

JULY 25, 2019 CE CLASS MARIPOSA

Merced County Department of Agriculture Ag
Commissioner's Office
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TOPICS FOR DISCUSSION

- 2019 Permit Conditions for Bee Protection
- California Code of Regulations 6650 Pesticides Toxic to Bees
- Merced County Apiary Notification Procedures for Pesticide Applications
- Possible New Merced County Interactive Bee Map
- Pesticide Information
- Real Life Scenario for a Pesticide Application
- CalAgPermits Program-It can work for you!
- BeeWhere Program (New)
- Questions?

2019 PERMIT CONDITIONS

- A. GENERAL POLICY for pesticide applications when environmental hazards statements on the label indicate the pesticide is toxic or highly toxic to bees. These applications shall not be made when crop or weed bloom is present in the application site or adjacent borders except under the following conditions:
 - 1. Person performing pest control notifies beekeepers, after inquiring of the Agricultural Commissioner for those beekeepers who have previously requested notification of such operation, within one mile of such property unless a greater distance is specified in the permit conditions in Section B below.
 - 2. Such notification of pesticide applications shall be by collect telephone call or other expedient means provided by the beekeeper and at the beekeeper's expense. The beekeeper shall specify a 2-hour period between 6:00 a.m. and 8:00 p.m. daily, when he or she will be available for the notification. Notification shall include the time and date of intended pesticide application, location, crop, acreage, method, identity and amount of pesticide.
 - 3. Notification shall be given at least 48 hours prior to application, allowing the beekeeper time to move, cover or otherwise protect the bees.
 - 4. If the beekeeper fails to properly protect the apiary within the 48-hour period, the application may be made without delay provided the application is otherwise in compliance with the label and there is not a reasonable possibility of drift over apiaries.
 - 5. If the product label states that the pesticide is toxic or highly toxic to bees exposed to "residues on blooming crops or weeds", applications are prohibited if temperatures are forecasted to be above 55°F during daylight hours on the day following application. (Refer to:
<http://www.cdpr.ca.gov/docs/county/cacltrs/penfltrs/penf2008/2008028.htm>)

Division 6. Pesticides and Pest Control Operations

Chapter 3. Pest Control Operations

Subchapter 2. Work Requirements

Article 3. Protection of Bees

6650. Pesticides Toxic to Bees.

- (a) Pesticides toxic to bees are those that include the words "toxic to bees" on the labeling of the pesticide, regardless of modifying words on the label that state "highly" or "moderately."
- (b) Bees are considered to be inactive from one hour after sunset to two hours before sunrise or when the temperature is below 55 degrees Fahrenheit. The sunset and sunrise times will be those indicated in the local newspaper.
- (c) Residual toxicity (RT) time is that period of time after completing a pesticide application until there is minimal toxic effect to bees. The RT time is specified on product labeling and is based upon Residual Toxicity25 (RT25) studies. RT25 studies determine 25 percent bee mortality based on the test bee population exposed to the formulated pesticide product applied to foliage.

NOTE: Authority cited: Section 29102, Food and Agricultural Code.

Reference: Sections 29100 and 29102, Food and Agricultural Code.

6652. Availability for Notification.

(a) Each beekeeper who desires advance notice of applications of pesticides shall inform the commissioner of a two-hour period between 6 a.m. and 8 p.m. each day, during which time the beekeeper shall be available for contact, at the beekeeper's expense, to receive advance notice from persons intending to apply pesticide(s). This request for notification shall expire on December 31 each year.

(b) This Section shall apply statewide. However, from March 15 through May 15 in a citrus/bee protection area, if there are conflicts between the provisions of this Section and those of Section 6656, Section 6656 shall prevail.

NOTE: Authority cited: Section 11456 and 29102, Food and Agricultural Code.

Reference: Section 29102, Food and Agricultural Code.

6654. Notification to Beekeepers.

(a) Each person intending to apply any pesticide toxic to bees to a blossoming plant shall, prior to the application, inquire of the commissioner, or of a notification service designated by the commissioner, whether any beekeeper with apiaries within one mile of the application site has requested notice of such application.

(b) If the person performing pest control is advised of a request for notification, he or she shall notify the beekeeper, at least 48 hours in advance of the application, of the time and place the application is to be made, the crop and acreage to be treated, the method of application, the identity and dosage rate of the application to be applied, and how the person performing pest control may be contacted by the beekeeper. This time may be increased or decreased by the commissioner, or by an agreement of both the beekeeper and the person performing the pest control work.

(c) This section shall apply statewide. However, from March 15 through May 15 in a citrus/bee protection area, if there are conflicts between the provisions of this section and those of section 6656, section 6656 shall prevail.

NOTE: Authority cited: Section 29102, Food and Agricultural Code.

Reference: Section 29102, Food and Agricultural Code.

APIARY PESTICIDE NOTIFICATION





New Interactive Bee Map for Pesticide Notification Program

The New BeeWhere mapping program

The new program beginning July 2019

[https://beewherecalifornia.com/about-bee-
where/](https://beewherecalifornia.com/about-bee-where/)

GROUP 4 INSECTICIDE



ASSAIL® 30SG

INSECTICIDE

For Agricultural Use Only

ACTIVE INGREDIENT:

Acetamiprid, (E)- N¹-[(6-chloro-3-pyridyl)methyl]-N²-cyano-N¹-methyl acetamidine By Wt. 30.0%

OTHER INGREDIENTS:

70.0%

TOTAL:

100.0%

EPA Reg. No. 8033-36-70506

KEEP OUT OF REACH OF CHILDREN
CAUTION

Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle.
(If you do not understand the label, find someone to explain it to you in detail.)

PRECAUTIONARY STATEMENTS

CAUTION

HAZARDS TO HUMANS and DOMESTIC ANIMALS

Harmful if swallowed or absorbed through skin. Causes moderate eye irritation. Avoid contact with eyes, skin or clothing. Harmful if inhaled. Avoid breathing vapors or spray mist. Keep out of reach of children and domestic animals.

PERSONAL PROTECTIVE EQUIPMENT (PPE)

Mixers, loaders, applicators and other handlers must wear long-sleeved shirts, long pants, shoes plus socks, chemical resistant gloves made of waterproof material (such as nitrile rubber, neoprene rubber, barrier laminate, polyvinyl chloride (PVC), or viton), and chemical resistant headgear for overhead exposure. Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. Do not reuse them. Follow manufacturers instructions for cleaning/maintaining PPE. If there are no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

When handlers use closed systems, enclosed cabs, or aircraft in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240 (d) (4-6)], the handler PPE requirements may be reduced or modified as specified in the WPS.

User Safety Recommendations

Users should wash hands before eating, drinking, chewing gum, using tobacco or using the toilet. Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing. Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

ENVIRONMENTAL HAZARDS

This product is toxic to birds and aquatic invertebrates. This product is toxic to bees exposed to direct treatment. Do not apply this product while bees are actively visiting the treatment area. Do not apply directly to water, or to areas where surface water is present or to intertidal areas below the mean high water mark. Do not contaminate water when disposing of equipment washwater or rinsate. Do not contaminate water used for irrigation or domestic purposes.

GROUND WATER ADVISORY

This chemical has properties and characteristics associated with chemicals detected in ground water. This chemical may leach into ground water if used in areas where soils are permeable, particularly where the water table is shallow.

SURFACE WATER ADVISORY

This product may impact surface water quality due to runoff of rain water. This is especially true for poorly draining soils and soils with shallow ground water. This product is classified as having high potential for reaching surface water via runoff for several months or more after application. Avoid accidental or intentional application of this product to ditches, swales, drainage ways or impervious surfaces such as driveways. Runoff of this product to surface water will be reduced by avoiding applications when rainfall is forecasted to occur within 48 hours.

SPRAY DRIFT

Avoid spray drift. Do not apply when weather conditions may cause drift. Do not allow this product to drift on to non-target areas. To avoid spray drift, DO NOT apply aerially when wind speed is greater than 10 mph or during periods of temperature inversions. For aerial application, select nozzles and pressure that deliver **MEDIUM** spray droplets as indicated in nozzle manufacturer's catalogs and

AERIAL DRIFT REDUCTION ADVISORY

[This section is advisory in nature and does not supersede the mandatory label requirements].

INFORMATION ON DROPLET SIZE

The most effective way to reduce drift potential is to apply **MEDIUM** droplets. The best drift management strategy is to apply the largest droplets that provide sufficient coverage and control.

Applying larger droplets reduces drift potential, but will not prevent drift if applications are made improperly, or under unfavorable environmental conditions (See Wind, Temperature and Humidity, and Temperature Inversions).

CONTROLLING DROPLET SIZE

Volume - Use high flow rate nozzles to apply the highest practical spray volume. Nozzles with higher rated flows produce larger droplets.

Pressure - Do not exceed the nozzle manufacturer's recommended pressures. For many nozzle types lower pressure produces larger droplets. When higher flow rates are needed, use higher flow rate nozzles instead of increasing pressure.

Number of nozzles - Use the minimum number of nozzles that provide uniform coverage.

Nozzle Orientation - Small droplets are more prone to spray drift and can be minimized by several factors including orienting nozzles away from the airstream. Orienting nozzles so that the spray is released parallel to the airstream produces larger droplets than other orientations. Significant deflection from horizontal will reduce droplet size and increase drift potential.

Nozzle Type - Use a nozzle type that is designed for the intended application. With most nozzle types, narrower spray angles produce larger droplets. Consider using low-drift nozzles. Solid stream nozzles oriented straight back produce the largest droplets and the lowest drift.

BOOM LENGTH

For some use patterns, reducing the effective boom length to less than 3/4 of the wingspan or rotor length may further reduce drift without reducing swath width.

APPLICATION HEIGHT

Applications should not be made at a height greater than 10 feet above the top of the target plants unless a greater height is required for aircraft safety. Making applications at the lowest height that is safe reduces exposure of droplets to evaporation and wind.

SWATH ADJUSTMENT

When applications are made with a crosswind, the swath will be displaced downwind. Therefore, on the up and downwind edges of the field, the applicator should compensate for this displacement by adjusting the path of the aircraft upwind. Swath adjustment distances should increase, with increasing drift potential (higher wind, smaller drops, etc.).

WIND

Drift potential is lowest between wind speeds of 2 - 10 mph. However, many factors, including droplet size and equipment type determine drift potential at any given speed. Application should be avoided below 2 mph due to variable wind direction and high inversion potential. NOTE: Local terrain can influence wind patterns. Every applicator should be familiar with local wind patterns and how they affect spray drift.

TEMPERATURE AND HUMIDITY

When making applications in low relative humidity, set up equipment to produce larger droplets to compensate for evaporation. Droplet evaporation is most severe when conditions are both hot and dry.

TEMPERATURE INVERSIONS

Applications should not occur during a temperature inversion because drift

How to Reduce Bee Poisoning from pesticides

L. Hooven
R. Sagili
E. Johansen



A PACIFIC NORTHWEST EXTENSION PUBLICATION • PNW 591
Oregon State University • University of Idaho • Washington State University

<http://extension.oregonstate.edu/crook/sites/default/files/bee2.pdf>

What do I do if a beekeeper sitting near my field that I want to spray is not registered with the county?

- The regulation is specific in regards to beekeeper pesticide notification. If that beekeeper does not want to be notified of pesticide applications, it does not exempt the applicator from the registered pesticide labels environmental-bee warnings statement. The label is law and must be followed. It is always best to try and communicate with or try to find out who has the honeybees near the application site. Not having the hives marked with a name or phone number can make it a big challenge. A change is coming in 2019 where bee hives will have to be posted with the responsible persons name, and phone number.

BeeWhere Program

<https://beewherecalifornia.com/>

QUESTIONS?

