

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. Young nymphs are **yellow/white with white eyes**; later stage nymphs have **six pale yellow spots** on the thorax. Adults emerging from winter dormancy must feed on grapevines for ~2 weeks before they can lay eggs. Eggs of the first brood are laid in April/May on basal leaves. Parasitism rates of **10-30% of first generation eggs** (by *Anagrus* spp.) may provide economical control during the 2nd and 3rd generations.



WGLH nymphs are white, with white eyes & pale, yellow markings; six yellow spots visible in later stage nymphs

Virginia Creeper Leafhopper (VCLH) *Erythroneura ziczac*

Invasive species found in Napa county since the early 2010s. 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). Overwintering females lay eggs immediately after coming out of dormancy, so insecticide treatments must begin **2-3 weeks earlier** than for WGLH. Early season oil sprays and early season leafing (after eggs are laid) can reduce populations but leafing needs to be tested under California conditions. **Parasitism is generally low** in the north coast because local strains of *A. daanei* have not adapted to VCLH as a host.



Nymph (early stage) with red eyes; red spots absent

Nymph (late stage) with four red spots

Variegated leafhopper (VLH) *Erythroneura variabilis*

Invasive species—a major pest in central and southern California since the 1980s—its range has expanded considerably in Napa county in the last 10 years. Young nymphs are **yellow/orange**; later stage nymphs are **yellow/brown** and distinctively **darker along the edges of the body**. Nymphs found on both upper and lower leaf surfaces. Natural control by *Anagrus* spp. is generally low because eggs laid deep in leaf tissue are not readily parasitized.



Nymph (early stage) is yellow-orange

Later stage nymphs are yellow/brown & darker at the edges of the body

Additional Resources: [North Coast Virginia Creeper Leafhopper Project](#); [UC IPM](#); Leafhopper identification ([videos](#))