

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: Egg laying began on April 1st; 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%. Egg laying for the second brood is just starting.

Nymphs: Egg hatch was first observed on April 22. On June 3 average number of nymphs per leaf range from 3 to 5 in the Chardonnay vineyards and 15 nymphs/leaf in the Hopland Grenache vineyard (Fig. 1). The majority of the nymphs were 2nd-3rd instars (nymphal stage), with ~15% of the nymphs 4th instars and ~10% 5th instars. 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 3. We project that peak adult emergence will happen in about 1 or 2 weeks. At peak adult emergence is when you can expect peak egg laying of the next brood. Summer generation eggs hatch in about 1 week time depending on temperature.

Western grape leafhopper (WGLH)

Eggs: The first WGLH eggs were observed on the leaves sampled on April 8th. Few WGLH eggs are still viable; the remainder have hatched, are parasitized or dead. WGLH egg parasitism ranged from 22 to 44% in the Chardonnay vineyards.

Nymphs: The first WGLH nymphs were observed on May 6. On June 3 the average number of WGLH nymphs per leaf ranged from 5 to 15. The majority of the WGLH nymphs present on June 3 were 2nd-3rd instars; with ~12% of the nymphs 4th instars, and ~10% 5th instars. On May 27 we did observe a couple WGLH cast skins, signaling the beginning of adult emergence and next generation eggs.

Fig. 1 - Nymph monitoring: Average number of leafhopper nymph per leaf on Chardonnay and Grenache at four Mendocino County vineyard locations monitored April 1st to June 3, 2015.

