Notice of Preparation (NOP) of a Draft Programmatic Environmental Impact Report for the European Grapevine Moth Eradication Program

Date: October 19, 2010

To: State Clearinghouse; Responsible, Trustee, and Interested Agencies; and other Interested Organizations and Individuals

The California Department of Food and Agriculture (CDFA) as Lead Agency under the California Environmental Quality Act (CEQA) will prepare a Programmatic Environmental Impact Report (PEIR) on the proposed eradication of the European grapevine moth (EGVM, *Lobesia botrana*) throughout all counties in California. We need to know the views of your agency as to the scope and content of the environmental information that is germane to your agency's statutory responsibilities in connection with the proposed Project. As a responsible agency, you may be asked to consult on CDFA permits or other approvals, pursuant to this PEIR. Interested parties and individuals are invited also to comment on alternatives to, concerns with, and environmental issues or potential effects of the Project.

Public Scoping Meetings

Four public scoping meetings will be held in November 2010 to receive agency and public comment on the scope of analysis and PEIR content for the proposed Program in several locations around the State. Dates/time and locations[1] are as follows:

Napa - November 4
6pm to 8pm
Agricultural Commissioner's Office
1710 Soscol Avenue # 3
Napa, CA 94559-1311

Sonoma - November 5
6pm to 8pm
Agricultural Commissioner's Office
133 Aviation Blvd, Suite 110
Santa Rosa, CA 95403

Temecula – November 8
6pm to 8pm
Chamber of Commerce
26790 Ynez Ct # A
Temecula, CA 92591

Fresno – November 9
5pm to 7pm
County Farm Bureau
1274 W. Hedges Avenue
Fresno, CA 93728

Due to the time limits mandated by State law, **your written response must be sent at the earliest possible date, but not later than 30 days after receipt of this notice**. Please send your response to: Jim Rains, Staff Environmental Scientist, California Department of Food and Agriculture, 1220 N Street, Room 220, Sacramento, CA 95814, fax (916) 654-1018, email jrains@cdfa.ca.gov. Project files will be maintained at this location.

Signature on File

Jim Rains
California Department of Food and Agriculture
Plant Health & Pest Prevention Services

Date: October 19, 2010

[1] If special accommodation is required, please contact Jim Rains at (916) 654-0317 or jrains@cdfa.ca.gov by October 27, 2010, to enable the Department to secure the needed services.

THE EUROPEAN GRAPEVINE MOTH PROJECT DESCRIPTION

Summary

The California Department of Food and Agriculture (CDFA/Project Sponsor) is preparing a Programmatic EIR (PEIR) to evaluate the effects of implementing eradication and/or control strategies and methods (Project) for infestation of the European grapevine moth (*Lobesia botrana*) in portions of the State where they have been identified by the trapping program to date and for the potential spread of the pest to other locations throughout the State. A range of project alternatives is being evaluated by the CDFA, and these will be described and evaluated in a technical report for the PEIR. These treatment alternatives include other types of synthetic pheromones and approved insecticides effective in treating EGVM. Based on current information, the Proposed Program alternatives selected for evaluation in the PEIR are the nonchemical method of removal of flowers and fruit and the three chemical treatments using the EGVM pheromone, Btk, and spinosad.

Project Location

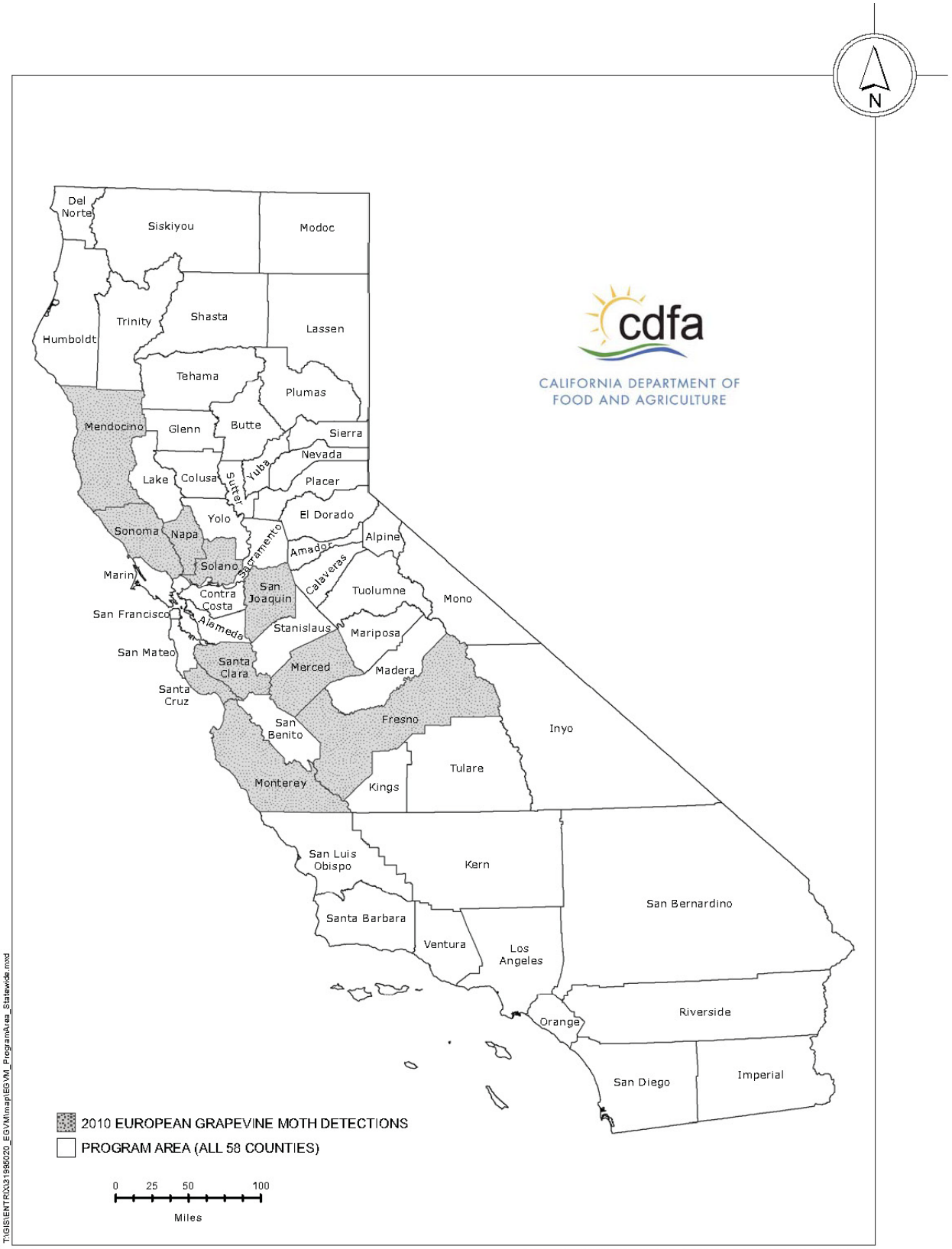
The project location or Program Area consists of all locations that may be treated by any of the EGVM eradication methods that are proposed by the CDFA, which may include all counties within California. However, within this overall Program Area, there is the immediate study area, which consists of the ten counties of the state where EGVM have been detected as of October 2010: Mendocino, Napa, Solano, Sonoma, Santa Clara, Santa Cruz, Monterey, Merced, San Joaquin, and Fresno. The existing infested areas may expand to include other likely areas of the State that could become infested with EGVM, including adjacent counties. This ten county infestation area (see Figure 1), along with the remaining 48 counties within the State, comprise the overall Program Area for the PEIR. Within the ten-county area, eradication activities would be focused in the locations with the greatest infestation problems and those posing a threat to commercial agriculture.

Background

The European grapevine moth is a significant pest of fruits and especially grapes, feeding on both their flowers and fruit. It originates in Southern Europe, but can be found in North Africa, Anatolia, the Caucasus, and most recently in Chile since 2008. The moth was first detected in the Napa Valley in October 2009, the first record in the United States. Confirmation of that detection led to additional trapping and surveys, resulting in the identification of EGVM at other sites in Napa County. The EGVM has adapted primarily to grapes, and as such, it is a threat to wine, table, raisin, and wild grapes throughout the State. Without control measures, grape crop losses could be significant. For example, up to 100 percent loss of the 2009 crop in a vineyard has already occurred in Oakville, California.

On March 9, 2010, the California Department of Food and Agriculture announced it had established a quarantine of 162 square miles (420 km^2) including portions of Napa, Sonoma, and Solano Counties. As of October 2010, areas under quarantine had expanded to 2,089 square miles (5,416 km^2). Information on the areas under quarantine can be accessed at: www.cdfa.ca.gov/go/egvmq .

The EGVM is thought to produce three generations per year in North Bay areas like Napa County, with possibly as many as four in Central Valley areas like Fresno County. The moth suspends its development as a pupa for 3 to 4 months during the winter, a process known as “diapause.” The larvae feed on both the flowers and grapes. Their entry into the grape then allows an endemic fungus to enter the fruit with the potential for substantial to complete crop loss. Other host crops are a result of secondary or transient opportunities. These include olive flowers, pomegranates, kiwi, blackberries, raspberries, carnations, stone fruits, and rosemary. The EGVM will feed on feral and wild grapes growing along riparian corridors. Some of the affected riparian areas that could be proposed for treatment are potential salmon migration and spawning streams.



Date: 10-13-10

ENTRIX

European Grapevine Moth Eradication Program

FIGURE ONE

PROGRAM AREA LOCATION

There is a Federal Order establishing quarantine areas in California (June 22, 2010). The State's "interior quarantine" procedures to control the spread of the pest are parallel to the Federal Order. Regulated plants and plant products are listed in the Federal Order located at www.aphis.usda.gov/plant_health/ea/egvm.shtml.

Mexico has implemented restrictions on imports of grapes and the secondary host crops due to the EGVM finds in Fresno County. While visual inspection of other fruits is sufficient, grapes have to be fumigated with methyl bromide to allow for export to Mexico. Similarly, Canada has implemented restrictions on imports of EGVM host products from infested counties.

Proposed Project

The CDFA proposes an EGVM Eradication Program for areas outside of commercial agricultural areas, including natural riparian areas, other non-crop open space, and residential and local "neighborhood" areas with grapevines or other affected plants. For the purposes of CEQA, this is the "project." Infestations or "finds" of EGVM that are found in the commercial agricultural areas will be addressed by the growers pursuant to the authority of the county agricultural commissioners and DPR. The CDFA's proposed Eradication Program is directed to isolated and noncommercial infestations of EGVM that pose a threat to commercial agriculture.

While EGVM can produce up to four generations per year in warmer regions of the state, it is thought that only three generations occur per year in Napa County, the first county where the moth was found. It is assumed that at least two years of treatment, and more likely three to five years, and possibly up to seven years of treatment may be necessary to accomplish full eradication of this pest. The CDFA will coordinate its treatment applications with the county agricultural commissioners' activities relative to the current (and future) quarantines and commercial agriculture. The objective of the eradication strategy is to remove the isolated finds from the affected counties and thus to remove those counties from the quarantine regulations.

CDFA's proposed pest control efforts will consist of applications of the biologically based, organically-approved insecticides Btk (*Bacillus thuringiensis kurstaki*), or spinosad to noncommercial infested vineyards and in natural areas with wild grapes, followed by mating disruption applications of an EGVM-targeted pheromone through the use of twist ties on vines. Should the EGVM Program move from eradication to control of EGVM in heavily infested areas, then it shall be assumed for the PEIR, and for the health risk assessments being prepared as technical studies for it, that the period of time for a control program would be the same as for the Eradication Program, i.e., seven years.

A suite of measures has been approved for use against EGVM by the US Environmental Protection Agency and California Department of Pesticide Regulation. The only methods for eradication that CDFA would choose to implement as part of the Proposed Program are as follows:

- **Mechanical (nonchemical) removal of flowers and fruit** (hand pick) from grapevines in residential yards with inspection to ensure compliance.

- **Chemical treatment with a pheromone product on twist ties, or ground spraying of foliage with Btk or spinosad** (that is, 3 chemical Program alternatives) for residential areas, noncommercial vineyards and community gardens that are not successful with removal of the flowers and fruit.

The EVGM pheromone formulation for twist ties is registered for use in the U.S. and Europe; its inert ingredients will be identified. The twist ties would be used at a density of 200 ties per acre and along riparian stream corridors containing wild grapes. Twist ties could also be used in trees and on vines in residential areas and on school property adjacent to grapevines or other infested crops. Twist ties are already being used in commercial vineyards by growers.

The State Office of Environmental Health Hazard Assessment (OEHHA) has prepared a human health risk assessment, and the California Department of Fish and Game (CDFG) is conducting basic aquatic toxicity tests of the specific formulation proposed for use. No aerial or SPLAT-type application of the pheromone is proposed. The twist ties last long enough that they are envisioned to be deployed only once each year.

In addition to the pheromone treatments with twist ties, the insecticides Btk (Dipel DF) and spinosad (Entrust), approved for use on organic crops, would occur under the Proposed Program. For spinosad treatments, two applications are expected per 1.5 month life cycle (i.e., generation) in a treatment area. Treatments would occur every other week during the period of larval (caterpillar) growth (efficacy requires ingestion). For Btk treatments, up to three applications in a treated area are expected per 1.5 month life cycle, with treatments occurring the first three weeks of each life cycle (generation) treated. Treatments of Btk would be applied when the adults are flying and laying eggs.

For both of these insecticide treatments, it is expected that three to four generations would be treated to ensure eradication where isolated populations exist, with the number of treatments predicated on the number of generations anticipated in these locales. Multiple year treatments may be required in heavily infested areas, which would be separated by a several month period in the winter, corresponding to the moth's pupae stage. Assuming a standard of three generations of moth reproduction per year, a total of nine (9) Btk applications or a total of six (6) treatments would be required with spinosad in a single year to achieve eradication in an area. (Both types of treatments would not occur at the same time in the same location.) If four generations are to be treated in a single location, then twelve (12) applications of Btk or eight (8) applications of spinosad would be required.

Homeowners would be given the options of either mechanical removal of fruit and/or flowers or application of Btk or spinosad. If eradication is determined in the future to not be possible and a control program would then be implemented, this same system of treatments by CDFA would be assumed to occur within the maximum seven-year time frame for the Proposed Program.

Scope of the PEIR Analysis

The No Project alternative (No Program) would continue and extend the quarantine to the entire state, if needed, resulting in the use of methyl bromide fumigant for all table grapes and other chemical treatments for wine grapes. It would also lead to the expansion of detection and inspection activities under the county agricultural commissioners, based on trapping results but without the application of the pheromone or any other insecticides on an areawide basis by CDFA, except for limited treatments under "emergency action" allowances. Restrictions on domestic and foreign trade would increase. Approved insecticides would be used to control EGVM, but without a regional coordinated treatment program, EGVM would flourish in existing areas and spread to surrounding areas, with associated environmental effects.

The list of 18 approved insecticides for use against EGVM includes eight classes of pesticides. Human health and ecological health analyses will address the potential toxicity of all of the approved pesticides and focus on the potential risk to humans and the environment for those chemical formulations determined by CDFA in consultation with the county agricultural commissioners to be those most widely used by commercial growers. The toxicity of the inert ingredients disclosed to CDFA will also be assessed. Methyl bromide is approved for chamber-based, post-harvest fumigation of table grapes, and its use will be evaluated as part of No Program for the human health risk assessment.

The PEIR will evaluate potential environmental impacts (direct, indirect, and cumulative) and focus on the following environmental resources and concerns: human health, ecological health, agricultural economics and land use, non-agricultural land uses, public services/hazard response, water quality (surface and ground waters), air quality, climate change (greenhouse

gas production), noise, and biological resources. The human and ecological risk assessments on the three proposed chemical treatment methods are expected to be technical appendices to the PEIR with important results summarized in the appropriate sections of the PEIR.

Issues raised during public scoping on the alternatives and the potential for impacts to humans and the environment will be incorporated into a public scoping report and made available to the public and preparers of the Draft PEIR. These concerns will be addressed as needed in studies and reports prepared independently of the PEIR process. The CDFA has commissioned the preparation of health risk assessments or toxicological studies on the one new EGVM pheromone formulation (to be applied via twist-ties), which will be incorporated into the human health and ecological risk assessments and environmental impact analyses prepared for the PEIR.

For More Information

Additional information about the project can be found at: www.cdfa.ca.gov/go/egvm.