



Photo caption: Virginia creeper leafhopper 5th nymphal stage (Photo: Jack K. Clark)

We are monitoring leafhoppers at four vineyards: three in Hopland (1 Grenache and 2 Chardonnay) and one in Talmage (Chardonnay), Mendocino County.

Virginia creeper leafhopper (VCLH)

Eggs: First brood egg laying began on April 1; by June 3 the majority of the eggs for the first brood have emerged or are dead. Parasitism was observed in all 4 vineyards at less than 0.1%. As of June 11, egg laying for the second brood is just starting (see Fig 1. Viable eggs/week since April 1st).

Nymphs: Egg hatch for the first brood was first observed on April 22. On June 11 average number of nymphs per leaf ranged from 1 to 4 in the Chardonnay vineyards; the Hopland Grenache vineyard was sprayed last week and so the average number of nymphs/leaf decreased to 1 (Fig. 2). The majority of the nymphs were 3rd to 5th instars (nymphal stage). On May 27 we noticed VCLH cast skins (the shedding of the last nymphal stage skin

when it molts into an adult) signaling the beginning of adult emergence. We continue to observe cast skins on June 11. We project that peak adult emergence will happen in the coming week or so. At peak adult emergence is when you may expect peak egg laying of the second brood. Summer generation eggs hatch in about 1 week time depending on temperature.

Western grape leafhopper (WGLH)

Eggs: Eggs of the first brood WGLH were first observed on the leaves sampled on April 8. Very few of the first brood WGLH eggs are still viable; the majority have hatched, are parasitized or dead. On June 11, parasitism of non-emerged WGLH egg ranged from 70 to 88%.

Nymphs: The first WGLH nymphs were observed on May 6. On June 11 the average number of WGLH nymphs per leaf ranged from 2 to 12. The majority of the WGLH nymphs present on June 11 were 3rd to 5th instars. On May 27 we observed WGLH cast skins, signaling the beginning of adult emergence and second brood egg laying.

Synopsis

We are at the end of the first brood for both VCLH and WGLH with the majority of the remaining nymphs between 3 to 5th instar stages. Adult emergence started on May 27, egg laying of the second brood is just beginning.

Fig. 1 - Egg monitoring: Average number of VCLH viable per leaf on Chardonnay & Grenache at 4 Mendocino County vineyard locations monitored April 1st to June 11, 2015.

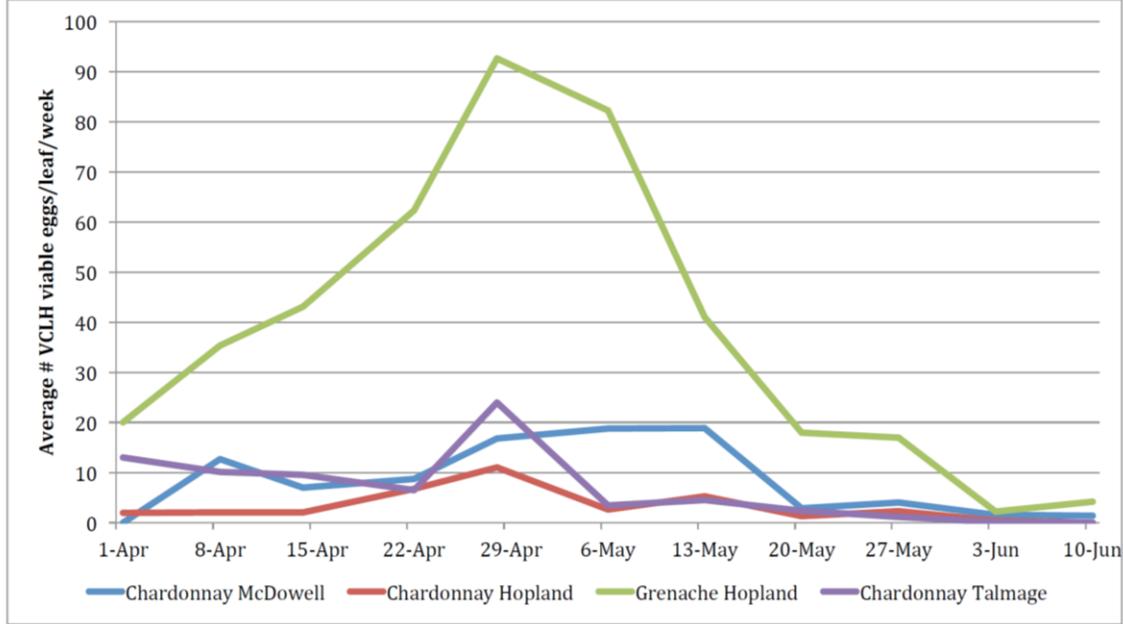


Fig. 2 - Nymph monitoring: Average number of leafhopper nymph per leaf on Chardonnay and Grenache at four Mendocino County vineyard locations monitored April 1st to June 11, 2015.

