## European grapevine moth (*Lobesia botrana*) in California Treatment timing for 1<sup>st</sup> generation applications in 2012

Monica L. Cooper, Lucia G. Varela, Rhonda J. Smith University of California, Cooperative Extension & Integrated Pest Management Program

Using the flower cluster as an indicator of treatment timing, the OPTIMAL time to treat the 1<sup>st</sup> generation of EGVM with conventional and organic products is just prior to the beginning of bloom. This will be immediately before the first flower caps fall, when the inflorescence is fully developed and individual flowers are separating (Eichhorn-Lorenz stage 17). Conventional growers making applications at the optimal time should need to treat only once for the 1<sup>st</sup> generation. Organic growers should begin treatments at the optimal time, and continue through egg hatch and early larval development (typically 3 applications, at 7-10 day intervals).

Conventional and organic applications are considered LATE if vines in the block are in full bloom and the block has not been treated. If your vines are blooming and you have not started your insecticide sprays, start your application(s) immediately.

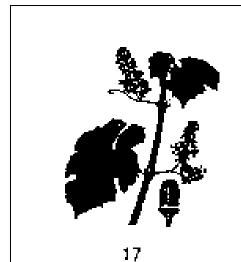
Conventional and organic applications are considered EARLY if more than 14 days have elapsed since the insecticide was applied, and on average the treated block has 1% bloom or less. If this scenario occurs, conventional growers should consider retreating and organic growers should consider adding a treatment for the 1st generation. Do not make insecticide applications before flower separation (Eichhorn-Lorenz stage 15).

Calendar dates for these vine stages vary by region, variety, and block. Follow vine development to determine when these stages are occurring in your vineyard blocks, and time your insecticide applications appropriately. As a guide, these vine stages are depicted in photographs and diagrams below.

Mating disruption dispensers should be in the field just prior to bud break. In the North Coast this will be in early March, and should be no later than March 15 (in blocks with later bud break).



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Eichhorn-Lorenz stage 17: Inflorescence fully developed, Single flowers separating



Inflorescence fully developed, single flowers separating (Photo credit: Novartis Crop Protection, Canada)



Inflorescence fully developed, single flowers separating (Photo credit: Rhonda J. Smith)



Inflorescence fully developed, single flowers separating (Photo credit: Rhonda J. Smith)

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