October 30, 2020

Mr. Val Dolcini
Director
California Department of Pesticide Regulation
1001 I Street
Sacramento, CA 95814

Dear Mr. Dolcini:

Re: Draft Proposed Pollinator Protection Regulations for Neonicotinoid Pesticides

The California Citrus Quality Council (CCQC) represents the California citrus industry including approximately 2,000 growers and approximately 85 citrus packers on technical and regulatory issues domestically and overseas. We appreciate this opportunity to comment on the California Department of Pesticide Regulation's (CDPR) Draft Proposed Pollinator Protection Regulations for Neonicotinoid Pesticides. The draft proposes to restrict certain uses of imidacloprid and thiamethoxam, which are essential pesticides in California citrus production. These restrictions, if finalized, would jeopardize the long-term viability of citrus production in California.

CDPR's Risk Assessment and Mitigation Proposal Process Needs Refinement

CCQC shares CDPR's goals of protecting human health and the environment. We believe these goals are best achieved by starting with a refined risk assessment and then taking steps to mitigate risks through a dialogue with registrants and other stakeholders. This process should balance the needs of stakeholders along with goals for environmental protection. With reference to this specific proposal, we were disappointed that CDPR did not conduct a more transparent process of explaining the basis for its risk assessment and, where appropriate, refining it before proposing product use mitigations. We were also disappointed that CDPR did not consult stakeholders about potential mitigation approaches that might address potential risks while maintaining critical uses.

In the future, we believe that CDPR could significantly improve its regulatory process by taking time to conduct a *dialogue* with stakeholders on important science issues and policies that influence the risk assessment. Additionally, we suggest that CDPR engage stakeholders in a *dialogue* about risk mitigation measures that could be implemented to achieve the mutually beneficial objectives of risk mitigation and maintaining critical uses. While CDPR has provided opportunities for stakeholders to provide input on its risk assessment and mitigation proposal, there has been little substantive *dialogue* that would generate confidence that the risk assessment is fair and representative of actual risks to honeybees. As a result, the current proposed mitigations will severely harm citrus growers. Perhaps, CDPR intends to engage the citrus

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industry in this process, and we look forward to such a dialogue with CDPR. However, in the future we urge CDPR to conduct this discussion before proposing mitigations.

Additionally, CCQC is requesting that CDPR consider the following input about the risk assessment that, if adopted, could preserve critical neonicotinoid uses for citrus growers.

1. *Setting of Imidacloprid Endpoints is Inconsistent with Setting of Endpoints for Thiamethoxam and Dinotefuran*

   Regarding the imidacloprid No Observed Effect Concentration (NOEC) for pollen, we believe CDPR has been inconsistent in its use of studies to determine NOEC values for pollen when evaluating other neonicotinoid pesticides. It is widely held that toxicity among the neonicotinoids under evaluation is similar, so data from one neonicotinoid potentially can be used to establish endpoints for another. For example, CDPR used the clothianidin pollen colony feeding study to establish the NOEC values for thiamethoxam and dinotefuran because studies were unavailable for these two compounds. However, CDPR is using an imidacloprid study that shows no effects at the highest level tested, without evaluating higher exposures that would produce an effect.

   This implies that the exposure used to establish the imidacloprid pollen NOEC could be higher if the data were available. We believe the absence of this data is parallel to the cases of thiamethoxam and dinotefuran where data were also unavailable. Given CDPR's willingness to use the clothianidin studies to establish the pollen NOECs for thiamethoxam and dinotefuran, CCQC believes that CDPR should also use the clothianidin data to establish the imidacloprid pollen NOEC. If CDPR were to use that data, the NOEC would be 372 parts per billion (ppb) instead of the much lower pollen NOEC value of 97.5 ppb for imidacloprid.

2. *Use of Endpoints for Regulation*

   There is inconsistency in the endpoints used in risk assessments conducted for imidacloprid. Various studies indicate that the imidacloprid nectar endpoint should be either 23 ppb or 25 ppb. Canada's Pest Management Regulatory Agency (PMRA), the US. Environmental Protection Agency (EPA) and CDPR have agreed in their data evaluation report that the imidacloprid endpoint should be 25 ppb. However, EPA and CDPR have chosen to use 23 ppb as the nectar endpoint. Nevertheless, CCQC maintains that there is no statistical or practical difference between 23 ppb and 25 ppb, so a slight exceedance of the 23 ppb value should not be considered a risk of concern. Use of the 23 ppb level as a "bright line" is inappropriate.

   Other studies have shown that the Lowest Observable Effect Concentration (LOEC) for nectar from imidacloprid soil applications is 50 ppb. This suggests that small exceedances of the NOEC would not mean there is harm to honeybee colonies and the closer the exceedance is to the NOEC the greater the certainty that honeybees are not harmed.

3. *CDPR Should Use the Most Representative Data to Evaluate Risk and Determine Mitigation*

It is our understanding that CDPR decided not to use a study because it did not generate quantitative estimates for *pollen* residues even though the study generated robust and reliable data for *nectar*. This study confirmed a NOEC value for nectar of 25 ppb. However, rather than use the nectar data from the study, CDPR substituted data from a thiamethoxam study that was conducted much closer to citrus bloom and therefore generated higher residue values. CCQC maintains that the nectar values from the imidacloprid study are valid and more representative of the actual imidacloprid use pattern and expected residues.

CDPR should be confident that the pollen residues from imidacloprid soil uses are not harmful to bees because using a pollen NOEC of 372 ppb, the pollen residues from the study would need to be nearly 15 times greater than the nectar residues of 25 ppb to present a risk to bee colonies. We know from other studies that the ratio of pollen to nectar residues is never that high for a single soil application. For instance, a soil thiamethoxam study confirms that pollen residues are approximately six times greater than nectar residues.

CCQC recommends that CDPR utilize the imidacloprid study to validate the nectar NOEC for the imidacloprid soil use of 25 ppb.

4. *Bees Demonstrate an Overwhelming Preference for Collecting Nectar from Blooming Citrus as Compared to Pollen*

In risk assessments conducted by PMRA[1] and EPA[2] honeybees are assumed to consume between 14 and 25 times less pollen than nectar. Additionally, a three-year study conducted in sweet orange groves found that nectar was preferred by honeybees by a margin of 94.4 percent for nectar as compared to 5.6 percent for pollen.[3] This overwhelming preference for nectar by bees foraging on citrus suggests that nectar would be the major pathway for potential risk to honeybees. Since nectar residues barely exceed the NOEC of 23 ppb, CCQC urges CDPR to reconsider the mitigations that it has proposed for the soil use of imidacloprid.

[1] US EPA, Health Canada PMRA, California DPR (2014). Guidance for Assessing Pesticide Risks to Bees. Available online at: https://www.epa.gov/sites/production/files/2014-06/documents/pollinator_risk_assessment_guidance_06_19_14.pdf

[2] USEPA 2015. BeeREX, v.1.0. United States Environmental Protection Agency, Office of Pesticide Programs, Environmental Fate and Effects Division. October 2015. Available online at: https://www.epa.gov/pesticide-science-and-assessing-pesticide-risks/models-pesticide-risk-assessment#beerex

[3] Malerbo-Souza et. al, 2004. Honeybee attractants and pollination in sweet orange, Citrus sinensis (L.) Osbeck, var. Pera-Rio. Journal of Venomous Animals and Toxins including Tropical Diseases 10(2), DOI: 10.1590/S1678-91992004000200004.

5. *Data Substitution Should Use Statistical Methods to Account for Differences in Use Patterns*

   CCQC supports the use of surrogate data when data gaps exist, when the data can be adjusted for different rates and use patterns and when there are no available data for specific active ingredients. Where data are available that can be used to reduce uncertainty in the evaluation of potential risk, CCQC recommends that CDPR utilize statistical techniques that can account for differences in use patterns. This approach is often used by EPA and it is commonly used to rationalize differences in data sets.

6. *Mitigations are Out of Proportion to the Risk Determination*

   CCQC believes that honeybees are not harmed by the use of neonicotinoids in citrus production. Various studies provide evidence that the residues from soil applications of imidacloprid are nearly the same as the NOEC value. Given that all the residue values are generally the highest residues detected, we believe there is a sufficient basis to conclude that there is no unreasonable risk to honeybees. However, CDPR outlined in its risk determination that since the residue for the imidacloprid soil use of 25 ppb exceeded the NOEC of 23 ppb, mitigation was necessary. The mitigation proposal reduces the soil rate of imidacloprid from 0.5 pounds per acre to 0.086 pounds per acre, **a reduction of 83 percent**. CCQC believes that this reduction is out of proportion to the estimated risk. CCQC urges CDPR to reconsider its risk determination and allow the 0.5 pounds per acre rate, since there is evidence that shows that there is no unreasonable risk and growers need the full rate of 0.5 pounds per acre for effective Asian citrus psyllid (ACP) control.

Imidacloprid is an Essential Tool for Controlling ACP

The California citrus industry is facing its greatest threat since the 1870s when commercial citrus shipments began. ACP is spreading Huanglongbing (HLB), a bacterial disease with no cure, into southern California, primarily in Orange, Los Angeles, Riverside and San Bernardino Counties. HLB attacks a citrus tree's nutrient transport system causing infected trees to drop leaves and fruit. The tree eventually dies within four to 12 years depending on the age and overall health of the tree. While trees may survive as long as 12 years, the disease also reduces fruit quality and ruins the tase of the fruit. Since California produces primarily fresh market fruit, symptoms that reduce fruit quality will reduce demand for California citrus and jeopardize the economic viability of citrus production even before the diseased trees die. Despite millions of dollars being spent on research, no cure has been identified. The California citrus industry's number one priority is stopping the spread of HLB.

With no cure in sight, the best defense against HLB infection is to control the ACP, the vector that spreads the disease. HLB can only spread through grafting, dissemination of infected nursery plants or if it is transmitted from tree to tree by infected ACP. The California citrus industry is working in collaboration with the California Department of Food and Agriculture (CDFA) to monitor residential properties and commercial groves for the presence of ACP and HLB. CDFA makes pesticide applications to residential properties when positive trees are identified. In addition, citrus growers have formed citrus pest management areas to coordinate

pesticide applications in commercial groves. CDFA has also targeted high risk urban areas where an ACP parasitic wasp is being released. CDFA works in tandem with the USDA's Animal and Plant Health Inspection Service (APHIS) to administer a multilayer regulatory program that includes regulation of nursery production, movement of harvested fruit, ACP and HLB monitoring, residential treatments and tree removal, production and dissemination of an ACP predatory wasp, areawide ACP treatments and a multimillion-dollar research program. These activities are coordinated with industry-funded public service communications, research and laboratory services.

Soil Uses of Neonicotinoids are Critically Important

Several different pesticides are used to control adult ACP. However, the two most effective tools for ACP control are the neonicotinoids imidacloprid, applied systemically through the irrigation system, and thiamethoxam applied as a foliar spray. Use of imidacloprid as a soil application allows the industry to minimize the number of foliar pesticide applications to control adult ACP, since systemic imidacloprid reaches new leaf tissues and thus is very effective against early life stages. Without imidacloprid, citrus growers would be required to make more frequent foliar pesticide applications resulting in more pesticides being used, since foliar applications are not as effective as imidacloprid soil drenches in controlling nymphs. The soil use of imidacloprid is usually effective for three months while foliar pesticides are only effective for up to one month.

CDPR's mitigation proposal would eliminate the soil use of imidacloprid. This in turn would require three times as many pesticide applications to control ACP. This increased use of pesticides would reduce populations of beneficial insects, which would cause outbreaks of insects that are presently controlled through natural biocontrol or the systemic effect of imidacloprid. This would devastate integrated pest management (IPM) programs and increase the use of pesticides to control outbreaks of secondary pests.

While ACP control is the citrus industry's major use of neonicotinoids, they are also essential for control of the glassy-winged sharpshooter, a major vector for the spread of Pierce's disease (*Xylella fastidiosa)* in grapes. Pierce's disease threatens California's table grape, raisin and wine industries, because there is no cure for the disease and once vines are infected, they usually die within five years.

The California citrus industry collaborates with grape growers to control the glassy-winged sharpshooter, which overwinters in citrus groves and is a preferred host for population development. Citrus is a major host for GWSS which can survive during the winter by feeding in citrus groves. GWSS also prefer to lay their eggs masses in citrus leaves which often leads to the development of very high populations in citrus orchards. Therefore, control in citrus groves is essential in reducing glassy-winged sharpshooter populations and assists the grape industry in managing those populations. Neonicotinoids play an important role in this objective.

Imidacloprid soil treatments are also used in an area-wide program to control aphids around the Lindcove Research Center. Aphids are a vector for the citrus tristeza virus, which reduces tree vigor and kills branches and trees. Citrus tristeza reduces productivity and yield and slows tree

growth. If citrus tristeza became established at the Lindcove Research Center it would jeopardize the entire center, since research cannot be conducted on unhealthy trees. The loss of the soil use of imidacloprid will make it more difficult to control the spread of tristeza virus in the region particularly around the research center, require more pesticide applications and jeopardize the viability of the research center.

CDPR's draft proposal effectively cancels the soil and foliar uses of imidacloprid since the reduced rates would not be effective in controlling target pests such as ACP, citrus leafminer and citricola scale. Imidacloprid is the keystone to the industry's defense against ACP until a cure for HLB is found. CDPR's proposal if finalized reduces imidacloprid rates thereby effectively removing its use. As such, it undermines the citrus industry's strategy to slow the spread of HLB by eliminating the imidacloprid use on nursery plants and stopping effective ACP control in citrus production regions in California. The proposal also handicaps growers in their efforts to control citrus leafminer and citricola scale.

Citrus leafminer is a harmful insect that burrows into leaves and feeds inside of the leaf. As nymphs grow during the season, they consume more of the leaf, damaging the ability of the leaves to create the energy that trees need to grow. Young trees can become stunted by high populations of leafminers. Early tree growth is important in establishing new citrus groves and a significant factor in the long term profitability of the grove. Optimal control is achieved by using systemic pesticides. Systemic neonicotinoids are essential for managing leafminers because they provide longer lasting control than foliar treatments that are rapidly outgrown and they are the only systemic pesticides available.

Citricola scale is another significant pest that is normally controlled with applications of imidacloprid and thiamethoxam. Citricola scale feeds on leaves, twigs and small branches and exudes a sugary substance known as honeydew. Heavy populations of citricola scale lead to severely reduced yields and smaller fruit size.

The loss of imidacloprid and thiamethoxam will create significant problems for citrus growers especially with control of leafminer and citricola scale. Inadequate control of these insects reduces yields and fruit size, thereby reducing grower revenue. Growers are under significant economic pressure because of the high cost of labor, water and other inputs. CDPR's proposal will increase the citrus grower's cost of production by requiring more pesticide applications to control the same pests that are currently controlled with imidacloprid and thiamethoxam. These costs are extremely difficult to pass on since retailers have significant market power. The additional costs generated by CDPR's proposal will likely be borne by citrus growers.

Reduced profitability is the primary reason that small growers and packinghouses go out of business. CDPR's proposal is another nudge towards fewer citrus growers and packinghouses in California.

Thiamethoxam is Critical for Exports to Korea

The most significant use for foliar applications of thiamethoxam are for Fuller rose beetle (FRB) control. Growers usually make one application in the spring and another in the fall to meet a

regulatory protocol required by Korean phytosanitary regulatory authorities. California ships $159 million of oranges to Korea, which represents 31 percent of all U.S. orange exports. Before packers can export to Korea, they must follow a protocol that requires two pesticide applications and other measures to control FRB. Under the draft mitigation proposal, growers will face a dilemma in deciding how to use neonicotinoid pesticides. Given the importance of the Korean market and the efficacy of thiamethoxam, growers will want to maintain the use for FRB. However, with the potential loss of imidacloprid, there is likely to be a greater need for thiamethoxam ACP control. If growers use thiamethoxam for ACP control it will not be available for FRB control. Growers will be forced to use more pyrethroids for control of FRB, which will increase the potential for resistance development in pyrethroids and other alternatives. This will also increase the difficulty of compliance with the Korean protocol and jeopardize market access to Korea.

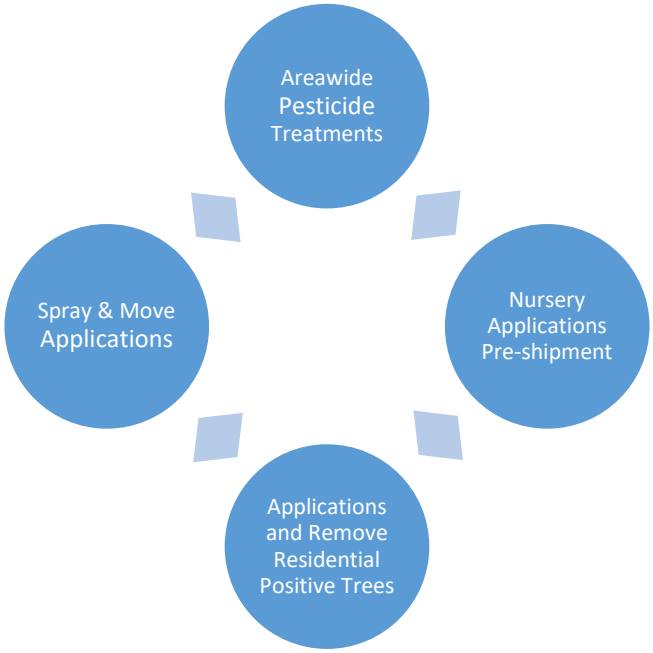

Figure 1. The California citrus industry utilizes an integrated strategy to slow the spread of HLB. CDPR's proposal will seriously undermine and weaken the industry's efforts to control ACP because, if adopted, it effectively cancels the soil and foliar uses of imidacloprid for citrus. The proposal will increase the probability that HLB will spread faster in California. Imidacloprid is an essential pest management component for nurserymen and growers. It is used to prevent the movement of HLB infected nursery plants throughout California. Area-wide treatments prevent ACP population growth and Spray & Move treatments prevent movement of the insect throughout California.

Citrus Nursery Production Use Presents no Risk to Bees

With the introduction of ACP and HLB into the California production environment, citrus nursery production has undergone a major transformation. Distribution of infested and/or infected citrus nursery stock is a significant potential pathway for spread of ACP and HLB. Consequently, all citrus propagation and an increasing majority of citrus production are now conducted in protective structures, which are capable of 100 percent exclusion of insects far

smaller than bees. Since such structures are capable of 100 percent exclusion of bees, it would be highly improbable that pollinators would come into contact with young citrus nursery trees growing inside such structures. Additionally, young nursery trees grown outdoors are rarely old enough to produce flowers, so bees would not be attracted to them. We urge CDPR to allow the continued use of imidacloprid, dinotefuran and thiamethoxam in nursery production and provide an exemption to indoor and outdoor nurseries in its proposal.

CDFA regulations also require treatment of citrus nursery stock before shipping to retail nurseries. These requirements include the application of a soil drench with a systemic insecticide capable of controlling ACP. Currently, the only systemic insecticides approved for such application are neonicotinoids. Treatment of citrus nursery stock prior to shipment is an essential use; it protects the trees from ACP infestation, thereby minimizing the risk of spreading ACP and HLB through the pathway of citrus nursery stock, especially in retail outlets in urban areas where it is difficult to control ACP. Given the long residual efficacy of the treatment, it also protects the small trees from ACP infestation while in retail nurseries.

Bee Protection in Citrus

It should be noted that the California citrus industry maintains a formal system designed to protect honeybees during citrus bloom. In each major citrus producing county a committee of industry experts and county enforcement officials establish citrus bloom periods when the use of pesticides is severely regulated. This system protects honeybees from exposure to pesticide applications when the bees are most vulnerable. This system has been highly effective in preventing accidental pesticide exposure to bees during bloom periods.

Definition of Bloom Period Conflicts with Citrus Bee Protection Regulations

CDPR's proposed regulation defines bloom as *"bud break until complete petal fall (all petals have fallen)."* However, citrus bee protection regulations state that *"the citrus bloom period, in any citrus grove, for purposes of declaring bloom and label interpretation, shall be from when 10 percent of the total citrus blossoms are open until 75 percent of the blossom petals on the north side of the trees have fallen."*

The difference between the two definitions is significant. CDPR's proposal would increase the regulated bloom period by as much as one month. The proposal to increase the bloom period definition would not significantly affect foliar uses of thiamethoxam. However, if the same definition were applied to the existing bee protection regulations that include all insecticides that are toxic to bees it could create significant jeopardy to citrus growers.

Increasing the bloom period when growers are severely restricted on the pesticides they can use, adversely affects their ability to control citrus thrips, a major citrus pest that must be controlled annually with well-timed pesticide applications. Citrus thrips applications are usually made at a critical period at the very end of bloom or immediately after bloom. Restrictions that could interfere with the timing of these applications is a major concern of citrus growers. The potential application of the imidacloprid mitigation to the existing bee regulations could create major problems for control of citrus thrips.

Citrus thrips feed on the developing fruitlets causing fruit scarring that make the fruit unmarketable. Changing the bee protection regulations to include this new definition would create significant problems for growers for citrus thrips control. Citrus thrips damage reduces the grade of packed fruit, which reduces grower returns and income. When the damage is significant it can make production unmarketable. We urge CDPR to maintain the current bee protection regulations definition for bloom.

Prohibited Uses for Indeterminate Blooming Citrus Crops

CDPR's provision to prohibit the use of neonicotinoids for indeterminant blooming citrus crops will cause significant problems to lemon growers in the coastal production regions in Ventura and Santa Barbara Counties. Without the use of neonicotinoids, growers will have a more difficult time controlling ACP since they will need to use less effective alternatives. This is important because Ventura County is so close to Los Angeles County where ACP populations are high and HLB positive trees have been detected. Ventura County is particularly vulnerable to the spread of HLB because of the higher populations of ACP in Los Angeles County and the greater probability that ACP incursions could be carrying the bacteria, so growers in that county need the best tools to control ACP.

Additionally, citrus groves in Ventura and Santa Barbara Counties are close to urban areas where activists have been opposing the use of pesticides in agricultural production. Should CDPR maintain this provision, the only option for continued use of neonicotinoids would be use of the emergency provision. However, the emergency provision is a process that is vulnerable to political pressure, such as pressure from activists with political influence. This means that there would be great uncertainty about the use of the emergency provision particularly in Ventura and Santa Barbara Counties. Therefore, the indeterminant bloom restriction is a very dangerous limitation on the ability of lemon growers to prevent the spread of HLB in this region. CCQC urges CDPR to eliminate this provision from its mitigation proposal.

Emergency Provision is Inadequate

CDPR's proposal states that crops are not subject to the provisions of the proposed regulation if a local government declares an emergency under California Code Section 8630. CCQC acknowledges that this provision would provide a potential pathway for the necessary and legal use of neonicotinoid pesticides if CDPR effectively eliminated the use.

However, we believe that CDPR has sufficient scientific evidence to determine that when imidacloprid and thiamethoxam are used under current use conditions, honeybees do not face undue harm. CDPR is in a position to interpret this data and make scientific judgements that we believe would maintain the current uses. We also maintain that CDPR has the flexibility to consider the harm that the proposal would cause to the citrus industry in making a fair judgement about what constitutes an acceptable risk in its decision making. The emergency provision will subject the citrus industry to a patchwork of local decisions that are likely to be inconsistent across the citrus industry. This inconsistency will undermine the efforts of the industry, CDFA and APHIS to provide the necessary coordination to conduct a robust ACP control program. We

know that ACP is best controlled when it is attacked in large areas with coordinated controls. The inconsistent ability to use the best tool for ACP control would undermine this principle.

Additionally, the emergency provision under California Code Section 8630 requires a local government to declare the emergency. By resorting to this process, CDPR is taking the decision out of a scientific and regulatory context and moving it into a political process. This means that the use of imidacloprid under the emergency provision will be dependent on political considerations that are unlikely to reflect any scientific judgement about risk to honeybees.

Additionally, Section 8630 requires local governments to review the emergency decision every 60 days. The citrus industry anticipates that imidacloprid will be an essential tool in its ACP control program for the indefinite future. If the industry must utilize the emergency provision it will become a permanent fixture on the agenda of local governments along with the associated political uncertainty. We urge CDPR to reconsider its overly conservative approach to its evaluation of honeybee health, so the industry does not need to depend on myriad political processes to decide the availability of thiamethoxam and imidacloprid and future of the citrus industry in California.

Use of the Precautionary Principle is Inappropriate

CCQC has made recommendations in this document that, if adopted, could maintain the soil use of imidacloprid. We urge CDPR to adopt the changes in its risk assessment for imidacloprid that would maintain that critical use. In the event that growers could still use imidacloprid, they would still face a dilemma in determining which of the neonicotinoids to use, since the proposal would not allow growers to use two different neonicotinoid pesticides in one season.

The primary use of thiamethoxam for citrus growers is a spring and fall foliar treatment for FRB control. Korea is the industry's largest export market and Korea's phytosanitary regulatory authorities have identified FRB as a quarantine pest that must be controlled under an APHIS protocol that requires elimination of all life stages of FRB. Under this proposal, growers would have to choose to use thiamethoxam for FRB control or imidacloprid for ACP control. Growers need both uses.

While CDPR has conducted a risk assessment on the individual uses of thiamethoxam and imidacloprid to evaluate their potential risk, no assessment has been conducted to assess the potential risk from joint uses of foliar applications and soil applications or the use of multiple neonicotinoids. Neither Canada's PMRA nor EPA have restricted such neonicotinoid use scenarios without the use of data to evaluate the potential risk. However, CDPR has proposed to restrict the uses of thiamethoxam and imidacloprid on a suspicion that the combined uses are harmful enough to honeybees that only one or the other could be used in a growing season. CCQC does not believe that this decision meets the commonly understood regulatory principle that decisions should be based on scientific evidence. The use of the precautionary principle is a troubling policy, because in the absence of data, the decision is a matter of opinion. In this case, the State of California is asserting that its opinion is more correct than the opinion of stakeholders and the legitimacy of its decision is based on its power to make it. CCQC urges

CDPR to avoid the use of the precautionary principle and allow the simultaneous uses of thiamethoxam and imidacloprid and foliar and soil uses in citrus.

U.S. Environmental Protection Agency Neonicotinoid Decision

The U.S. Environmental Protection Agency (EPA) released its Registration Review Proposed Interim Decision for Several Neonicotinoid Pesticides in January 2020. EPA evaluated the risk to pollinators from the use of several neonicotinoid pesticides including imidacloprid and thiamethoxam on citrus and other agricultural commodities. EPA decided that benefits of using imidacloprid and thiamethoxam outweighed any harm that was caused to pollinators from the uses. According to the Interim Decision, EPA states that "*due to the potential impact to growers' ability to address certain critical pest issues, the agency did not propose risk mitigation on several uses, including citrus and grapes. For citrus crops, the neonicotinoids are a key element in programs to control the ACP, an invasive pest that transmits HLB, a devastating and incurable disease.*"[4] CCQC urges CDPR to consider EPA's approach when making its decision on whether to revise its proposed mitigation proposal. The California citrus industry is open to future dialog with CDPR on measures that might be taken to further protect honeybees while still maintaining the critical uses for control of ACP.

Summary

Over the next several months, CDPR will decide how to move forward with its proposal. We believe this process should include consideration of the potential harm to honeybees, harm to the citrus industry and the marginal benefit achieved by restricting the uses of imidacloprid and thiamethoxam in citrus production. We have outlined several issues that we believe CDPR should address when making its final decision.

It is clear that the proposed restrictions on imidacloprid will require changes to APHIS' and CDFA's HLB management strategy. The core principle of the current strategy is to control ACP, so the disease cannot spread. This is achieved by nursery and areawide applications that are effective because of the long residual efficacy of the imidacloprid soil treatments. CDPR's proposal effectively cancels the soil use of imidacloprid and significantly weakens the ability of regulatory authorities and the citrus industry to control ACP. The industry will be forced to use either a less effective foliar treatment of thiamethoxam or more applications of pyrethroids. This response will set the industry on a path towards greater reliance on pyrethroid insecticides, greater disruption of IPM and increasing resistance to pyrethroid pesticides.

CDPR is aware that honeybee health can be affected by pesticide residues, loss of habitat, hive movement and parasitic mites. However, CDPR's proposal will not address the ongoing impact of parasitic mites, long distance hive movement or loss of habitat. Since the combined effect of just these stressors are arguably more harmful to honeybees than pesticide residues, CDPRs proposal is likely to provide only a negligible marginal benefit to honeybee health. First, residues are not expected to exceed the NOECs, and the field investigation confirms this.

[4] Imidacloprid Proposed Interim Registration Review Decision Case Number 7605, Jan. 22, 2020, Page 40.

Second, the proposed restrictions will likely result in an increase in foliar applications of other insecticides. Third, the proposal increases the probability that HLB will spread in California, which would result in the decline of the California citrus industry. Ultimately, the loss of citrus acreage is a detriment to honeybees. At the same time, the proposal will cause significant and irreversible harm to the citrus industry. CDPR's proposal will force the citrus industry to rely on less effective pesticides to control ACP, allow ACP populations to grow and increase the likelihood that HLB will spread more quickly in California. We urge CDPR to reconsider its proposal to reduce the application rate for the soil use of imidacloprid, remove the prohibition of the use of multiple neonicotinoids in a growing season, eliminate the restriction on foliar and soil neonicotinoid uses and provide and exemption to indoor and outdoor citrus nurseries from the neonicotinoid prohibitions in the draft proposal and lift the restriction on indeterminant blooming citrus crops.

Finally, we would like to highlight the measures that citrus growers are already taking to protect honeybee health by restricting the use of all pesticides during bloom and communicating with beekeepers to ensure that honeybee hives are safe from pesticide residues. Additionally, we believe that even when the soil use of imidacloprid is evaluated using a conservative methodology the residue values are not meaningfully different from the NOEC, so there is no unreasonable harm to honeybees from neonicotinoid use in citrus. Given the improbable risk to honeybees and the significant harm that would accrue to the citrus industry from the proposed elimination of the imidacloprid soil use and the other restrictions we believe CDPR has adequate cause to revise its proposal and maintain the soil use of imidacloprid, remove the limitations on soil and foliar uses, restrictions on multiple neonicotinoid pesticides, nursery prohibitions and indeterminant bloom restrictions.

We appreciate this opportunity to comment on this important issue. Please contact me via e-mail at jcranney@ccqc.org if you have questions or need additional information.

Sincerely yours,

James R. Cranney, Jr.
President

cc: CCQC Board of Directors