CERTIS
The Biopesticide Company

Deliver®
BIOLOGICAL INSECTICIDE

Javelin®
BIOLOGICAL INSECTICIDE

For control of European Grapevine Moth (EGVM)
Lobesia botrana

Bacillus thuringiensis **formulations from Certis have helped European growers successfully control EGVM for years. Our expertise in the control of this pest and the production of Bt bioinsecticides is unparalleled.**

Always read and carefully follow label directions.

CELEBRATING 50 YEARS BT PRODUCTION

Residue Exempt

Certis Bts: Proven Solutions for EGVM Control

Certis has produced Bts in California for more than 50 years. Two highly effective, proven and popular options for EGVM control are Deliver and Javelin. Deliver and Javelin are the only Bt formulations with full EPA-approved Section 3 labeling that includes EGVM.

Deliver: The most cost-effective Bt option, Deliver delivers 1.5 times the potency, pound for pound, of any other Bt available for EGVM control.

Javelin: Its proprietary fermentation and production process gives growers one of the most potent and effective tools for EGVM control.

EGVM: New to the U.S. but Not to Certis

EGVM is a long-time perennial pest in Europe. For over 20 years, Certis Bts have been a key component of grape IPM programs developed through European academic and government agricultural researchers in collaboration with growers and fieldmen. As more and more pests have extended their ranges worldwide, Certis technical personnel in the USA and Europe travel and share their expertise in pest management. That expertise is available to assist growers and PCAs today in California.

EGVM is Here and Its Damage Can Be Extensive

Early EGVM damage occurs when larvae feed on buds and flowers. A single larva is capable of damaging up to 60 buds and/or flowers and can significantly reduce photosynthetic tissue and yield. Direct damage to the fruit clusters by EGVM can be severe; full clusters can be affected. Subsequent infection of clusters by Botrytis and other fungi can further reduce yields by up to 70%.

Use Directions for Deliver and Javelin

Use Deliver or Javelin beginning at blackhead stage. Continue applications on three- to five-day intervals throughout the larval feeding period. See product labels for specific information about rates and application instructions.

Under California conditions, control of both first and second generations may be warranted given that this is a newly introduced pest. Insecticides are less effective after bunch closure.

University of California researchers are working to validate a degree day model to improve timing of applications and reduce unnecessary sprays. Updated degree day information can be found at: http://www.ipm.ucdavis.edu/EXOTIC/eurograpevinemoth.html

Deliver and Javelin:

- Zero PHI, 4-hour REI
- Exempt from residue tolerance
- Safe for farm workers
- Non-toxic to beneficial insect species
- Excellent fit for IPM and resistant management programs

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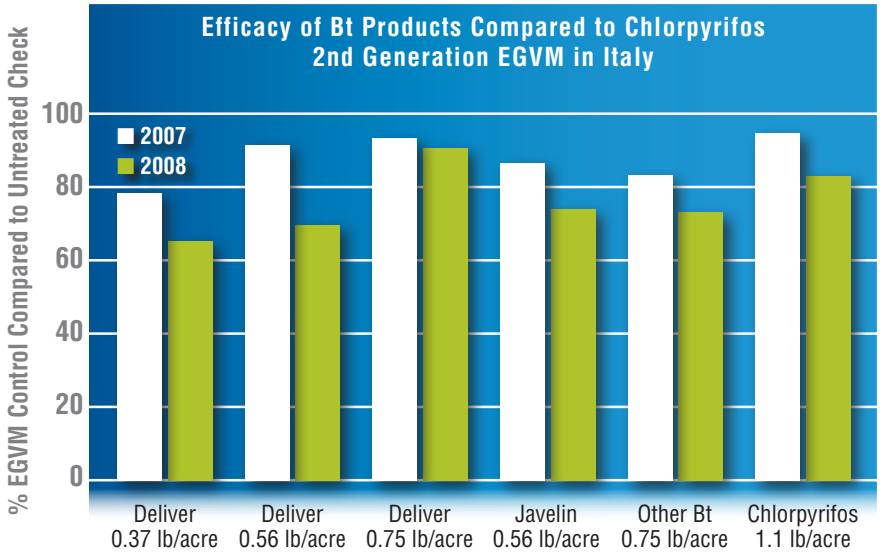
Bt Efficacy vs. Chlorpyrifos

Application Dates:

Bt's: 15 June, 2007
21 June, 2007
17 June, 2008
24 June, 2008

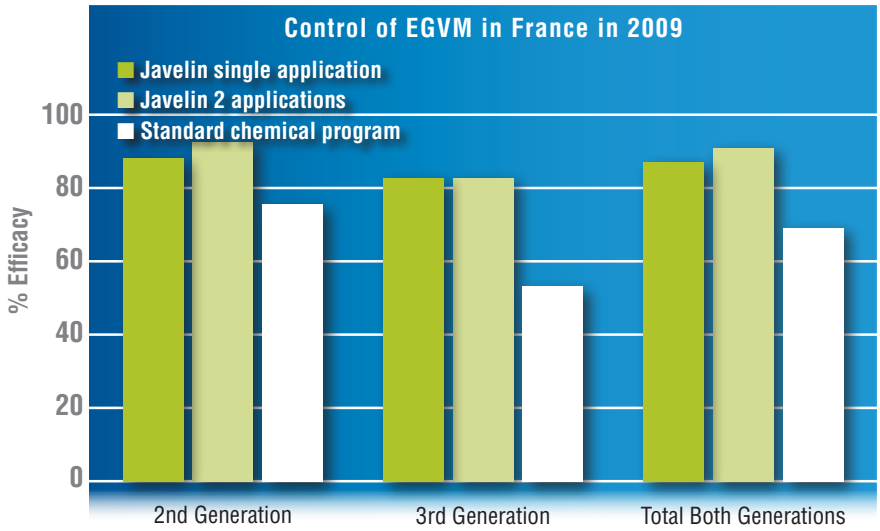
Chlorpirifos: 21 June, 2007
24 June, 2008

Application Volume: 90gpa



Control of EGVM with Javelin

- **Javelin** single application: 0.67 lb/acre at blackhead for each generation
- **Javelin** 2 applications: 0.67 lb/acre at blackhead followed by another application 7 days later for each generation
- 27 vineyards represented:
  - 20 vineyards treated for 2nd generation
  - 7 vineyards treated for 3rd generation



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