

False Chinch Bugs swarming on arugula at Estes Valley Community Garden 10 July 2020



Photo: Jan Pauley

The following information is compiled from 2 email messages received from Dr. Whitney Cranshaw, Professor/Extension Specialist, Entomology, on July 10 and July 12, 2020 in response to a call for help after these insects were observed in several large swarms in several plots at the Garden on July 10.

Colorado State University Extension has a Fact Sheet on these pests, at <https://extension.colostate.edu/docs/pubs/insect/05603.pdf>

These can be very common insects in some years - and there have been lots of reports of them this year. They are particularly common on mustard family plants¹ (like arugula) and weedy mustards are what they develop on in spring. They particularly develop high numbers on plants in flower.

Less commonly they will be on other kinds of plants - potato, lettuce, beans and many weeds such as kochia pigweed.

These insects will often mass on plants (as you are probably seeing), and sometimes there will be many hundreds (or thousands) on a few plants, and much fewer on plants nearby. And they may show up suddenly - and they may depart abruptly on their own.

I am not sure of an organic insecticide that I think would work well on these insects - they are pretty tough. Probably pyrethrins would be best choice.

You also may be able to knock off large numbers into soapy water or some other fluid. However, you will have to get up early in the morning before it gets warm to make this work well - because as soon as it warms they become very active and the winged adults fly readily.

One last thing, as for the damage they do to plants I have often been impressed how little damage they do. Even when there are a lot I can see no damage in many cases. Sometimes there is injury - mostly wilting/killing of the new growth. But it can take a lot.

False chinch bugs rarely attract attention, unless they occur in large numbers. But they are, and always have been, about the most common insect in Colorado. I can find a few at least in almost any kind of crop I have sampled - and are particularly common on many kinds of weeds (which we normally don't look at for the presence of insects). And throughout the state, high elevations sometimes (quite bad in the San Luis Valley this summer), but usually more on the Plains. So it is nothing new, you are just having a "good" year for them in Estes Park.

Not sure why, but insect populations often bounce erratically from season to season. If I was to make a guess, it would be that some kind of weed that is a winter annual mustard - such as flixweed² - was unusually abundant in some area in the vicinity and that when the weeds dried down the false chinch bugs moved onto other plants. That is a common scenario. Another reason that some plantings could see more of a problem is if the general area is in drought. When that occurs there are few alternate host plants so they tend to move into the remaining places of higher humidity and shade - an irrigated garden. That is probably much less a problem in Estes Park than most of the state right now.

Removing the plants? If all of the insects are adults - and your photo only shows adults - then that may cause them to leave and seek plants elsewhere. If you have nymphs, no wings, smaller with a rounded body - they can't fly away and will just move to whatever they can crawl to. And if any mustard-family plants (e.g., arugula, radishes) are flowering you should probably remove them. They are no good anyway to eat and false chinch bugs mass on the flowers and developing seeds in highest numbers.

As for recovery of the arugula, you are the one who can determine that. Often plants show only limited areas of injury and plants bounce back. Sometimes masses of the bugs will cause the top growth to permanently wilt. But if the leaves look OK there is no reason not to eat them. If your question is whether the presence of or damage by false chinch bugs to some plant makes it dangerous to eat for some reason, it absolutely does not.

And false chinch bugs in leafy vegetables should be able to be easily washed off, unlike some other insects that are also found on our vegetables (e.g., aphids, thrips) that are smaller and more common but are more difficult to completely remove, and thus are eaten (without our knowing) all the time.

¹Brassicaceae or Cruciferae is a medium-sized and economically important family of flowering plants commonly known as the mustards, the crucifers, or the cabbage family. [Wikipedia](#)

²Descurainia sophia, see https://cuvth.colostate.edu/poisonous_plants/Plants/Details/97