



University of California Cooperative Extension

NEWS RELEASE

Kern County • 1031 S. Mt. Vernon Avenue • Bakersfield, CA 93307 • 661-868-6200



June 24, 2002

Jennifer Hashim
Viticulture Farm Advisor
(661) 868-6223

Western Grapeleaf Skeletonizer Can Be Problematic in Backyard Vines

The Western Grapeleaf skeletonizer can be a serious pest of grapes if populations are allowed to build to high levels. The larval (worm) stage feeds on the leaves initially, removing just the upper cuticle of the leaf creating a whitish, tissue paper appearance. As the larvae mature they completely “skeletonize” the leaf tissue, leaving only the main veins intact. The first sign of damage is indicated by brown leaves found in the under canopy of the vine. Upon turning the leaves, numerous small worms can be seen, feeding side-by-side. If numbers are high enough, the worms can defoliate an entire vine by July, causing sunburn of the fruit and may weaken the vine in the following year because the leaves are an important structure for creating carbohydrate reserves essential for plant growth.

There are four stages of development for the grapeleaf skeletonizer; the egg, larva, pupa and adult (moth). Adults of the first generation in the Central Valley emerge from hibernating pupa in early spring to June. The pale yellow or whitish capsule-shaped eggs are laid in groups on the underside of grape leaves. The larvae are cream colored in early development but as growth continues tan bands develop across the body. Mature stages are about ½ inch in length and have bands of yellow, purple and black. Larvae have conspicuous tufts of long black poisonous spines that cause skin welts on humans. Reactions are different for everyone, but it make good sense that if you do suspect that you have these creatures in your vines not to handle them no matter how harmless or “cute and fuzzy” they may look.

Before the adult moth is formed, the larvae develop into pupa, which are covered by a dirty white silken cocoon. Cocoons are generally found beneath the bark of the vine. The adult moth is bluish/greenish black in color and is approximately ½ inch with a wing span of about an inch. There are three generations in

the San Joaquin Valley and each cycle takes about two months to complete. Moths are active in late-April to mid-May, late June to early July and late August to early September. The time from egg laying to hatch takes about two weeks.

Control of the skeletonizer in backyards is relatively easy. Materials should be applied to control the first hatching worms. Early detection and thorough coverage is essential. Make sure that treatments are directed to the underside of leaf surfaces. Listed are several materials registered for use:

- 1) CARBARYL (Sevin® or “7”): Carbaryl is toxic to beneficials but provides excellent long-lasting control.
- 2) BACILLUS THURENGENSIS (Dipel® or Caterpillar Clobber®): Bt is nontoxic to beneficials but has a short residual and is only effective against young larvae. Apply when worms are small, or less than half grown. Must be ingested by the larvae to be effective.
- 3) CRYOLITE (Kryocide®): Cryolite is a stomach poison, which gives long lasting control. Must be ingested by the larvae to be effective. Not toxic to beneficials. Must be applied 30 days before harvesting fruit.
- 4) TEBUFENOZIDE (Confirm®): Tebufenozide is an insect growth regulator and is nontoxic to beneficials. Must be ingested by the larvae to be effective.

BE SURE TO READ AND FOLLOW LABEL DIRECTIONS

