

Protecting Pollinators through the Pesticide Label

There is a long history of protecting bees and other non-target pollinating insects from potential adverse effects from pesticides through the pesticide registration process. As part of the registration process for each pesticide, the U.S. Environmental Protection Agency (EPA) assesses the risk to bees by evaluating each pesticide's toxicity and comparing the level at which adverse effects are observed to an estimated exposure concentration in the environment. Based on information from the risk assessment, the pesticide label includes directions for use and information on any environmental hazards so that, when applied according to the label, any risk to non-target organisms would be negligible. At the state level, the NC Department of Agriculture and Consumer Services (NCDA & CS), Structural Pest Control & Pesticides Division implements both federal and state pesticide laws, which include applying a pesticide according to its label.

For years, the EPA has required a "Bee Hazard" warning to be included in the Environmental Hazards section of the pesticide label if the pesticide is used outdoors as a foliar application and is toxic to pollinating insects. The following table from the Label Review Manual Chapter 8: Environmental Hazards (Revised September 2012)¹ sets out the toxicity groupings and examples of label statements for honey bees and other pollinating insects. The Label Review Manual also states that crop-specific use instructions would optimize safety for bees and other pollinating insect safety. There may be other options for mitigating risk that may be considered (i.e. applications at night for continuously blooming crops). These instructions could be placed in the Directions for Use.

¹ Label Review Manual. Chapter 8: Environmental Hazards (Revised September 2012). U.S. Environmental Protection Agency. August 2015.

Table 2. Pollinating Insect Acute Toxicity Groups and Precautionary Statement Examples

Toxicity Group	Precautionary Statement if Extended Residual Toxicity is Displayed	Precautionary Statement if Extended Residual Toxicity is not Displayed
<p>I</p> <p>Product contains any active ingredient with acute LD₅₀ of 2 micrograms/bee or less</p>	<p><i>This product is highly toxic to bees and other pollinating insects exposed to direct treatment or residues on blooming crops or weeds. Do not apply this product or allow it to drift to blooming crops or weeds if bees or other pollinating insects are visiting the treatment area.</i></p>	<p><i>This product is highly toxic to bees and other pollinating insects exposed to direct treatment on blooming crops or weeds. Do not apply this product or allow it to drift to blooming crops or weeds while bees or other pollinating insects are actively visiting the treatment area.</i></p>
<p>II</p> <p>Product contains any active ingredient(s) with acute LD₅₀ of greater than 2 micrograms/bee but less than 11 micrograms/bee.</p>	<p><i>This product is moderately toxic to bees and other pollinating insects exposed to direct treatment or residues on blooming crops or weeds. Do not apply this product if bees or other pollinating insects are visiting the treatment area.</i></p>	<p><i>This product is toxic to bees and other pollinating insects exposed to direct treatment. Do not apply this product while bees or other pollinating insects are actively visiting the treatment area.</i></p>
<p>III</p> <p>All others.</p>	<p>No bee or pollinating insect caution required.</p>	<p>No bee or pollinating insect caution required.</p>

The label statements presented in this matrix are derived from two toxicity tests in honey bees evaluated by the EPA. The acute contact toxicity test (OCSPP Guideline 850.3020)² is used to calculate a lethal dose to 50% of the population (LD₅₀), and this value determines whether the pesticide is highly toxic (LD₅₀ less than or equal to 2 µg/bee), moderately toxic (LD₅₀ greater than 2 µg/bee, but less than 11 µg/bee), or practically non-toxic to bees (LD₅₀ 11 µg/bee and above). If the pesticide is highly toxic to bees, the bee warning statement includes restrictions about drift. The other test determines how long the pesticide remains toxic on foliage by contact (OCSPP Guideline 850.3030)³. In this test, the residual toxicity time that will kill 25% of the bees on contact (RT₂₅) is calculated, and a RT₂₅ of 8 hours or more is considered to have extended residual toxicity. If the pesticide has extended residual toxicity, then the bee warning statement would instruct the applicator to not apply the product if bees are visiting the treatment area. If the pesticide does not have extended residual toxicity, then the label statement would instruct applicators to not apply the product if bees are *actively* visiting the treatment area, which means that they are actually present in the treated area at the time of application. The term “visiting” is more challenging to interpret, but implies that the applicator should not apply the pesticide if bees may forage in the treated area within 8 hours following application. More information

² Office of Chemical Safety and Pollution Prevention (OCSPP) Ecological Effects Test Guideline 850.3020 Honey Bee Acute Contact Toxicity Test. U.S. Environmental Protection Agency. EPA 712-C-019. January 2012.

³ Office of Chemical Safety and Pollution Prevention (OCSPP) Ecological Effects Test Guideline 850.3030 Honey Bee Toxicity of Residues on Foliage. U.S. Environmental Protection Agency. EPA 712-C-018. January 2012.

about residual toxicity time, including RT25 data for approximately 50 pesticides, is available on the EPA website at <https://www.epa.gov/pollinator-protection/residual-time-25-bee-mortality-rt25-data>.

In the past few years, several incidents involving bee kills have led the EPA to make changes to some pesticide labels. In the spring and summer of 2012, Health Canada's Pest Management Regulatory Agency (PMRA) received numerous honey bee mortality reports from beekeepers in corn growing regions of Ontario and Quebec⁴. The majority of reports were from southern Ontario, involving over 40 beekeepers and 240 different bee yard locations. Additionally, one report was received from Quebec involving eight bee yards. Timing and location of these honey bee mortalities coincided with planting corn seed treated with neonicotinoid insecticides. Subsequent investigation and residue analyses of the dead bees suggests that planting of corn seeds treated with the neonicotinoids clothianidin and/or thiamethoxam contributed to the majority of these bee deaths. The likely route of exposure was neonicotinoid-contaminated dust generated during the planting of treated corn seed.



In June 2013, more than 50,000 bumblebees were killed in Wilsonville, Oregon when a landscaping company applied Safari (active ingredient dinotefuran) insecticide to blooming linden trees. Three other incidents involving foliar application of neonicotinoid insecticides occurred in Oregon that summer resulting in bumblebee deaths in Hillsboro, West Linn, and downtown Portland⁵. In response to these

⁴Evaluation of Canadian Bee Mortalities that Coincided with Corn Planting in Spring 2012, Health Canada, Pest Management Regulatory Agency (PMRA). May 31, 2013 http://www.hc-sc.gc.ca/cps-spc/pubs/pest/decisions/bee_corn-mort-abeille_mais/index-eng.php

⁵ Bumblebee incidents result in pesticide violations. *Portland Tribune*, January 3, 2014. <http://portlandtribune.com/sl/206414-62081-bumblebee-incidents-result-in-pesticide-violations>

incidents and the conclusions from their subsequent investigation, in February 2015, the Oregon Department of Agriculture prohibited the use of pesticide products containing active ingredients dinotefuran, imidacloprid, thiamethoxam and clothianidin on linden, basswood or other Tilia species trees in Oregon⁶.



In August of 2013, the EPA sent a letter to registrants requiring new pesticide labels for products containing the neonicotinoids clothianidin, dinotefuran, imidacloprid, and thiamethoxam. These new labels included a Bee Advisory Box and new Directions for Use. The Bee Advisory Box, pictured below, contains advisory language on: different routes of exposure for bees (i.e., contact from foliar application; and ingestion of nectar and pollen from applications via seed treatment, soil treatment, trunk injection, as well as foliar application); Best Management Practices (BMPs) to reduce exposure to bees, including reducing drift; and information about how to report bee kills to the EPA.

⁶ Oregon Administrative Rules (OAR) 603-057-0388. Prohibits the Application of Four Neonicotinoid Insecticides. February 27, 2015. http://arcweb.sos.state.or.us/pages/rules/oars_600/oar_603/603_057.html

PROTECTION OF POLLINATORS



APPLICATION RESTRICTIONS EXIST FOR THIS PRODUCT BECAUSE OF RISK TO BEES AND OTHER INSECT POLLINATORS. FOLLOW APPLICATION RESTRICTIONS FOUND IN THE DIRECTIONS FOR USE TO PROTECT POLLINATORS.



Look for the bee hazard icon in the Directions for Use for each application site for specific use restrictions and instructions to protect bees and other insect pollinators.

This product can kill bees and other insect pollinators.

Bees and other insect pollinators will forage on plants when they flower, shed pollen, or produce nectar.

Bees and other insect pollinators can be exposed to this pesticide from:

- Direct contact during foliar applications, or contact with residues on plant surfaces after foliar applications
- Ingestion of residues in nectar and pollen when the pesticide is applied as a seed treatment, soil, tree injection, as well as foliar applications.

When Using This Product Take Steps To:

- Minimize exposure of this product to bees and other insect pollinators when they are foraging on pollinator attractive plants around the application site.
- Minimize drift of this product on to beehives or to off-site pollinator attractive habitat. Drift of this product onto beehives or off-site to pollinator attractive habitat can result in bee kills.

Information on protecting bees and other insect pollinators may be found at the Pesticide Environmental Stewardship website at:

<http://pesticidestewardship.org/PollinatorProtection/Pages/default.aspx>.

Pesticide incidents (for example, bee kills) should immediately be reported to the state/tribal lead agency. For contact information for your state, go to: www.aapco.org/officials.html. Pesticide incidents should also be reported to the National Pesticide Information Center at: www.npic.orst.edu or directly to EPA at: beekill@epa.gov

In addition to the Bee Advisory Box, these neonicotinoid product labels contain new Directions for Use. These Directions for Use describe three different scenarios for: (1) crops under contracted pollination services; (2) food crops and commercially grown ornamentals NOT under contract for pollination services but attractive to pollinators; and (3) non-agricultural applications. The specific label language in the Directions for Use for these three scenarios is as follows:

1. Crops under contracted pollination services

Do not apply this product while bees are foraging. Do not apply this product until flowering is complete and all petals have fallen unless the following condition has been met.

- If an application must be made when managed bees are at the treatment site, the beekeeper providing the pollination services must be notified no less than 48-hours prior to the time of the planned application so that the bees can be removed, covered or otherwise protected prior to spraying.

2. Food Crops & Commercially Grown Ornamentals Not Under Contract for Pollination Services but are Attractive to Pollinators

Do not apply this product while bees are foraging. Do not apply this product until flowering is complete and all petals have fallen unless one of the following conditions has been met:

- The application is made to the target site after sunset
- The application is made to the target site when temperatures are below 55°F
- The application is made in accordance with a government-initiated public health response
- The application is made in accordance with an active state-administered apiary registry program where beekeepers are notified no less than 48-hours prior to the time of the planned application so that the bees can be removed, covered or otherwise protected prior to spraying
- The application is made due to an imminent threat of significant crop loss, and a documented determination consistent with an IPM plan or predetermined economic threshold is met. Every effort should be made to notify beekeepers no less than 48 hours prior to the time of the planned application so that the bees can be removed covered or otherwise protected prior to spraying.

3. Non Agricultural Applications

Do not apply this product while bees are foraging. Do not apply this product to plants that are flowering. Only apply after all flower petals have fallen off.

The EPA has provided the following guidance for interpretation and enforcement of these labels:

- New bee labeling does not replace previously-existing product-specific warnings. Applicators are instructed to follow the more restrictive labeling. EPA is working with the registrants to address any conflicting text.
- The Bee Advisory Box has only advisory statements but alerts applicators to mandatory Directions for Use.
- These labeling changes only affect foliar applications – new labeling does not apply to soil, trunk injection, or seed treatments.
- Applicators can apply pre-bloom (unless directed otherwise) and after flowering is complete (to the extent that bees are no longer foraging).
- “Bees” refers to honey bees and native bees that forage for pollen and nectar.

- “Imminent threat of significant crop loss” is included as one of the provisions to allow applications during bloom of crops and commercially grown ornamentals not under contract for pollination services but attractive to pollinators. The applicator should document a pre-determined economic threshold through scouting for pest pressure and make this determination with a County Extension Service (CES) agent, crop consultant, certified crop advisor, or a state recognized pest management model/tool.

In June 2014, *Guidance for Assessing Pesticide Risks to Bees* was published by the U.S. EPA, Health Canada PMRA, and the California Dept. of Pesticide Regulation. This new risk assessment guidance provides a more comprehensive framework for evaluating pesticide risk to bees and is based on many more studies compared to the two tests historically required by the EPA – the acute contact toxicity test in adult bees and the test of residual toxicity test on foliage. Additional studies evaluate different life stages (adults and larvae), exposure durations (acute and chronic), and routes of exposure (contact and ingestion). The new risk assessment framework relies on a tiered approach which begins with conservative exposure assumptions and laboratory toxicity data conducted with individual bees, then progresses to more realistic exposure measurements in nectar and pollen, as well as colony level bee studies conducted in the field. Data required under the Framework has been divided into three tiers. Tier 1 consists of laboratory toxicity studies with both adult and larval honey bees exposed for acute and chronic durations. Tier 2 effects studies include feeding and tunnel studies in which honey bee hives are exposed to pesticides in a more realistic setting than the laboratory. Tier 2 residue studies measure exposure based on pollen and nectar residue data from pesticides applied to crops using different application methods. Tier 3 studies are generally large-scale field studies that most closely resemble an in-field exposure scenario for honey bees.

The four neonicotinoids affected by the label changes were prioritized for registration review by the EPA to obtain and evaluate new data on any potential adverse effects on bees as part of the ecological risk assessment. Neonicotinoid registrants have submitted, or are in the process of conducting, a number of studies to support their pollinator risk assessments using the new risk assessment framework. The Agency will use these studies as well as information from published literature in the tiered risk assessment approach. All relevant scientific information will be considered alongside incident data in a weight-of-evidence approach, which considers if the information is robust and consistent, for the risk characterization⁷.

In January 2016, the U.S. EPA released the preliminary pollinator risk assessment for the first of these four neonicotinoid insecticides, imidacloprid, and this assessment indicated a potential risk to hives when the pesticide comes in contact with certain crops that attract pollinators⁸. A residue level of 25 ppb imidacloprid was determined to be the threshold above which effects on pollinator hives are likely to be seen (including decreased numbers of bees and less honey produced). The data show that crops such as corn and leafy vegetables either do not produce nectar or have residues below the threshold. However, application to some other crops, such as citrus and cotton, may result in residues of

⁷ Joint PMRA / USEPA Re-evaluation Update for the Pollinator Risk Assessment of the Neonicotinoid Insecticides. U.S. EPA Office of Chemical Safety and Pollution Prevention (OCSPP). January 6, 2016.

⁸ Preliminary Pollinator Assessment to Support the Registration Review of Imidacloprid. PC Code 129099. Housenger, J., Sappington, KG, Ruhman, MA, and Shamim, MT (U.S. EPA); Bireley, R, Troiano, J, and Alder, D. (CA DPR). 305 pp. January 4, 2016.

imidacloprid in pollen and nectar above the threshold. The EPA is awaiting completion of several field studies that will provide additional data on these and other crops to further evaluate whether imidacloprid poses a risk to hives.

In January 2017, preliminary pollinator risk assessments for three other neonicotinoids (clothianidin, thiamethoxam, and dinotefuran) were released. Generally, seed treatments using clothianidin and thiamethoxam were determined to be low risk⁹. In contrast, foliar application of clothianidin or thiamethoxam to cotton show potential risk concerns. Additionally, for thiamethoxam, there are potential on-field risk concerns for foliar applications to cucurbits, stone fruit and berry and small fruit (cranberry) as well as for soil applications to citrus. For foliar applications, off-field risks to individual bees exposed to spray drift extend 1000 feet from the edge of the treated field. In addition, there are potential concerns for off-site transport from dust from planting of corn seeds. For dinotefuran, all crops and application methods where on-field exposure is expected, the exposure concentrations exceeded the risk levels of concern (LOC) for bees¹⁰. Even in cases where on-field exposure was not expected (e.g., lettuce, onion), an off-field spray drift assessment was conducted and indicated that there could be risk from all foliar uses. Refined analysis using available measured residue data showed that dinotefuran could adversely affect bee larvae from chronic oral exposure. A residual toxicity (RT25) study indicated that aged residues at 48-hrs did not cause significant increases in bee mortality by contact, however, the primary risk concern post application is through dietary routes of exposure which are irrelevant to the RT25 estimate. The EPA is awaiting further data on actual residue levels in the field which may be lower than modeled levels, and regardless, will reduce the uncertainty in the risk estimates. Proposed registration review decisions for these four neonicotinoids are expected to be released in Spring 2018.

On May 29, 2015, EPA proposed new mandatory pesticide label restrictions to protect managed bees under contract for pollination services from foliar applications of pesticides that are acutely toxic to bees on a contact exposure basis.¹¹ The term “managed” bee typically refers to the honey bee (*Apis mellifera*), although other bees are used for pollination services, including the orchard mason bee (*Osmia lignaria*), alfalfa leafcutter bee (*Megachile rotundata*), and bumble bee (*Bombus impatiens*). These label restrictions would prohibit applications of pesticide products, which are acutely toxic to bees, during bloom when bees are known to be present under contract for pollination services. The initial proposal included 76 active ingredients that are acutely toxic to bees by contact (LD50<11µg a.i./bee), and the proposed label language would be included on pesticide products containing these active ingredients. The labels would include the following Directions for Use:

FOR FOLIAR APPLICATIONS OF THIS PRODUCT TO SITES WITH BEES ON-SITE FOR COMMERCIAL POLLINATION SERVICES: Foliar application of this product is prohibited from onset of flowering until flowering is complete when bees are on-site under contract, unless the application is made in association

⁹ Preliminary Bee Risk Assessment to Support the Registration Review of Clothianidin and Thiamethoxam. Wagman, M., Mroz, R., Blankenship, A., Koper, C.M., and Garber, K. U.S. EPA. 414 pp. January 5, 2017.

¹⁰ Draft Assessment of the Potential Effects of Dinotefuran on Bees Farruggia, F.T. and Bohaty, R.F.H. U.S. EPA. 139 pp. January 3, 2017.

¹¹ EPA’s Proposal to Mitigate Exposure to Bees from Acutely Toxic Pesticide Products. Federal Register 80 FR, pp. 30644-30646. Agency Docket Number EPA-HQ-OPP-2014-0818. May 29, 2015.

with a government-declared public health response. If site-specific pollinator protection/pre-bloom restrictions exist, then those restrictions must also be followed.

There would be no other exceptions to the bloom prohibition in the contracted-services scenario. Current neonicotinoid product labels include a 48-hr notification exception to the bloom prohibition. However, as part of this mitigation proposal, the 48-hr notification exception for crops under contracted pollination services during bloom would be removed from all neonicotinoid product labels.



The NCDA & CS, Structural Pest Control & Pesticides Division submitted comments to the EPA regarding this proposed label changes. These comments included expressing support for the EPA in using the Guidance for Assessing Pesticide Risks to Bees¹² to obtain the scientific data upon which label statements and other risk mitigation strategies should be based. This approach is more comprehensive compared to reliance on a single acute contact toxicity test. In these comments, the Division also asked the EPA to provide flexibility in the proposed label statement to allow applications of acutely toxic pesticides to crops under contracted pollination services under certain situations in which risk to bees is minimized by applying a pesticide with a residual toxicity time less than 8 hours to crops for which the blooms close in the afternoon or evening (or otherwise become less attractive to bees). This is the case with many of the cucurbits, such as pumpkins, squash, cucumbers, melons, and watermelons. Additionally, these comments included a request that the EPA provide flexibility in the proposed label language to allow applications based on pest pressure and imminent economic loss if the pesticide is applied in the evening when bees are no longer foraging and the RT₂₅ ≤ 8 hours. In contrast to the cucurbits for which flowers close each evening, there are several high-value crops with indeterminate

¹² Guidance for Assessing Pesticide Risks to Bees. United States Environmental Protection Agency, Office of Pesticide Programs, Washington, D.C. 20460; Health Canada Pest Management Regulatory Agency, Ottawa, ON, Canada; California Department of Pesticide Regulation, Sacramento, CA. June 19, 2014.

blooming which may pose a higher risk to bees from pesticide application because their flowers do not close each evening, but instead remain attractive to pollinators as long as the bees themselves are active. Several of these crops are not only dependent upon contracted pollination services but may also require pesticide application during this time. These crops include blackberries, raspberries, and strawberries. Finally, these comments supported EPA's approach on leaving the exceptions in Scenario 2 in the neonicotinoid labeling (Crops and commercially grown ornamentals not under contracted pollination services but attractive to pollinators) unchanged by this proposed new labels. Most field crops do not require pollination by bees. However, nectar from soybeans and cotton, for example, can be very attractive to managed bees not under contract pollination services in addition to native bees. This fact, combined with indeterminate flowering in cotton and some soybean varieties, among other factors, require the exceptions allowing application if economic thresholds and IPM practices necessitate treatment. The EPA received approximately 115,000 comments in response to this proposed label changes.

On January 12, 2017, the EPA finalized the policy to mitigate acute risk to bees from pesticide products after reviewing comments and incorporating several changes. One of these changes is that the EPA reduced the initial list of 76 active ingredients acutely toxic to bees down to 43 active ingredients by only considering those active ingredients that are used in pesticide products on crops which would use pollination services. These crops include pome fruits (apple, pear, crabapple) stone fruits (apricot, cherry, nectarine, peach, plum, etc.), berries (blackberry, blueberry, raspberry) small fruits (kiwi), and tree nuts (almond, chestnut). The EPA was also responsive to NC's comments about taking pesticide exposure into account, instead of only considering toxicity, so that the new label language would not be included on ALL pesticide products which are acutely toxic to bees ($LD50 < 11 \mu\text{g a.i./bee}$), but would be limited to those products for which the maximum application rate results in exposure levels that exceed the acute risk for bees. Specifically, the labels would be on any pesticide product that, when applied at its maximum application rate, would result in a residue concentration that is at or above a level that is 40% of the amount that would kill half of the bees based on acute toxicity studies (i.e., exceeding a Level of Concern (LOC) of 0.4). The final label language to be included on these products is as follows:

FOR FOLIAR APPLICATIONS OF THIS PRODUCT TO A CROP WHERE BEES ARE UNDER CONTRACT TO POLLINATE THAT CROP: Foliar application of this product is prohibited to a crop from onset of flowering until flowering is complete when bees are under contract for pollination services to that crop unless the application is made to prevent or control a threat to public and/or animal health as determined by a state, tribal, authorized local health department or vector control agency.

Additionally, the EPA addressed NC's comments about providing flexibility for evening application for pesticide products with a shorter residual toxicity time. Pesticide products which meet this criteria would have the following label language:

FOR FOLIAR APPLICATIONS OF THIS PRODUCT TO A CROP WHERE BEES ARE UNDER CONTRACT TO POLLINATE THAT CROP: This product has been determined to have a short residual toxicity (RT25) time. Foliar application of this product is prohibited to a crop from onset of flowering until flowering is complete when bees are under contract for pollination services to that crop unless:

(i) The application is made to prevent or control a threat to public and/or animal health as determined by a state, tribal, authorized local health department or vector control agency; OR,

(ii) The application is made in the time period between 2-hours prior to sunset and 8 hours prior to sunrise.

Finally, the EPA considered NC's comments about the need to be able to apply pesticides during bloom to crops with indeterminate blooming because fruit and flowers are present at the same time. Crops with indeterminate bloom include the cucurbits (pumpkin, cucumber, squash, watermelon, etc.), some berries and small fruits (strawberry, raspberries, blackberries) and avocado. Therefore, specific label language for these uses makes allowances for application to crops with indeterminate bloom and minimizes risk to bees by limiting the application to times when bees are less active, such as in the evening and during cooler temperatures. This label language is also included on crops grown for seed, and reads as follows:

FOR FOLIAR APPLICATIONS OF THIS PRODUCT TO A CROP WHERE BEES ARE UNDER CONTRACT TO POLLINATE THAT CROP: Foliar application of this product is prohibited to a crop from onset of flowering until flowering is complete when bees are under contract for pollination services to that crop unless:

(i) the application is being made to prevent or control a threat to public and/or animal health as determined by a state, tribal, authorized local health department or vector control agency; OR,

(ii) the application is being made in the time period between 2-hours prior to sunset until sunrise; OR,

(iii) the application is being made at a time when the temperature at the application site is 50°F or less.

In addition to the new label language, the EPA has revised the Environmental Hazards statements. Again, the old Environmental Hazards section of the labels contained bee warning statements that read:

*This product is [**moderately/highly**] toxic to bees and other pollinating insects exposed to **direct treatment [or residues]** on blooming crops or weeds. Do not apply this product [**or allow it to drift**] to blooming crops or weeds if bees or other pollinating insects are [**actively visiting/visiting**] the treatment area.*

The new Environmental Hazards section of the label does not include any mandatory statements but instead alerts the applicator that the pesticide is toxic to bees and to follow the Directions for Use. The revised Environmental Hazards statements simply reads as follows:

*This product is [**moderately/highly**] toxic to bees and other pollinating insects exposed to direct treatment, or to residues in/on blooming crops or weeds. Protect pollinating insects by following label directions intended to minimize drift and to reduce risk to these organisms.*

The EPA considers this new policy another step forward in protecting bees from possible adverse effects of pesticides. They may implement further label statements or other risk management strategies for pesticides as chemical-specific pollinator assessments are completed through the registration review process.