

Quick Reference Guide for North Coast Vineyard Leafhoppers

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Western Grape Leafhopper (WGLH) Erythroneura elegantula

Native to California and the most commonly occurring leafhopper in the North Coast. Adults emerging from winter dormancy must feed on grapevines for ~2 weeks before laying eggs. Parasitism rates of 10-30% of first-generation eggs (by *Anagrus* spp.) may result in suppression of the 2nd and 3rd generations.

Young nymphs have yellow/white bodies with white eyes; later stage nymphs have six pale yellow spots on the thorax.

Adults are a creamy-white color with orange markings and two pairs of black spots: one pair on the thorax and one at the base of the wings.



Early-stage nymph



Late-stage nymph





Virginia Creeper Leafhopper (VCLH) Erythroneura ziczac

Invasive species found in Napa County since the early 2010s. Overwintering females lay eggs immediately after coming out of dormancy, so insecticide treatments must begin 2-3 weeks earlier than for WGLH. Parasitism is generally low in the North Coast; local strains of *A. daanei* have not adapted to VCLH as a host.

Young nymphs are yellow/white with red eyes; later stage nymphs have four distinctive red spots on the thorax. Red spots are also visible on cast skins (after the insect molts).

Adults can be identified by the brown zigzag markings along the wings.



Early-stage nymph; red spots absent



Late-stage nymph; four red spots





Variegated leafhopper (VLH) Erythroneura variabilis

An invasive species and major pest in central and southern California since the 1980s, its range has expanded considerably in Napa County in the last 10 years. Nymphs found on upper and lower leaf surfaces. Limited natural control by *Anagrus* spp. because eggs laid deep in leaf tissue are not readily parasitized.

Young nymphs are yellow/orange.

Later stage nymphs are yellow/brown. Nymphs are darker along the edge of the body.

Adults are darker in color than the other vineyard leafhopper species with a combination of rust and brown markings.



Early-stage nymph; yellowish body with red markings



Late-stage nymph; darker body with brown markings





Leafhoppers on Yellow Panel Traps

Yellow panel traps are used to monitor leafhopper populations. Distinguishing between species is crucial to effective monitoring & management.



Variegated Leafhoppers



Western Grape Leafhopper



Virginia Creeper Leafhopper



Leafhopper Damage

Adults and nymphs damage feed in the leaf mesophyll, resulting in characteristic white speckles on leaf blades. Late-season defoliation may occur with large populations.





Visit the UCCE Napa- Viticulture website for more information



