



# PROTECT POLLINATORS READ PESTICIDE LABELS

Four steps to reading a pesticide label to reduce risk to pollinating insects



## 1. OPEN THE LABEL.

**STEP 1** - See if product is toxic and has more than 8 hour residual contact toxicity in the **ENVIRONMENTAL HAZARDS** statement.

**STEP 2** - Look for general and crop-specific directions under **DIRECTIONS FOR USE**.



**2. BEE TOXIC PESTICIDES** will be indicated by the phrase **“TOXIC”** or **“HIGHLY TOXIC TO BEES”**. If toxic:



don't spray  
when in bloom

wait until over  
80% of petals fall

**3. Some bee-toxic pesticides  
BREAK DOWN IN A FEW HOURS.**  
Learn if these pesticides can be applied at bloom in the evening:



**1. “FORAGING”** or **“VISITING”** = remains toxic for more than 8 hours. **DON'T APPLY TO FLOWERING PLANTS!**



**2. “ACTIVELY FORAGING”** or **“ACTIVELY VISITING”** = remains toxic for less than 8 hours **ONLY APPLY IN THE EVENING WHEN BEES ARE NOT ACTIVE!**

## ENVIRONMENTAL HAZARDS

This pesticide is toxic to mammals, birds, fish and aquatic invertebrates.

This product is **highly toxic** to bees exposed to direct treatment or residues on blooming crops or weeds. Do not apply this product or allow it to drift to blooming crops if bees are **actively foraging** the treatment area.

## DIRECTIONS FOR USE

### Protection of Pollinators

APPLICATION RESTRICTIONS EXIST FOR THIS PRODUCT BECAUSE OF RISK TO BEES AND OTHER POLLINATING INSECTS:

### Tree Nuts (Crop Group 14-12)

Pest	(oz/acre)
Aphids	0.75 - 1.5 (0.023 - 0.047 lb/acre)
San Jose scale	2.75 (0.086 lb/acre)

**Advisory Pollinator Statement:** Notifying known beekeepers within 1 mile of the treatment area 48 hours before the product is applied. The RT25 for this product is less than or equal to 3 hours.

### Restrictions:

Do not apply this product any time between 3 days prior to bloom and until petal fall.

## 4. GENERAL AND CROP-SPECIFIC USE DIRECTIONS

Newer labels have **additional precautions** for using products around honey bees. Here you will find what practices to follow to keep bees safe and/or **restrictions around whether a pesticide can be applied around crop bloom time**. Instructions **may apply to all crops, or include crop-specific restrictions**. The label may also specify a value **RT25**, a measure of the time that field weathered residues remain toxic to bees on contact with foliage.

[www.pollinator.org/pesticide-education](http://www.pollinator.org/pesticide-education)

# MINIMIZING PESTICIDE EXPOSURE TO BEES

Understanding pesticide label information on the hazard and risks of bees is an important first step to protecting bees. Insecticides and some fungicides are of concern for bees. Here are a few actions to help minimize pesticide exposure to bees while managing pests and diseases.

- 1. Avoid sprays during bloom when possible.** Bees face the highest exposure when pesticides are applied to the bloom of bee-attractive crops and weeds. When possible, use sprays before bloom to control pests and diseases to reduce the need for treatments at bloom.
- 2. If you must treat during bloom, choose products carefully and apply in the evening.** Choose insecticides that are not labeled as 'Toxic' or 'Highly Toxic' to bees (front of card, Point 2). Avoid insecticides where residues remain toxic to bees for longer than 8 hours (Point 3). Always look to the Directions for Use for more specific information on when a product can be applied at reduced risk to bees (Point 4)
- 3. Cooperate and communicate with beekeepers in a timely manner.** Contact beekeepers at least 48 hours prior to applying insecticides or fungicides to blooming bee-attractive crops. The beekeeper may choose to cover or move colonies, or may leave colonies in place depending on the toxicity of the product being sprayed.
- 4. Avoid spraying bee colonies and bee habitat.** Avoid placing bees directly in the crop. In cases where colonies can only be set in the crop, turn sprayers off as you pass over the colonies. Reduce drift onto adjacent flowering habitat by using coarser droplet sizes, drift reducing agent, or intelligent sprayer technology.
- 5. Mow blooming weeds.** If there are bee-attractive blooming weeds (e.g., mustard, clover or dandelion), mow them before spraying.
- 6. Review Pollinator Protection Plans and use IPM.** Many states and industries provide information on how to protect bees and other pollinators. Contact your Department of Agriculture to obtain these plans. Integrated Pest Management (IPM) can also reduce bee pesticide exposure. Contact your regional IPM Center for details.
- 7. Report pesticide incidents with bees.** Let EPA know as soon as you think bees have been killed by a pesticide (beekill@epa.gov). Also reach out to your state or tribal pesticide regulatory agency - contact information can be found at: <http://npic.orst.edu/incidents>.



**HELPFUL  
LINKS**

The **North American Pollinator Protection Campaign (NAPPC)** is a growing collaborative body of more than 170 diverse partners, including respected scientists, researchers, conservationists, government officials and dedicated volunteers. NAPPC's mission is to encourage the health of resident and migratory pollinating animals in North America.



National Institute of Food and Agriculture  
U.S. DEPARTMENT OF AGRICULTURE

**North Central  
IPM  
Center**