

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 May 27 between 6 to 16% of the eggs are still viable; the remaining have emerged or are dead. Parasitism was observed in all 4 vineyards at less than 0.1%.

Nymphs: Egg hatch was first observed on April 22. On May 27 the number of leafhopper nymphs in basal leaves ranged from 3 to 9 in the three Chardonnay vineyards and 33 nymphs/leaf in the Hopland Grenache vineyard (Fig. 1). The majority of the nymphs were 2nd-3rd instars (nymphal stage), with ~9% of the nymphs 4th instars and ~3% 5th instars. This week we noticed VCLH cast skins (the shedding of the last nymphal stage skin when it molts into adult) signaling the beginning of adult emergence. We project that peak adult emergence will happen in about two weeks. At peak adult emergence is when you can expect peak egg laying of the next generation. Summer generation eggs hatch in about one week time depending on temperature.

Western grape leafhopper (WGLH)

Eggs: The first WGLH eggs were observed on the leaves sampled on April 8th. On May 27 the average number of WGLH eggs per leaf (which includes viable, emerged and parasitized eggs) ranged from 11 to 52 in the Chardonnay vineyards. Between 7-15% of 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 May 27 the average number of WGLH nymphs per leaf ranged from 7 to 20. The majority of the WGLH nymphs present on May 27 were 2nd-3rd instars; with ~5% of the nymphs 4th instars, and ~2% 5th instars. On May 27 we did observe a couple WGLH cast skins signaling the beginning of adult emergence.

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 May 27, 2015.

