Oregon Pest Alert

Cabbage Whitefly

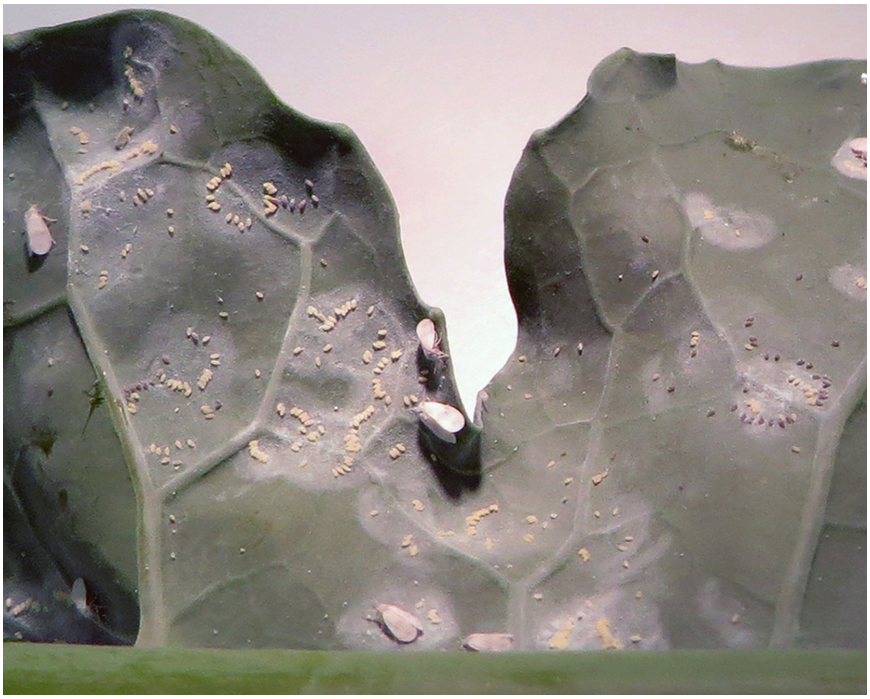
Aleyrodes proletella (Hemiptera: Aleyrodidae), also known as cabbage or brassica whitefly (CW), is originally from Europe. It has been spread around the world and is found in Russia, Taiwan, Australia, New Zealand, Bermuda, Brazil, and numerous countries in Africa. It has been established in the northeastern United States since at least 1993, and it was detected in California in 2001. In 2014, it was detected in a backyard garden in southeast Portland, Oregon.

CW has been emerging as a significant pest in some areas of Europe. CW feeds on a wide variety of plants in several families, but it is primarily a pest of the Cruciferae. Hosts where CW is an important pest include cabbage, Brussels sprouts, cauliflower, broccoli, and especially kale. While not known to be a vector of plant disease, CW reduces the quality of plants by the presence of eggs and nymphs, wax deposits, and sooty mold resulting from honeydew deposition. Large populations can develop in some situations resulting in leaf drop.

It is also known to feed on fodder crops (alfalfa, clover, etc.), and within Europe, it is intercepted on fruit and vegetable shipments (White-McLean, 2011).

How could it get here?

The primary way CW will move within Oregon is on live host plants. It can also disperse naturally using the wind.



Cabbage whitefly infestation on kale leaf showing adults and circles of eggs with wax (modified from image by Jean R. Natter, Oregon State University Master Gardener, Washington County).

Field identification

- Adults are about 1/16th of an inch long, white, and moth-like with two pale gray blotches on each wing.
- Circular waxy circles on the undersides of the leaves.

Adult cabbage whitefly. Note the two dark areas on each wing.

Description

Adults are white, moth-like, and about 1.5 mm (1/16th of an inch) in length. The forewings have a faint dark bar that is often broken into two irregular spots. Adults overwinter on the host plant, often under the leaves. Nymphs are flattened and scale-like.

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Life cycle

There can be two to six generations per year depending on climate. Eggs are laid in a semicircle or circle on a thin wax layer and hatch in about 12 days. There are three scale-like nymphal instars. Development to "pupa" or 4th instar takes about 10 days; it is immobile with red eyes. Adults overwinter on the undersides of the leaves.

References

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4th instar or "pupal" stage. Image by David Cappaert, Michigan State University, Bugwood.org.

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