

Potato Aphid - Life Stages



- A. Apterous (non-winged) pink adult
- B. Mixed stages of pink nymphs with non-winged adult and cast skins
- C. Nymph and cast skin
- D. Alate adult
- E. Apterous green adults

More detailed descriptions on the reverse.

Signs & Symptoms

Below: Colony of mixed morphs present on lettuce buds during early fall



Above: Potato plant displaying symptoms of potato leaf roll virus on the left, next to a healthy plant

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Photo Credits: Apterous green adult - Kansas Department of Agriculture Archive | A and B - Castner, University of Florida | C, D, and E - Lyle Buss, University of Florida | Infestation on lettuce buds - Whitney Cranshaw - Colorado State University (Bugwood.org) | Potato leaf roll virus - Eugene E. Nelson (Bugwood.org)

Potato Aphid, *Macrosiphum euphorbiae*

General Morphology:

What does it look like?

Adults are winged (**alate**) or non, and either green or pink in color. This can cause trouble with proper identification in the field. This aphid species is larger than many others, at 3-4mm long for non-winged adults and 2-3.5mm for alate adults. The **cornicles** (two projections at the end of the abdomen that secrete honeydew) are long with dark tips. Nymphs are miniature versions of the non-winged adults and usually yellow with pink or green under-

General Biology:

What is its life cycle?

1. Males mate with **oviparous** (egg-laying) females and eggs are deposited onto host plant (occurs in temperate zones, not FL or the tropics).
2. Nymphs emerge and undergo four instars (life stages) that are roughly 1.5 to 2 days long each.
3. Non-winged adult females reproduce via **parthenogenesis**, a complex process that doesn't require mating and results in live birth, **viviparity**. (This reproductive method is used all year long.)
4. In autumn, females give birth to alate forms for colony dispersal and oviparous females.

Pest Host Range:

Where is it found?

Potato aphid is typically found in the northern US and southern Canada. However, its range has spread to warmer temperate areas worldwide. It feeds primarily on potato, tomato, corn, and rose, but is a pest on other crops too.

Natural Enemies:

Predators & Parasitoids

Like other aphids, many natural enemies exist. These include lady beetles and larvae, flower flies, predatory midges, lacewing larvae, and a few ground beetles. Parasitoid wasps and fungi are also good control agents.

Signs & Symptoms:

What type of damage does it cause?

- ❑ Aphid feeding causes significant foliar damage, leaf distortion and droop as well as overall stunted growth and dieback.
- ❑ Premature blossom drop, deformed fruit, and decreased yields can result in very severe infestations.
- ❑ Honeydew can accumulate on the surface of leaves (a key problem with most aphid species) and promote sooty mold fungal growth.
- ❑ Although not considered to be a popular vector, a few notable viruses spread by these pests are cucumber mosaic virus and potato virus Y.