Psyllid Monitoring with Yellow Sticky Cards

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One of the most common ways to monitor psyllid populations in potatoes involves yellow sticky traps. Unfortunately for all of us, this task is made challenging by several factors, for example:

1. Psyllids are small.
2. Yellow sticky traps catch several other kinds of psyllids, even when placed in potato fields.
3. Psyllids are often obscured by the vast number of other insects also caught on the traps.

Below are some guidelines and photos that will hopefully be helpful for those of you who want to use yellow sticky traps to watch for potato psyllids.

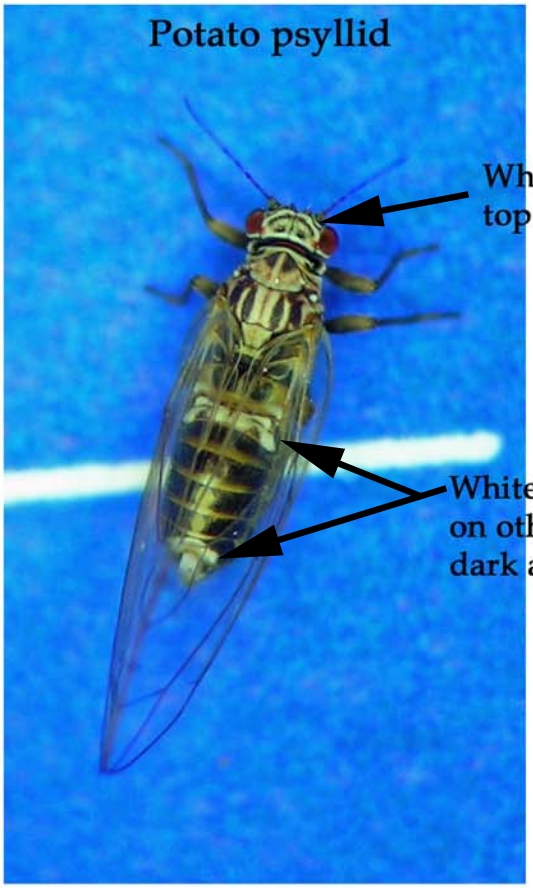
Setting the Traps

Traps meant to catch potato psyllids must be placed inside the potato fields, at about the height of the plant canopy. This contrasts to traps meant to catch beet leafhoppers, whch must be placed outside the crop. Traps should be placed near the field margin, within the outer few rows of potatoes.. How many traps per field? Place at least 4 traps per field, such as in the cardinal directions, North, East, South, and West.

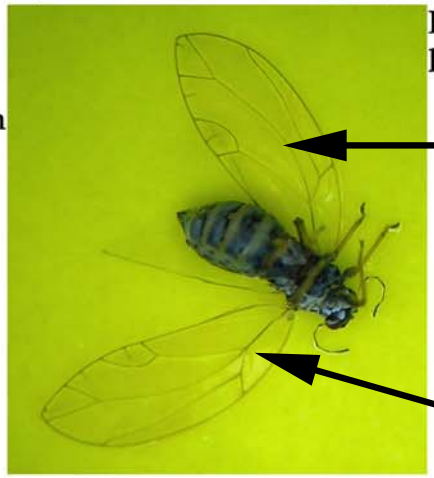
Checking the Traps

Ideally, traps should be checked at least every few days. Traps should be changed once a week, or whenever they become covered in insects, dirt, feathers, hair, dead lizards, etc.

Potato Psyllid Features and Size



Psyllid adults and nymphs on a penny for size comparison

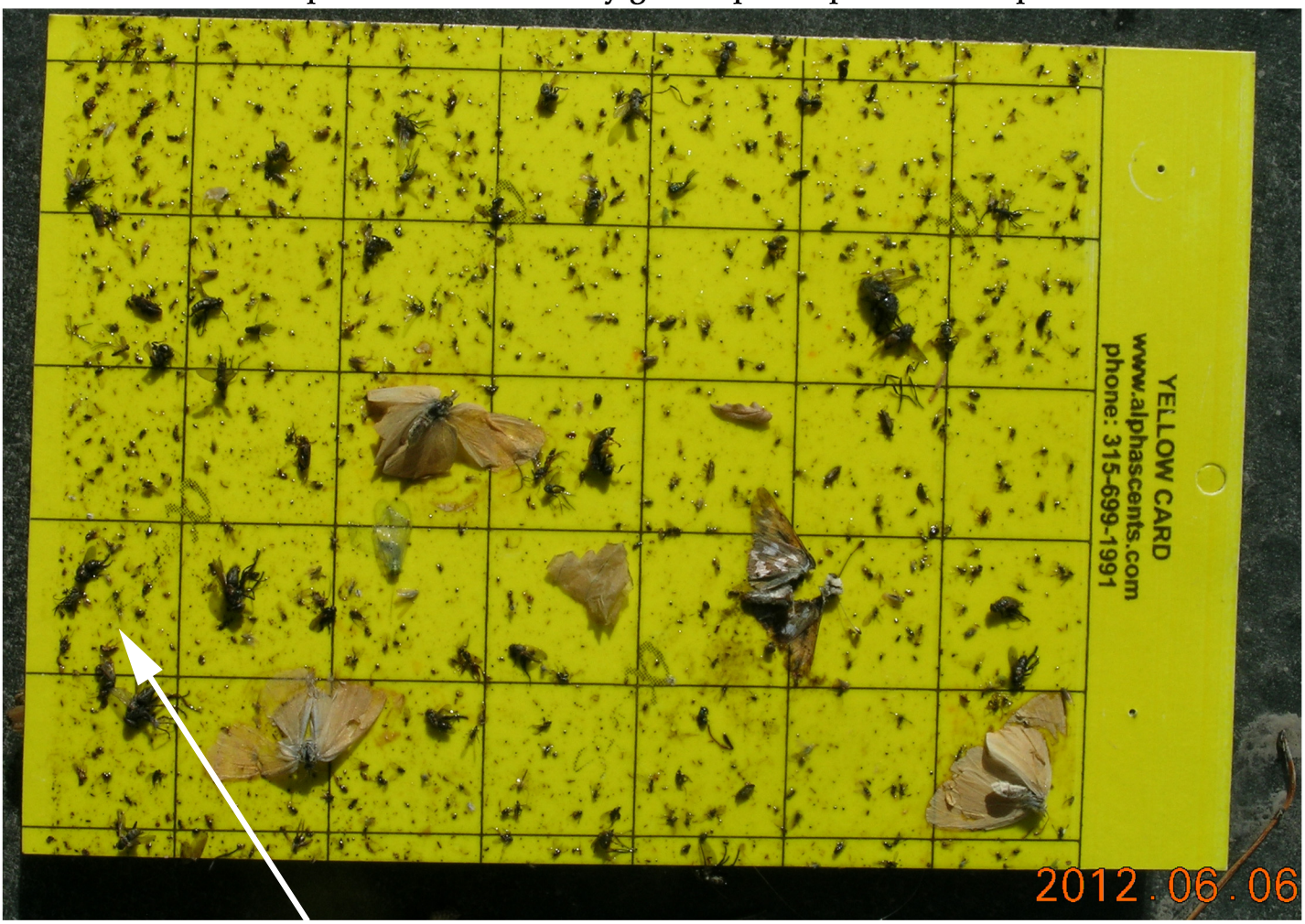


Psyllids don't always look their best on traps

Recognizing Psyllids, and then Potato Psyllids, on Sticky Traps

Knowing which psyllids are potato psyllid is important because only potato psyllid can cause damage to potatoes. When evaluating yellow traps, the first task is to recognize the psyllids among all the insects and debris on the card. A strong magnifying glass or dissecting microscope is absolutely necessary. Without magnification, finding the psyllids on a card is very challenging, and identifying the potato psyllids is impossible.

Here is a card I experimented with in my garden potato patch. Each square is 1X1 inch.

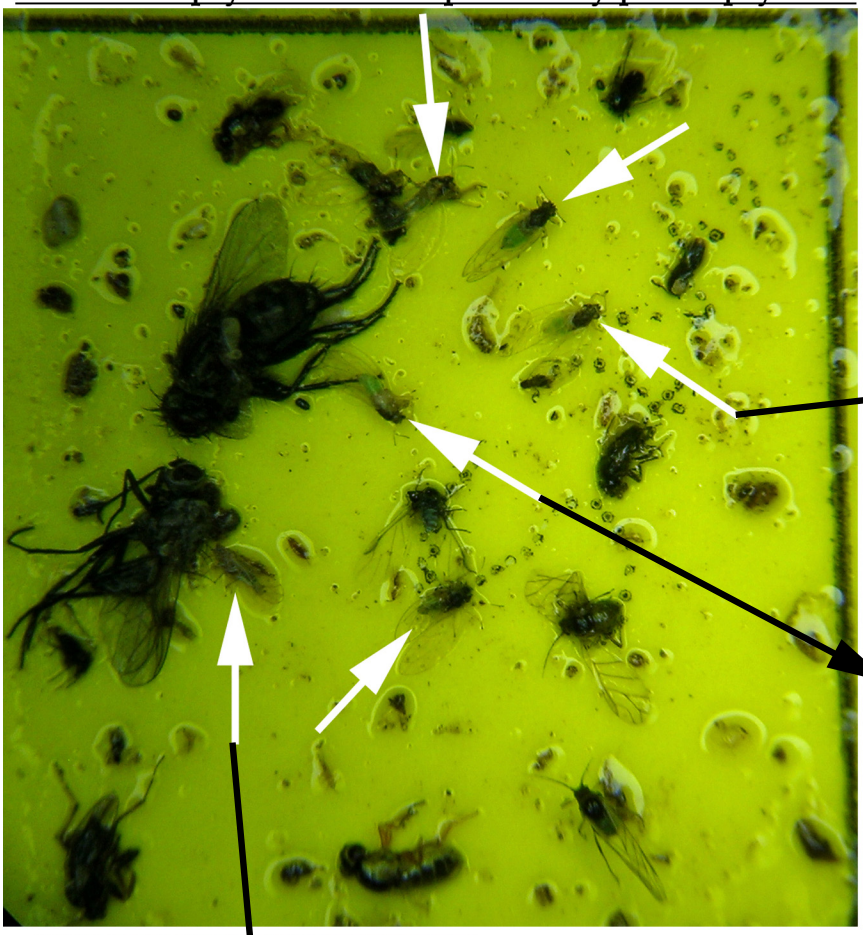


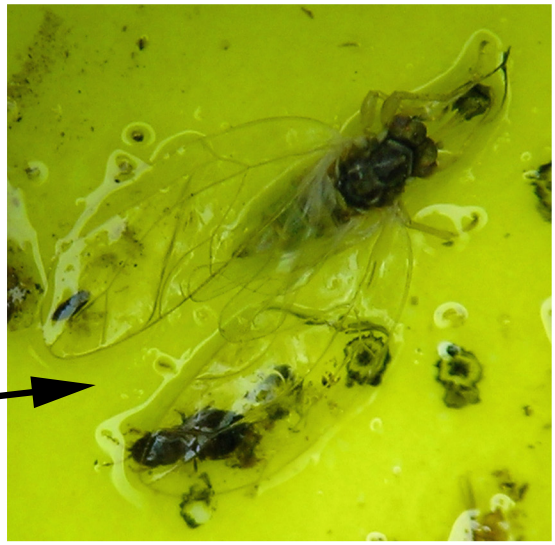
Let's focus on this square.

This is about 3X magnification; try to find the psyllids.

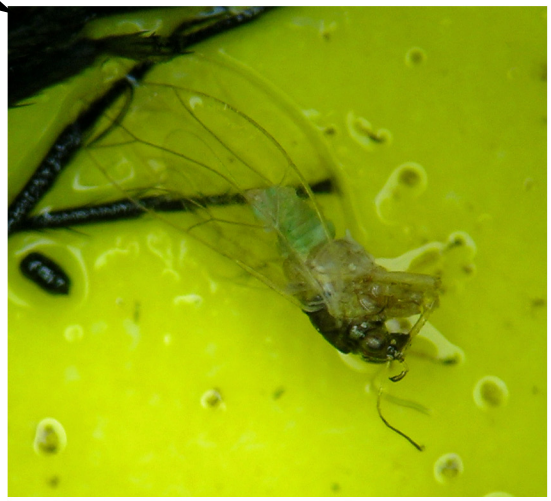
Recognizing Psyllids, and then Potato Psyllids, on Sticky Traps (continued)

There are 6 psyllids in this square. Any potato psyllids?





How about this one? Nope, abdomen is green, the head lacks white rim.



How about this one? Nope, abdomen is green, not dark/black.

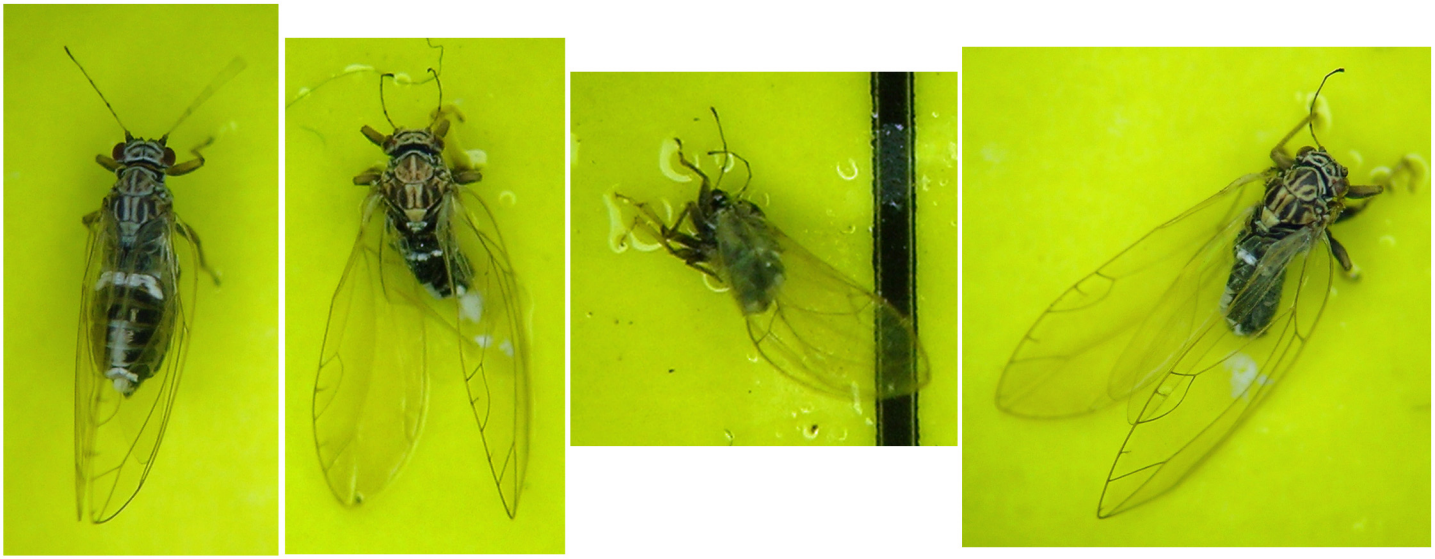
Seeing the wing veins takes a lot of magnification!

This one? Nope. Wing vein branches in two.

Bottom line: none of the 6 psyllids in this square were potato psyllids. In fact, none of the 40+ psyllids on this entire card, front and back, were potato psyllids.

Potato Psyllids Compared to other Psyllids

Photos of many psyllids, both potato psyllid and the other species, will hopefully help you calibrate your eye for recognition of the only damaging species, potato psyllid.



These four specimens are all potato psyllid. The one on the far left was alive when the photo was taken. After death on the card, psyllids shrivel to some degree and sometimes break into pieces.

These six specimens are **not potato psyllid**, and are representative examples of the type of specimens you will likely find on yellow sticky traps in the Northwest.