

The Potato Psyllid: A Brief Description

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Introduction:

An insect pest of potatoes, the potato psyllid has been found in three counties; Dickey, Kidder and Morton. It is important for potato growers to be cognizant that psyllids can cause yield and quality damage to potato due to a toxin they inject into the plant during feeding. This toxin disrupts the flow of carbohydrates from the leaves to the roots and tubers reducing the bulking rate of the tubers. This condition is known as “psyllid yellows”.

Insect identification:

It is important for growers to scout fields for psyllids by sweeping foliage to look for adults and to examine the underside of leaves for nymphs in the middle to upper third of the canopy. Psyllids are very difficult to see with the naked eye so a hand lens is recommended for detection and identification (Figure 1).

Symptoms:

Symptoms of psyllid yellows are extreme cupping and erect growth pattern of the upper leaves which will redden and become yellow as the toxin intensifies (Figure 2). At this point, all tuber bulking ceases and is irreversible.

Management:

Several insecticides are available for the control of psyllids in potato. Agrimek/Epimek has excellent activity on psyllid adults but has a short residual. Fulfill and Beleaf are active on first and second instar nymphs. Oberon is active on first to fourth star nymphs.



Figure 1. Winged adult psyllids and nymphs at various stages.



Figure 2. Early (A,B) and advanced (C,D) symptoms of psyllid yellows in a potato crop.