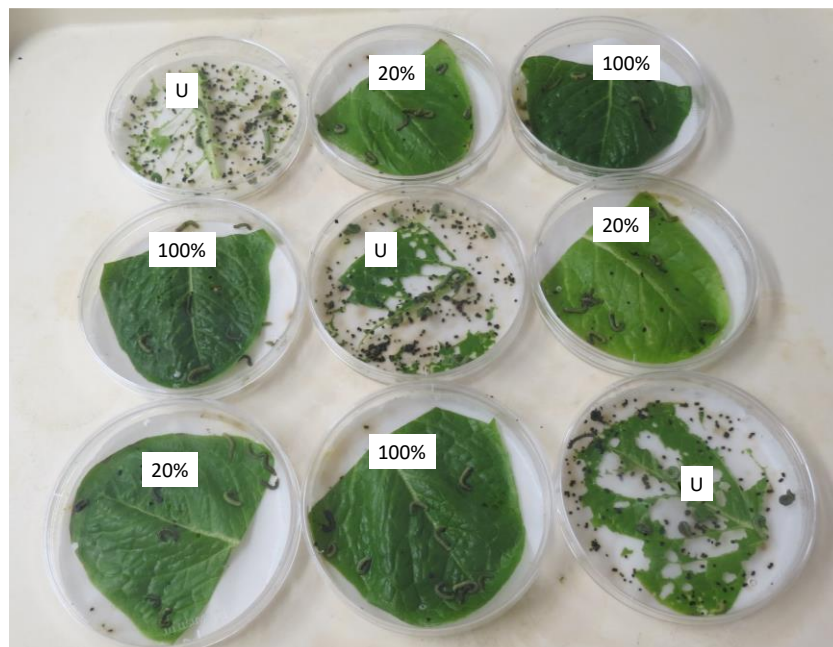
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### Tests on insecticide resistance status of silver Y moths in 2018

Silver Y moths were very abundant in 2018 and their caterpillars caused significant damage in some lettuce crops. There is more information here: <https://horticulture.ahdb.org.uk/news-item/pest-bulletin-update-lettuce-caterpillars>.

Growers asked whether the caterpillars might be resistant to insecticides – particularly pyrethroids. Using a protocol provided by Steve Foster from Rothamsted Research we tested some caterpillars we reared from eggs laid by a field-caught silver Y moth. The results are shown below and there is no evidence that these caterpillars are resistant to Hallmark (Lambda-cyhalothrin). All the caterpillars placed on treated foliage died rapidly. We undertook a similar test with another batch of larvae and the results were similar. We obtained similar results with Tracer (spinosad) and indoxacarb.



100% = field rate (25 ppm Lambda-cyhalothrin – Hallmark 75 ml/ha in 300 l/ha)

20% = 20% field rate (5 ppm Lambda-cyhalothrin - Hallmark 15 ml/ha in 300 l/ha)

U = untreated control