



(*Psylliodes chrysocephala*) on the UK winter oilseed rape crop

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Introduction

Since the ban on neonicotinoid seed treatments for oilseed rape, in Autumn 2014, cabbage stem flea beetles have become increasingly problematic for UK growers. Each year, crop failures have been reported, as a result of adult beetle feeding damage during the crop establishment phase, in the absence of any effective crop protection products. Growers are losing confidence in the crop. In 2018, very dry conditions for planting coincided with intense flea beetle grazing pressure and crop damage was reported throughout the oilseed rape growing regions.

A **Crowd Sourcing Survey** requesting estimates of crop damage and background crop management information received 1,042 responses and the findings are summarised here.

Crop damage incidence reports – Autumn 2018

Crop write-off
13%



Severe damage
18%



Moderate damage
25%



Mild damage
31%

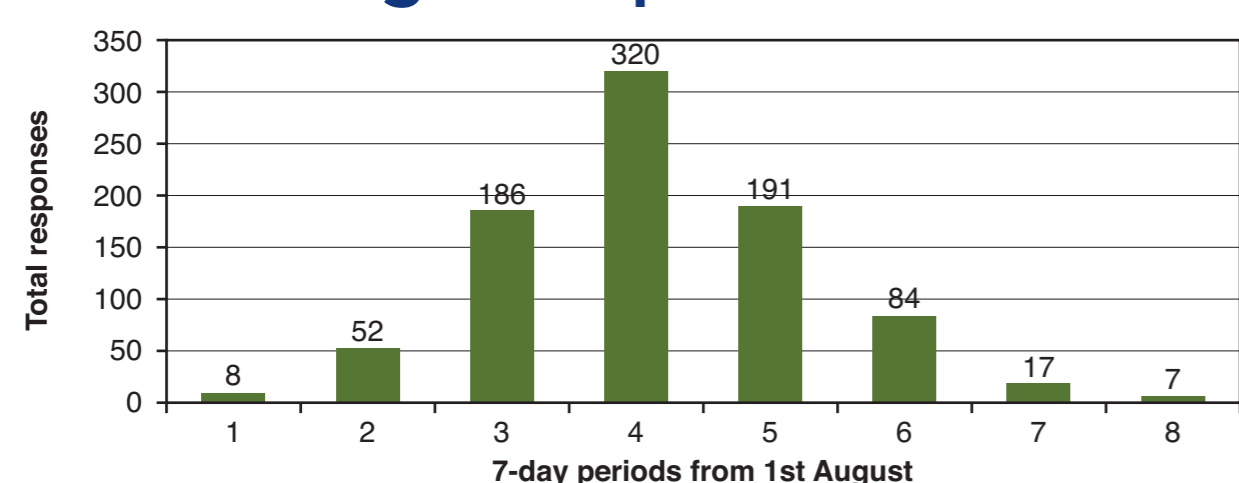


No damage
12%

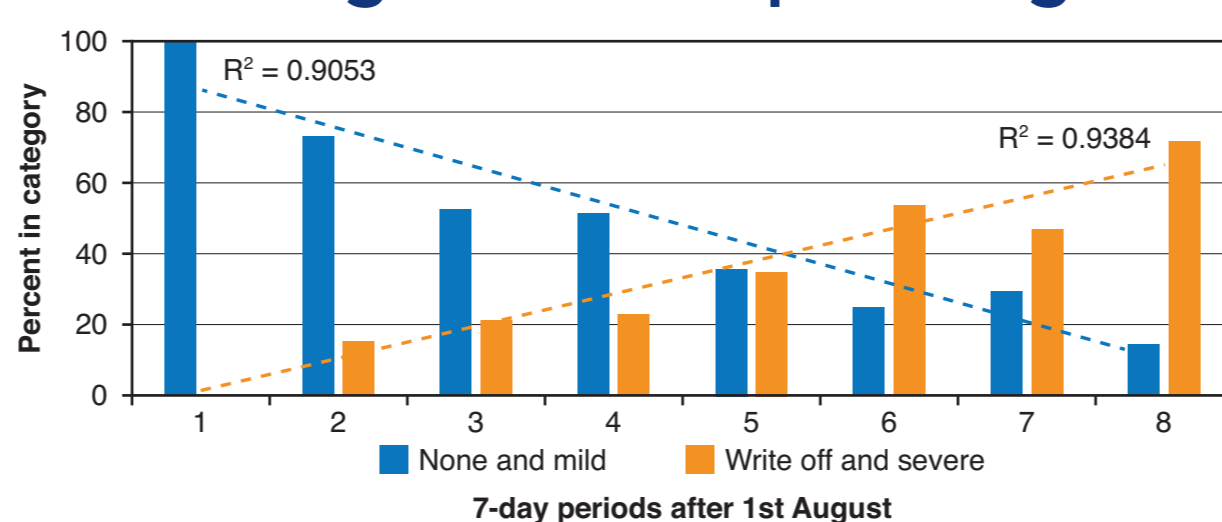


Time of sowing interactions

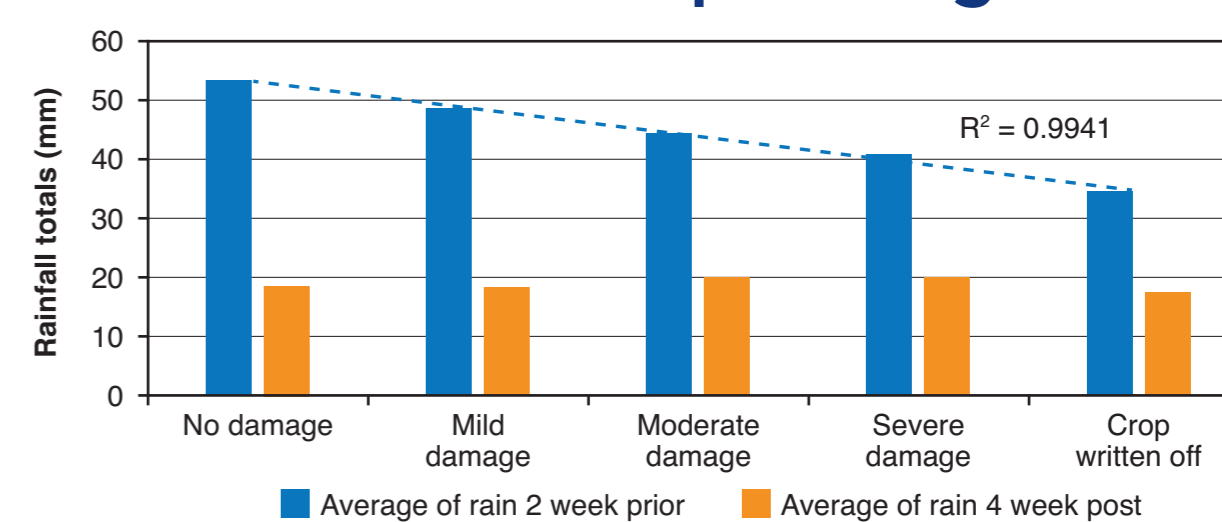
Sowing date pattern 2018



Sowing date x crop damage

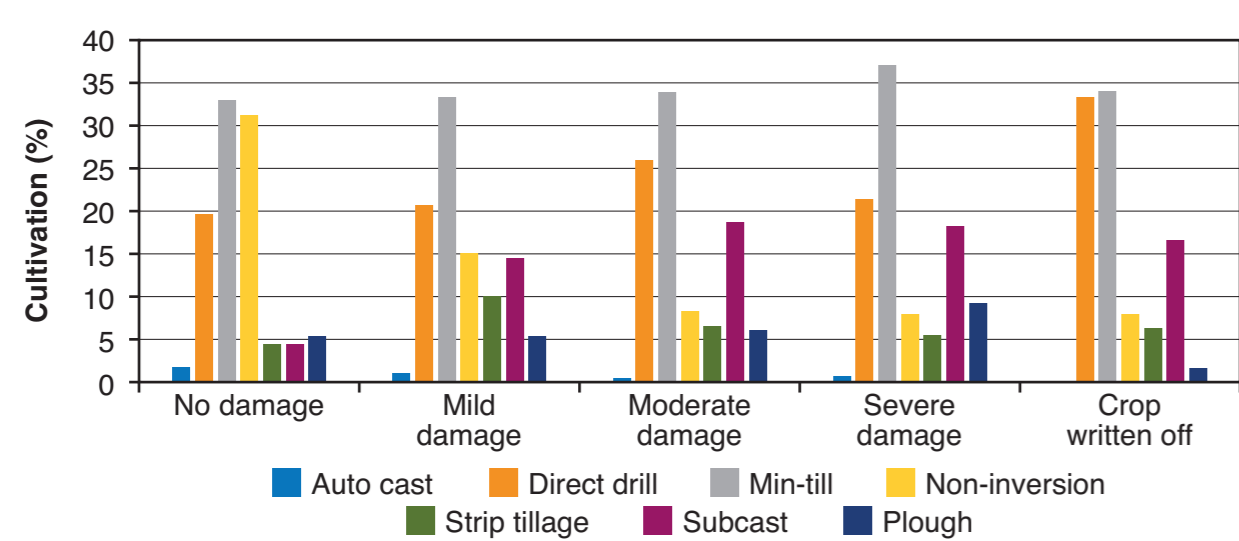


Rainfall x crop damage

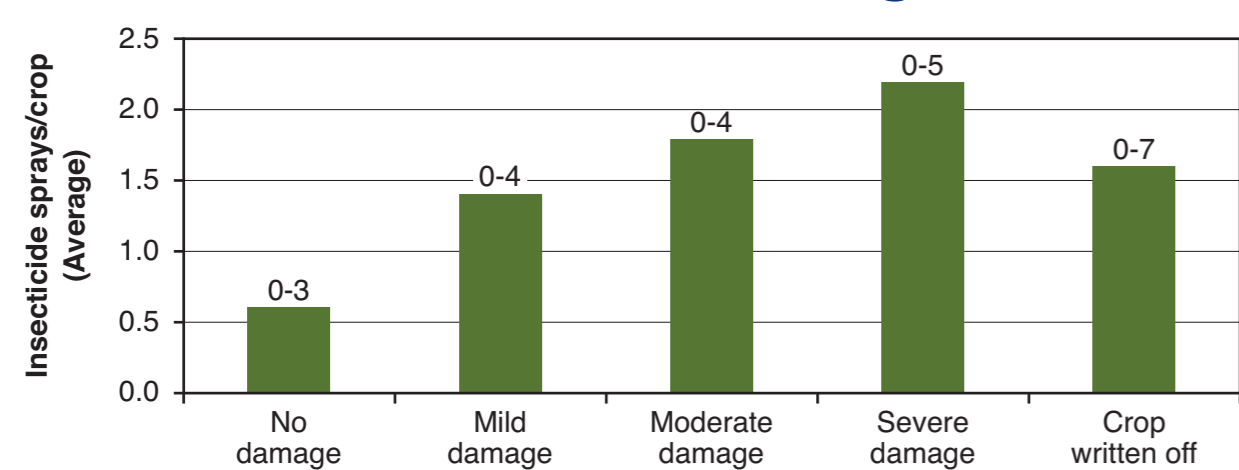


Management interactions

Establishment method



Insecticide spray applications (Number and range)



Analysis

- Flea beetle damage was very widespread with the most severe damage reported in the central area but spreading further north, west and south than normal.
- Flea beetles were present throughout the oilseed rape growing areas.
- Flea beetle damage increased with delayed sowing.
- The poor, dry growing conditions, after an unusually hot dry summer, exaggerated the flea beetle damage. Crop damage showed a strong relationship with rainfall totals in the two weeks before sowing.
- No strong relationships between crop damage and establishment method were observed.
- Pyrethroid insecticide spray applications were largely ineffective, because of resistance, but was almost certainly harmful to beneficial predator species.

Projection

After a mild 2018/19 winter, the incidence of cabbage stem flea beetle larvae in surviving crops has been very high, creating more crop damage and setting the scene for exceptional pressure on the 2019/20 crop. We will need good growing conditions in August/September for the crop to establish well and retain its current popularity!

Acknowledgement

We created the survey for the NIAB TAG membership using:

