BloomCheck®

Certification Standards and Audit Requirements

June 2019
Version 2.0

Applies to Cut Flowers, Cut Greens, and Potted Plant Production in the United States

Contact: certification@protectedharvest.org

Next anticipated review: 2022

Certified by Protected Harvest

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Background

In 2012 & 2013 the California Cut Flower Commission (CCFC) assembled a self-assessment of best management practices for the sustainable production of cut flowers in the United States. Approximately 200 of the most impactful practices were selected for CCFC's sustainable certification program. These practices were submitted to Protected Harvest for accreditation. Protected Harvest had the practice standards scientifically peer reviewed and then voted to approve them as the BloomCheck Standard Version 1.0 on December 16, 2014. In 2018 CCFC initiated a national expansion of the BloomCheck Certification program and small updates were made to the Standard in 2018, resulting in Versions 1.2. The subsequent development of the accompanying Pesticide Do Not Use List and Limited Use Policy in early 2019 resulted in Version 1.3.

Version 2.0 is the result of a major revision of the BloomCheck Standard in the first half of 2019. The revision of the Standard had the following objectives:

1. Update the Standard to reflect state of the art best practice and science in agricultural production; and,
2. Expand the scope and applicability of the BloomCheck Standard beyond cut flowers to greens and potted plant operations, and to other states.

Highlights of revisions include:

- Revision of integrated pest management practices related to invasive pests to be more generally applicable to invasive pests and less specific to Light Brown Apple Moth.
- Revision of answer choices for specific practices that are not applicable to potted plant production.
- Revision of practices throughout to remove or modify references to California-specific regulatory frameworks, while maintaining BloomCheck's high caliber of practices.

Version 2.0 is applicable to all cut flower, greens, ornamental and potted plant producing operations. For detailed information on the BloomCheck certification process, please see the BloomCheck Certification Manual.

Introduction: BloomCheck Standard Version 2.0

BloomCheck Standard Version 2.0 (The Standard) contains a total of 198 practices including those contained in the Potted Plant Annex. The practices fall into two groups, those that pertain to the whole farming operation, in other words if used they would be done in every production block (designated with "FARM" in the Standard), and those that might differ from one production block to another (marked "BLOCK" in the Standard).

The Standard is divided into 13 separate modules including the Potted Plant Annex. To achieve certification, an operation must achieve at least 50% of the available practice points in each applicable module as well as 70% or more of the available practice points in all applicable modules combined. Furthermore, pesticides containing the active ingredients listed in the Do Not Use List in Appendix I as Prohibited cannot have been used on the operation during the last cropping cycle, and all requirements regarding pesticide selection and application as outlined in the Pesticide Limited Use Policy in Appendix I must be adhered to.

On the following pages are tables listing each of the certification practices by module. To receive the number of practice points indicated for the practice it must have been used on the farm and in the production block during the last cropping cycle. Practices not applicable to potted plants are designated. Listed in the far-right column for each practice is the audit requirement for that practice. This is what the auditor will require to verify that the practice was implemented.

Some modules include a practice requiring a management plan. To assist operations in the development of these management plans to comply with the individual practice requirements, Protected Harvest provides Management Plan Templates. Please write certification@protectedharvest.org to request the management plan templates.

1. Production Management - FARM

The practices in the Production Management module focus on the management of soil/ planting substrate, plant nutrition, application of nutrients, and quality control. Another goal of this chapter is to include practices that optimize nutrient management, particularly nitrogen, on the flower farm, and those that minimize the offsite movement of nutrients and other water quality impediments, such as sediment.

Please note that individual practices that are not applicable to potted plant production are noted in the practice. Not applicable points will not count towards the total.

Question Number	Practice	Certification Points	Audit Requirements
Irrigation Water Sampling			
1	Irrigation water was sampled for nitrates and, if present, the amount was accounted for when determining nitrogen fertilization rates and timing.	3	Lab results of water sample from past year; fertilization plan
Fertilization: Equipment Calibration			
2	Solid fertilizer application equipment was calibrated OR another method is utilized to ensure accurate application of material.	3	Equipment maintenance record
3	Liquid fertilizer injectors were calibrated at least every 6 months.	3	Fertilizer injector equipment maintenance record
Erosion			
4	Water permeable mulches or planted ground covers were used in non-farmed areas to minimize erosion due to wind and water.	3	Photo record or visual inspection of block
5	Ditches have been planted with grass, hardened, or lined with material such as plastic or weed matting to prevent downcutting and other types of erosion.	3	Photo record or visual inspection of block
6	Potting mixes or other substrates for growing plants were stored in a manner that minimizes their potential for offsite movement (e.g., using storage bins, tarping storage piles, or surrounding storage piles with berms).	3	Photo record or visual inspection of block
Quality Control and Customer Service			
7	Internal product quality assurance protocols have been established for products grown by the operation (including grades and standards), and processes were in place to meet them and to respond to any identified problems. They were reviewed within the last 12 months.	3	Copy of protocols and processes. Record of review dates
8	The operation maintains customer service protocols and tracking system for customer complaints, returns, and comments. They were reviewed within the last 12 months.	3	Copy of protocols; description of tracking system, record of review dates

Continuous Improvement Process			
9	The operation has established and continues to implement a process for continuous improvement of business and farming practices (e.g. participating in trials, supporting research, annual evaluations).	3	Records of participation in trials, supporting research, and/or annual evaluations of business and farming practices.
Production Management Planning			
10	A production management plan for the farm has been developed and documented, and includes production goals, and elements such as crop nutrition, substrate management, erosion management, and crop residue management.	3	Copy of production management plan with required elements

2. Production Management - BLOCK

Practices included in this module are those that may vary from one production block to another. A production block can be defined as an area of production on the farm that is the smallest area that is managed uniquely from another area. Each production block should be assessed individually using this module.

Question Number	Practice	Certification Points	Audit Requirements
Soil Management			
1	List the species being grown in this production block for this assessment year.	0	
2	In the production block being assessed, flowers, greens, or plants are grown in in-ground soil (i.e. not in soil in pots). *If NO, skip to question #7.*	0	
3	The soil types in the production areas have been identified (e.g., using NRCS soils maps) and soil properties including soil moisture holding capacity, cation exchange capacity (CEC), texture, and rooting depth are known and recorded for each soil type and applied to soil management planning and practices. Not applicable to potted plants.	3	NRCS soil maps of farm OR map generated by other means with list of soil properties for each soil type; soil management plan
4	The soil was sampled for organic matter content within the last two years and a program is in place to raise soil organic matter content (e.g., adding compost annually, growing and incorporating a grass-based cover crop, or incorporating crop residues annually) where appropriate. Not applicable to potted plants.	3	Soil test results from soils lab of organic matter content; soil management plan
5	Are plants grown on the ground in soil? *If NO, skip to Question #6.*	0	
5.1	The block was not tilled.	3	Production block activity record
5.1	The block was tilled once.	3	Production block activity record
5.1	The block was tilled twice.	1	Production block activity record
5.1	The block was tilled three or more times.	1	Production block activity record
6	Fallow ground was planted with vegetation, and the species were chosen to enhance soil quality (e.g., nitrogen- fixing plants to increase N, or forage grasses with high carbon content to add organic matter/carbon).	3	Production block activity record or visual observation
Nutrition Management: Monitoring			
7	If a plant nutrient-related production problem existed, plant tissue was sampled and analyzed for important macro and micronutrients to identify the problem and correct it by altering fertilization accordingly.	3	Plant tissue lab analyses results; fertilization plan

8	The soil or planting substrate was sampled pre-planting and analyzed for macro- and micronutrients, electroconductivity (EC) and pH, and the results were used to determine fertilizer makeup, rate and timing.	3	Soil sample lab analyses results
9	A written nutrition management plan was developed and implemented for this production block, where plant demand is the primary measure of the kinds and amounts of nutrients needed, and the amounts supplied are calculated from all possible sources (e.g., irrigation water, substrate/soil, compost, or any other additives) for each planting.	3	Copy of nutrition management plan
Nutrient Application			
10	Compost was added to the soil or planting substrate.	3	Production block activity records
11	Fertigation was used. *If NO, skip to question #13.*	0	
12	The frequency, timing and rate of fertigation was dictated by measured plant demand.	3	Production block fertilization records
Crop Residue Management			
13	Crop residues were worked back into the soil or planting substrate or composted on the farm.	3	Production block activity records
14	Crop residues were sent to a regional green waste recycling program if one is available.	3	Records of materials sent to green waste center OR receipt from green waste center.

3. Pest Management - FARM

IPM is a sustainable approach to managing pests by combining biological, cultural and chemical tools in a way that minimizes economic, environmental and health risks. The goal of IPM, and therefore this module, is to reduce not only economic risks from pest outbreaks, but also the potential risks to the environment and the people in it posed by pesticides. Many of the practices contained in the modules are focused on preventing the need to use pesticides, and using pesticides only when necessary. If their use is required, there are practices included that ensure they are handled safely and applied in ways that minimize the amount required and maximize their efficacy.

Question Number	Practice	Certification Points	Audit Requirements
IPM Training			
1	Employees responsible for pest management received IPM training by participating in online or in-person continuing education classes (e.g., via universities, community colleges, and/or private companies).	3	Class attendance records or continuing education certificates
Pest Prevention			
2	The operation participated in state and/or county trapping programs for invading exotic pests.	3	Certificate of participation from relevant government agency
3	A list of shipped planting material at highest risk for harboring invasive pests and/or diseases, was maintained and posted, and employees were trained identify them and to follow documented protocols for rejecting infested shipments.	3	List of plant materials of high risk for invasive pest infestation
4	High-risk planting material was inspected for pests upon arrival, and infested material was destroyed in an isolated area away from production sites.	3	Inspection activity records
5	A plan for preventing invasive pests from entering, infesting, or becoming established on the farm was created and employees were trained to implement the plan.	3	Copy of invasive pest infestation prevention plan
6	Vents, doors, and other openings in the screenhouse or greenhouse were appropriately constructed and/or operated to prevent entry of pests.	3	Visual inspection of screenhouse/greenhouse
7	Pests are under effective control and are present only to a light degree, e.g., only a few of the plants on the farm or in any production block show any infestation or infection, none show more than a few individuals of any pest or more than a few individual infestations of any plant disease.	3	Pest monitoring records for production block
Pest Prevention: Viruses, Bacteria & Fungi			
8	Planting material brought onto the farm known to carry pest viruses and/or bacteria was tested for infestation and properly disposed if tests were positive.	3	Plant testing activity records and/or lab test results
9	Containers, tools, and equipment that contacted contaminated plants or media were cleaned with water, treated with heat, (e.g., steam or hot water), or disinfected before reuse.	3	Visual inspection of cleaning process
Pest Monitoring: General			

10	Documented pest monitoring protocols have been established and used to train appropriate employees.	3	Copy of protocols & training records
Pest Monitoring: Invasive and Quarantine Pests			
11	An employee was designated to oversee all USDA-required invasive or quarantine pest compliance programs for the farm, maintain current knowledge of monitoring techniques, and train staff to recognize life stages and signs of infestation and to keep written records of activities.	3	Name of employee and list of required records and mandated activities
12	Farm supervisors and staff have been trained to recognize invasive and quarantine pests' life stages and behavior, symptoms of damage caused by each life stage, and preferred host plants with special attention to incoming shipments and farm surroundings.	3	Training records including dates, participants, topics covered
13	To demonstrate the farm is free from invasive or quarantine pests, regular monitoring was done and written records of monitoring dates, findings, and necessary actions were kept.	3	Monitoring results & records of actions taken if they were necessary
Pesticide Management			
14	Records of pesticide usage, including product name and application date, site, and rate are maintained.	3	Pesticide use reports or internal pesticide use records
15	Pesticide use including pesticide name and application date, site, and rate was reported to the county Agriculture Commission or relevant government agency each month.	3	Pesticide use reports or internal pesticide use records
16	Employees that handle and use pesticides were appropriately trained, and training included use of proper notification and/or signage in treated area.	3	Evidence of training and signage, including photos
17	Sprayer calibration and spray coverage tests were done at least once per season and were based on manufacturers' recommendations and spray target characteristics (e.g., crop canopy).	3	Representative sprayer maintenance records
18	Workers who handle or apply pesticides were provided with necessary personal protective equipment (PPE) and an area to shower after applications. Clean PPE clothing was stored separately from personal clothing and provided to workers each day, and employees were not allowed to take PPE home.	3	Visual observation of PPE provided, shower area, PPE storage area
19	The following information about each pesticide application was posted at a central farm location: treated area, time and date; product name, active ingredient(s), and associated adjuvants; and restricted entry interval.	3	Observation or photos of pesticide application posting
20	Pesticide resistance management was practiced by rotating pesticides with different 'modes of action' from each spray to the next.	3	Pesticide use reports; Copy of pesticide resistance management protocols OR pest management plan with these protocols included
21	The operation did not store, handle, or apply any pesticides classified as “Do Not Use” in the BloomCheck Do Not Use List and Limited Use Policy Version 1.1.	3	Pesticide use reports OR pesticide use records; observation of pesticides in stock

22	The producer was aware of and followed all necessary program guidelines and risk mitigation procedures for pesticides classified as "Limited Use" in the BloomCheck Do Not Use List and Limited Use Policy Version 1.1.	3	Pest monitoring and response records; Records of risk mitigation procedures
Pest Management Plan			
23	A pest management plan with goals for the farm has been developed and documented, and includes elements such as prevention, monitoring and action thresholds, and effective and safe remedial actions.	3	Copy of pest management plan with required elements

4. Pest Management – BLOCK

Practices included in this module are those that may vary from one production block to another. A production block can be defined as an area of production on the farm that is the smallest area that is managed uniquely from another area. Each production block should be assessed individually using this module.

Question Number	Practice	Certification Points	Audit Requirements
Pest Monitoring			
1	Pest monitoring of the production block (e.g., glasshouse, shadehouse, or field) was done at least once per week before harvest time, or at least once per month at other times.	3	Pest monitoring records
2	Written or electronic pest monitoring records were kept and included important data such as monitoring dates, levels of specific pests, and action decisions made.	3	Pest monitoring records
3	Pest monitoring was stratified so that specific problem areas within the field could be detected and treated.	3	Pest monitoring records
4	Monitoring accounted for the presence of natural enemies (parasitoids or predators).	3	Pest monitoring records
5	Soil from in-ground areas to be planted with a crop sensitive to nematodes or other soil-borne pests was sampled and treated as necessary before planting. *Not applicable to potted plants.*	3	Soil sample lab analyses and production block activity records if actions taken
Pest Prevention: General			
6	Crop rotation was practiced to reduce pest problems.	3	Production block activity records
7	Steam was used to control weeds, diseases, and insects, or to sterilize planting substrate prior to use.	3	Production block activity records
Pest Prevention: Weeds			
8	Organic mulches were used to control weeds. *Not applicable to potted plants.*	3	Production block activity records
9	Plastic mulches or barriers such as ground cloth were used to control weeds, in open areas or under benches where applicable, OR Barriers (e.g., geotextile disks) were used in pots to control weeds.	3	Production block activity records OR photo record or visual inspection
Remedial Control: General			
10	Economic thresholds for important pests and diseases have been established, recorded, and used for control decisions.	3	Economic threshold specifications; pest control action records
11	An existing pest problem in planting substrate (e.g. soil or coir) was treated before planting with methods such as heat/steam or solarization.	3	Production block activity records
12	Yellow sticky tape was used to mass trap and control pests (e.g., aphids, whiteflies, and leafhoppers).	3	Photo record of installed sticky tape or visual inspection

13	Beneficial predators and/or parasitoid wasps were released in the management unit and subsequent monitoring was done to verify efficacy.	3	Production block activity records of beneficial releases
Remedial Control: Weeds			
14	Hand-weeding was used.	3	Production block activity records
15	Spot spraying was used to control weeds. *Not applicable to potted plants.*	3	Production block activity records
16	Herbicide resistance management was practiced by applying herbicides with different 'modes of action' at least every third spray. *Not applicable to potted plants.*	3	Pesticide use reports
Pesticide Management			
17	Before spraying, buffer zones based on environmental conditions and proximity to sensitive surroundings and areas where workers are present were established to minimize non-target exposure to humans and sensitive environments.	3	Visual inspection

5. Water Management - FARM

The Water Management - Farm module focuses on practices that optimize water quality and water use efficiency.

Question Number	Practice	Certification Points	Audit Requirements
Water Management Training			
1	The person in charge of irrigation for the farm participated in continuing education classes such as those required by the California Regional Water Quality Control Board for the Irrigated Lands Regulatory Program or agencies in other states.	3	Class attendance certificate
Pumping Plant Efficiency			
2	If a pumping plant is used, pumping plant efficiency is measured at least every three years and adjustments are made if efficiency is below 50%.	3	Pump maintenance records
Water Quality: Irrigation			
3	The quality of the irrigation water has been tested within the last 12 months for appropriate elements based on the water source(e.g., well water for pH, total salts, nitrates and micronutrients of regional concern like boron), and results were used to make necessary adjustments.	3	Irrigation water lab analyses results; water treatment action records
4	Recirculated irrigation water from farm is used in irrigation.	3	Water management records
Water Quality: Postharvest			
5	Water used for hydrating plants during harvest, storage, and packing was tested within the last 12 months and results were used to make necessary adjustments.	3	Water management records
Water Use: Production			
6	The total amount of water applied annually for irrigation for the entire operation was recorded and tracked to measure and manage water stewardship on the farm and measure effects of water management BMPs on water use.	3	Water meter records/water management records
Offsite Water Movement: Storm Water			
7	Drainage systems were built for major roads associated with the farm to capture storm water runoff.	3	Photo record or visual inspection of drainage system
8	Storm water is collected in a tailwater pond.	3	Photo record or visual inspection of tailwater pond
Water Management Planning			
9	A water management plan for the farm has been developed and documented, and includes elements such water management goals, irrigation scheduling, irrigation system maintenance and performance, water use efficiency, and runoff prevention and management.	3	Copy of water management plan with required elements

6. Water Management – BLOCK

Question Number	Practice	Certification Points	Audit Requirements
Water Quality			
1	Irrigation water for this production block required filtering to improve distribution uniformity. *If NO, skip to Question #4.*	0	
2	The farm filtered the irrigation water with a sand filter or other type of filter.	3	Photo record or visual inspection of filter
3	A schedule was in place and employees were trained to manually check filter status and flushing system, the frequency was at least twice during the cropping cycle, the status was documented, and corrections are made if necessary.	3	Filter maintenance records
Water Use			
4	The total amount of water applied annually for irrigation of this production block was recorded and tracked in order to improve water stewardship and measure effects of water management BMPs on water use.	3	Production block irrigation records
Water Use Efficiency			
5	Various practices can be used to determine when to start irrigation and how much water to apply. Which of the following practices are used to determine when to start irrigation and how much water to apply?	0	
5.1	Visual plant cues	1	Block monitoring records & irrigation scheduling records
5.2	Seasonal weather patterns	1	Irrigation scheduling records
5.3	Measurements from a weather station (e.g. rainfall, temperature, radiation, humidity)	1	Photo record or visual inspection of weather station
5.4	Soil/substrate moisture depletion measured directly using weight measures for potted plants, tensiometers for in ground plants or other soil-based devices.	3	Irrigation scheduling records
5.5	Direct measure of plant stress (e.g. pressure bomb)	3	Irrigation scheduling records
5.6	Radiation measurements	1	Irrigation scheduling records
6	A pressure regulator was installed and the system pressure was balanced.	3	Photo record or visual inspection of pressure regulators
7	A documented schedule and process was in place and employees were trained to check for and make necessary adjustments to ensure distribution uniformity at least once every season.	3	Copy of irrigation maintenance records

8	A documented schedule and process was in place and employees were trained to check lines for leaks, breaks, and clogs and make necessary repairs at least every other irrigation.	3	Copy of irrigation maintenance records
9	A backflow prevention device or air gap was installed to prevent contamination of the water source.	3	Observation or photos of device.
10	If production is on a slope, system pressure differences at the top and bottom of the slope were compensated for by running the mainline vertical to the slope with pressure controllers at each horizontal sub-line junction, and by running each sub-line horizontal to the slope with a pressure control valve in place.	3	Physical Inspection
11	Is the production block irrigated with a sprinkler system? *If NO, skip to Question #12.*	0	
11.1	Employees were trained to avoid irrigating outdoor blocks with sprinklers in windy conditions (e.g., > 5mph) whenever possible.	3	Verbal verification
11.2	A documented schedule and process was in place and employees were trained to check for head rotation and nozzle clogging and make necessary repairs at least every other irrigation.	3	Copy of irrigation maintenance records
11.3	A documented schedule and process was in place and employees were trained to check nozzle diameters for wear and replace worn heads as necessary every two years to ensure uniform irrigation rate and distribution uniformity.	3	Copy of irrigation maintenance records
11.4	A check valve was installed on each sprinkler line to ensure water does not drain from some sprinklers between irrigation sets and to improve distribution uniformity.	3	Photo record or visual inspection of backflow prevention device
11.5	If pots were used, they were spaced closely together to minimize water losses.	3	Photo record or visual inspection of pot layouts
12	Is the production block irrigated with a drip system? *If NO, skip to Question #13.*	0	
12.1	Pressure compensating emitters were used.	3	Photo record or visual inspection of emitters
Offsite Water Movement			
13	Which of the following practices are used on the production block to prevent, minimize or mitigate the effects of runoff from irrigation?		
13.1	A wetting agent like polyacrylimide (PAM) was added to irrigation water to increase water infiltration and reduce runoff.	3	Water treatment records
13.2	Organic amendments and/or incorporation of crop residues were added to the soil to increase water infiltration, as well as absorption and holding capacity.	3	Production block management activity records
13.3	Engineered barriers or buffer strips were established among production areas and creeks, ponds and other surface waters to reduce and filter runoff.	3	Photo record or visual inspection of buffer strips
13.4	Runoff occurring during irrigation is captured in a tailwater pond or by other means of storage.	3	Photo record or visual inspection of tailwater pond
13.5	Captured runoff is reused.	3	Water management records

7. Energy Management – FARM

The Energy Management - Farm module focuses on energy use and energy use efficiency practices that are used throughout the entire business.

Energy Use			
1	The total amount of energy used annually was documented and tracked by source (e.g., electricity, diesel) to measure production performance and is used to assess effects of energy BMPs on energy use.	3	Fuel use records, electrical use records
Energy Generation			
2	Renewable energy was generated on site for the operation (e.g. wind, solar, biodiesel, hydrogen fuel cell, co-generation).	3	Photo record or visual inspection of power generation equipment
Alternative Fuels			
3	Alternative fuels were used on the farm (e.g. biodiesel, propane, natural gas, ethanol/gasoline mixtures).	3	Fuel use records
Energy Use Efficiency: Vehicles			
4	A documented schedule was in place and employees were trained to inspect and maintain engines for optimal operating efficiency.	3	Copy of engine maintenance schedule and training records
Energy Use Efficiency: Stationary Motors			
5	Variable-speed drives were installed on motors that experience variable loads.	3	Photo record or visual inspection of variable speed pumps
6	Electrical pump efficiencies were measured and necessary adjustments to improve efficiencies have been completed within the last two years.	3	Pump efficiency test results; pump maintenance records
Energy Use Efficiency: Postharvest & Cold Storage			
7	A documented schedule was in place and employees were trained to check the seams between doors and walls in cold storage rooms for air leaks and reseal them if necessary.	3	Cooling system maintenance records
8	High-traffic doors to rooms that are heated or cooled (e.g. cold storage, greenhouses) were equipped with strip/energy curtains.	3	Photo record or visual inspection of high traffic doors
9	The operational efficiency of the storage and cooling system was ensured by cleaning and maintaining equipment at least once a year, and by measuring its efficiency at least every two years and making necessary cost-effective upgrades/replacements.	3	Cooling system maintenance records
10	Total energy used in cooling and storage was determined annually and tracked over time to monitor the efficiency of cooling equipment and determine when maintenance is required.	3	Energy consumption records and calculations for cooling and storage

Energy Audit			
11	An energy audit of the operation was completed during the last five years.	3	Copy of energy audit
12	Audit findings were used to develop, or refine, and implement an energy management plan designed to optimize energy use efficiency.	3	Copy of energy management plan
Energy Management Planning			
13	An energy management plan for the operation has been developed and documented, and includes goals (e.g. energy targets) and elements related to equipment, pumps, lighting, heating and cooling.	3	Copy of energy management plan

8. Energy Management – GREENHOUSE

If the operation does not utilize greenhouses, skip this module.

Energy management in a greenhouse involves many practices that differ from those used to manage energy in other types of production, such as outdoor and shadehouse, justifying a module devoted to practices that optimize energy use in greenhouses. The practices are grouped into the general topic areas of greenhouse covering, energy losses and heating. Each greenhouse should be assessed as a separate production block, in relation to energy use, because its energy use may differ from another greenhouse because of age, different equipment, etc.

Question Number	Practice	Certification Points	Audit Requirements
1	This production block is inside a greenhouse. *If NO, skip to Module 9: Postharvest Management.*	0	
Energy Losses from Greenhouse			
2	Doors, vents, fan openings, and other openings in the greenhouse covering were weather-stripped.	3	Visual inspection
3	A process was documented, and staff were trained to check the greenhouse covering for holes or broken panes at least once a year, and repairs made if necessary.	3	Photo record or visual inspection of greenhouse covering
4	The greenhouse was equipped with automatic doors, which are operational, to conserve heating and cooling.	3	Photo record or visual inspection of automatic doors
5	A humidity/energy curtain was installed and used to optimize heating.	3	Photo record or visual inspection of curtain
Greenhouse Heating			
6	The greenhouse heating is generated from non-GHG producing sources.	3	Visual inspection
7	Greenhouse temperature uniformity was monitored and if needed horizontal air flow fans were used to improve temperature uniformity.	3	Monitoring records and greenhouse activity records
8	All boilers and heating transport lines were insulated.	3	Photo record or visual inspection
9	The heating system was maintained in the last 12 months to ensure it was operating at peak efficiency and adjustments were made if necessary.	3	Heating system maintenance records
10	Climate control software was used to optimize greenhouse heating and cooling.	3	Photo record or visual inspection of software

9. Postharvest Management – FARM

The Postharvest Management - Farm module focuses on best management practices used in handling products once they have been harvested, placed in cold storage, packing and distribution. They include the use of water, water additives, energy for cooling and transportation, and packaging.

Question Number	Practice	Certification Points	Audit Requirements
Harvest Operations			
1	Employees were trained to keep harvest utensils clean, disinfected, and sharp. *Not applicable to potted plants.*	3	Training records or photo record or visual inspection of tools
2	Harvested plants were immediately placed in proper post-harvest solutions based on plant species. *Not applicable to potted plants.*	3	Harvest protocols, photo record, or visual inspection of harvest operations
3	Post-harvest solutions were monitored to ensure consistency among batches. *Not applicable to potted plants.*	3	Post-harvest solution monitoring records
4	Harvest containers were cleaned and disinfected before use. *Not applicable to potted plants.*	3	Photo record or visual inspection of container cleaning station
5	Wastewater from dyeing was disposed of according to local water quality control regulations. *Not applicable to potted plants.*	3	Wastewater disposal protocols or photo record or visual inspection of disposal practices
6	Post-harvest solutions were disposed of properly, which included following storm-water runoff regulations, such as putting in a containment pond, or used to water dirt roads. *Not applicable to potted plants.*	3	Postharvest solution disposal protocols or photo record or visual inspection of disposal practices
Cold Storage and Packing			
7	Storage and packing areas, especially benches, were cleaned daily.	3	Cleaning protocols and schedule, and/or photo record or visual inspection of storage and packing areas
8	Storage and packing areas were extensively cleaned and sanitized on the following schedule:	0	Cleaning protocols and schedule, or photo record or visual inspection, cleaning records
8.1	At least weekly	5	

8.2	Between weekly and bi-weekly	3	
8.3	Between bi-weekly and monthly	1	
8.4	Between monthly and semi-annually	1	
8.5	Between semi-annually and annually	0	
8.6	Less than annually	0	
9	Flowers and greens were cooled rapidly after harvest.	3	Harvest protocols, or photo record or visual inspection of packing/cooling areas
10	Coolers were run and monitored to achieve optimal temperatures and humidity based on the species of flowers and greens being stored.	3	Cooler temperature records
11	Boxes were precooled prior to final distribution to ensure flower species were at optimal core temperatures during shipping.	3	Packing protocols or visual inspection of packing rooms
Packing Material			
12	The total amount of packaging material used annually in shipments from the production facility was known, recorded, and tracked to optimize use of packing material.	3	Packing material use records
13	The amount of recycled packaging material used annually in shipments from the production facility was known, recorded, and tracked to optimize use of packing material.	3	Packing material purchasing records; packaging records
Transport and Distribution			
14	The optimum transportation temperature was determined for each species and temperatures were monitored for quality assurance.	3	List of temperatures by species; representative temperature monitoring records for transportation
15	Prior to loading, temperatures of boxes or containers, truck and truck contents were monitored and recorded to ensure optimum transportation conditions.	3	Representative temperature monitoring records from trucks
16	Temperatures were monitored during shipment using temperature data loggers in order to ensure transportation conditions.	3	Representative temperature monitoring log
Postharvest Management Planning			
17	A harvest and postharvest management plan with goals has been developed and documented for the farm, and includes elements such as harvest, storage, packing, optimum storage time, and shipping operations.	3	Copy of harvest and postharvest management plan with specified elements

10. Habitat Management – FARM

The Habitat - Farm module focuses on practices that maintain habitat for plants and animals on or near the farm, as well as enhancing existing habitat if possible. Watershed stewardship is another important topic addressed by the module.

Question Number	Practice	Certification Points	Audit Requirements
Habitat Preservation			
1	Unfarmed areas were maintained or enhanced to increase biodiversity, such as wildlife, pollinators, pest natural enemies, and/or other beneficial organisms (e.g., via maintaining or enhancing the health of existing vegetation).	3	Photo record or visual inspection of unfarmed areas
2	The farm has at least one water course on the property (e.g. creek, seasonal stream, or other natural water way). *If NO, skip to Question #4.*	0	
3	The water course has a setback of at least 25 feet to minimize siltation and other non-point source water pollution (setback is a space between the water course and where farm production begins; roads are not setbacks). *If NO, skip to question #4.*	3	Visual inspection of setbacks.
3.1	Setbacks were vegetated with annual and perennial grasses and weeds to improve its buffering capabilities.	3	Photo record or visual inspection of water course
3.2	Setbacks were vegetated with a mix of grasses, trees and/or shrubs to improve buffering and provide shade for water courses to lower water temperatures to benefit aquatic species.	3	Photo record or visual inspection of water course
Habitat Enhancement			
4	Trees and/or shrubs have been planted and are maintained on farm property borders to provide wildlife habitat.	3	Photo record or visual inspection of farm property borders
Watershed Stewardship			
5	An NRCS conservation survey or other environmental survey of the farm has been done to determine and record on a map the sensitive areas (e.g., wetlands, riparian areas, creeks, swales, and habitat for endangered species) and other environmental features which affect farmable acres and practices, and was used to guide spraying, irrigation, fertilization, and other management activities.	3	Copy of NRCS conservation survey or other environmental survey
Habitat Management Planning			
6	A habitat management plan with goals has been developed and documented for the farm, and includes elements such as monitoring, an environmental survey(s), and habitat preservation and enhancement.	3	Copy of habitat management plan with required elements

11. Materials Handling – FARM

Materials handling is a technical term for the storage, use, recycling, and disposal, if necessary, of hazardous materials. Hazardous materials are those that, because of its quantity, concentration, or physical or chemical characteristics, pose a significant present or potential hazard to human health and safety or to the environment if released into the workplace or the environment.

Question Number	Practice	Certification Points	Audit Requirements
Site Map			
1	A site map of the farm has been drawn that locates fuel tanks, waste oil drums, dumpsters, service/maintenance areas, hazardous material storage, storm drains, wells, surface water running through the property, tailwater ponds, leaching basins, municipal sewer lines, septic lines and tanks, green waste piles, and recycling receptacles. The map has been communicated to appropriate local agencies such as the County and Fire Department.	3	Site map of farm including required elements; list of agencies where it is on file
Hazardous Material Use			
2	The total amount of onsite hazardous materials, purchased and generated, was known and an inventory was kept and reviewed annually to communicate and manage performance.	3	Inventory list of hazardous materials
3	Employees were trained to properly recognize, handle (including spill prevention, containment and cleanup), and dispose hazardous materials (e.g., solvents, cleaning materials, explosives, compressed gases, fuel, fertilizers, pesticides, acids, and lubricants).	3	Records of training, including dates, participants, and topics covered.
Fertilizer Storage			
4	Fertilizers were stored in a ventilated and locked room or area protected from rainfall (e.g., under awning) and not located near areas where surface or ground water could become contaminated (e.g. near creeks, streams, storm drains, or well heads).	3	Photo record or visual inspection of fertilizer storage area
5	In case of a spill, the fertilizer storage area had secondary containment including an impermeable floor and waterproof curbs.	3	Photo record or visual inspection of fertilizer storage area
Fertilizer Mixing and Loading			
6	Fertilizer mixing and loading area has impermeable floor.	3	Photo record or visual inspection of fertilizer mixing area
Pesticide Storage			
7	Pesticides were stored in a ventilated and locked room that can be unlocked from the inside or in an appropriate locked cabinet clearly marked with appropriate signage readable from 25 feet.	3	Photo record or visual inspection of pesticide storage area
8	The following safe pesticide storage practices were used: dry products above liquids, only undamaged original or spill-proof containers with original labels were stored, products were segregated by type (e.g., insecticides, herbicides, fungicides and rodenticides), storage area was	3	Photo record or visual inspection of pesticide storage area

	more than 100 feet from the nearest well, and storage area had an impermeable floor and sump to contain leaks.		
9	A documented schedule was in place and employees were trained to check the storage area for leaky containers and to contain spills and dispose containers according to proper procedures and state law.	3	Process for inspection and inspection schedule records
10	A bilingual emergency response plan, including emergency phone numbers, for pesticide spills and exposure was posted in an appropriate location(s), and employees were made familiar with and trained to follow the plan.	3	Photo record or visual inspection of posted emergency response plan
Pesticide Mixing and Loading			
11	The outdoor pesticide mixing and loading area was more than 100 feet from the wellhead unless a berm or other physical characteristics protected the well from contamination by surface water.	3	Photo record or visual inspection of pesticide mixing and loading area
12	An eye wash station maintained in good working order was provided at the mixing and loading site.	3	Applicable state law and evidence, including observation of washing station in good working order.
13	The indoor pesticide mixing and loading area was adequately ventilated.	3	Photo record or visual inspection pesticide mixing and loading area
14	Either a double-check valve, reduced pressure principle backflow prevention device, or an air gap was maintained between the water source and sprayer tank.	3	Photo record or visual inspection of device or air gap
Fuel Storage			
15	The fueling area had a concrete floor or other mechanism(s) to contain leaks and spills (e.g., berms and/or sump).	3	Photo record or visual inspection
Hazardous Material Disposal and Recycling: Dumpster Area			
16	Dumpsters and recycling containers are sited to minimize environmental and visual impacts, positioned on cement pads to contain spills and leaks, and had lids or other covering (e.g., awning) to keep water out.	3	Photo record or visual inspection of dumpsters
Recycling of Equipment, Metals, Glass, Cardboards, and Plastics			
17	The business has an established, documented recycling program for metal, cardboard, plastics, paper and glass.	3	Copy of recycling program plan and photo record or visual inspection of recycling areas
Materials Handling Management Planning			

18	A materials handling and waste management plan with goals has been developed and documented for the farm, and includes elements such as packaging, hazardous waste, recycling and wastewater.	3	Copy of materials handling and waste management plan with required elements

12. Social Responsibility – FARM

The farm is an integral part of the community. It is responsible to the employees who work on it, the neighbors living around the farm, and the consumers who buy the plants, flowers, or greens produced on the farm. Human Resource Management is the part of Social Responsibility that involves the employees of the farming enterprise. Effective human resource management involves planning, designing, implementing and evaluating practices to recruit and retain good employees as well as to improve employee satisfaction, productivity, safety, and wellness. It also includes important issues like succession planning and risk management for the operation. Neighbors and Community is the part of Social Responsibility that involves the farms interaction with the people living on neighboring farms and the towns and cities in the landscape in which the farm is located.

Question Number	Practice	Certification Points	Audit Requirements
Staying Informed and Trade Leadership			
1	One (or more) member of the farm regularly attended regional and/or statewide industry meetings, educational events, and policy meetings.	3	Attendance record or minutes from meeting that includes attendance record
2	One (or more) member of the farm has membership in local, regional or state industry associations (e.g., CCFC, California Flower Growers and Shippers Association, Society of American Florists, Association of Specialty Cut Flower Growers).	3	Evidence of membership
Employee Recruitment, Retention, and Progression			
3	The operation has an Employee Handbook and associated workplace policies and procedures governing staffing and recruiting; orientation and training; employee relations and safety; performance review; and compensation and benefits. The Employee Handbook is reviewed annually and updated if necessary. Employees have access to the handbook upon hire, and the manual is available in their native languages.	3	Copy of Employee Handbook
4	The operation provides to employees upon hire a written employment contract or offer letter outlining the terms of employment in a language understood by the employee. (3 points)	3	Copy of example of an employment contract or offer letter
5	The operation does not discriminate in its recruiting and hiring on the basis of age, race, gender, political persuasion or opinion, sexual orientation, religion, and national or social origin.	3	Company statement of non-discrimination
6	If farm labor contractors (FLCs) are used, the operation verifies FLCs are in compliance with all applicable state and federal laws, including, but not limited to, those related to recruitment, terms of employment, employment practices, compensation, and working hours.	3	Copies of records from sample of FLCs utilized related to recruitment, terms of employment, employment practices, compensation, and working hours tracking.
Training			

7	All new employees underwent required safety training.	3	Records of training, including dates, participants, and topics covered
8	Safety training was done according to applicable regulations for when employees begin new assignments, processes, procedures or uses of a substance or equipment that involve a hazards (training topics include hazardous materials, office and shop safety, tractor safety, first aid, and personal hygiene including daily changes to clean clothing).	3	Records of training, including dates, participants, and topics covered; record of participation in state-mandated safety trainings.
9	Employees were trained to respond to hazardous events.	3	Records of training, including dates, participants, and topics covered
10	All employees have participated in sexual harassment prevention training.	3	Records of training, including dates, participants, and topics covered
Worker Safety			
11	Safety statistics (e.g., employee time lost to accidents) were tracked and retained for at least two years to communicate and manage performance.	3	Records of safety statistics for the last two years
12	An employee trained in first aid was always onsite during farming activities.	3	Documentation of training of key personnel and observation of presence of trained employee
13	Work accidents were investigated with the goal of reducing or eliminating them in the future.	3	Accident investigation records
14	A documented process was in place and employees were trained to ensure the adequate and timely onsite treatment of injured or sick workers.	3	Process and training records
15	Workers are trained in the use of all personal protective equipment (PPE) required for their job tasks.	3	Records of training, including dates, participants, and topics covered
Employee Career Development			
16	The operation paid employees wages during training.	3	Company policy statement on paying wages during training
17	The operation paid or reimbursed employees for tuition for work-related continuing education.	3	Sample evidence of reimbursement of tuition
Workplace Conditions			
18	Employees were trained in basic hygiene practices and were provided with conveniently located clean toilet and hand washing facilities in the greenhouse area and in the field.	3	Records of training, including dates, participants, and topics covered

19	Employees were provided shade when temperatures exceed 85 deg F.	3	Observation or worker verbal verification
20	Employees working in hot environments were provided with at least one quart of drinking water per hour at accessible locations (2 gals per 8-hour day).	3	Observation or worker verbal verification
21	Clean facilities are provided for food storage and lunch breaks.	3	Visual inspection of facilities
Employee Job Performance and Grievance			
22	A documented process and timeline for evaluating job performance and determining pay increases and promotions was in place and communicated to employees.	3	Copy of job performance evaluation process
23	A grievance process has been documented in the employee handbook, and grievances are recorded and processed in a timely manner.	3	Copy of employee handbook & grievance records
Employee Compensation, Benefits, and Incentives			
24	The operation adheres to applicable laws relating to child labor and forced labor.	3	State and federal law
25	The operation pays wages compliant with local minimum wage and industry standard, and pays overtime wages for time worked above 40 hours per week and 8 hours per day.	3	Copy of wage and overtime payment policy
26	When piecework compensation is used, the operation ensures that piecework rates meet or exceed the legal minimum wage. Piece-rate workers are compensated at least minimum wage for rest periods and breaks.	3	Copy of piecework compensation policy
27	The operation complied with state and federal laws for unemployment compensation and social security.	3	State and federal law
28	The operation provides worker compensation coverage to all workers, even if state law excludes agricultural employers or workers.	3	Copy of worker compensation policy
29	The operation provided appropriate daily breaks for lunch and rest.	3	Evidence or written policy of provision of daily breaks
30	Clean facilities were provided for food storage and lunch breaks.	3	Photo record or visual inspection of food storage area and lunchroom/break room
31	Employees were provided paid time off for sick leave.	3	Written policy documenting paid sick leave.
32	Employees were provided paid time off for vacation.	3	Copy of company policy on paid vacation
33	Employees were allowed unpaid time off without reprisal for important events such as childbirth, adoption or serious illness (up to 12 weeks is required by federal law).	3	Copy of time off policy
Team Building			
34	A documented employee recognition process was in place to provide peer-to-peer and management-to-employee feedback.	3	Copy of recognition process

35	A team building activity was held within the last 12 months for all employees.	3	Record of team building activity
Neighbors and Community			
36	The farm took proactive measures to ensure good community relations, which may include but are not limited to: holding open houses; making literature available to the public; presenting community members with gifts (e.g., flower arrangements); maintaining visual aesthetics of the farm; involvement or volunteering in local initiatives; or contributing to fundraising for local initiatives.	3	Copies of literature; calendar of events; visual inspection of grounds; record of donations; or record of participation in community activities
Social Responsibility Planning			
37	A social responsibility management plan with goals has been developed and documented for the farm, and includes elements such as staffing, recruiting, retention, employee wellness and neighbors and community.	3	Copy of social responsibility management plan

13. Potted Plant Annex

This module is only applicable to operations producing potted plants.

Question Number	Practice	Certification Points	Audit Requirements
1	Does the operation produce potted plants? *If NO, do not answer questions in this module.*	0	
2	The farm retains records of its sources of soils and other planting media.	3	Copy of soil or planting media sourcing records
3	The farm maintains records of amounts and sources of peat moss used, and where possible develop a policy to substitute peat moss with renewable substrate materials.	3	Copy of records of peat moss used; copy of policy for renewable substrate materials
4	The farm has developed and implements a policy for recycling excess potting waste (soil and planting material).	3	Copy of potting waste recycling policy; records of waste recycling
5	The farm does not utilize extraction practices that result in soil erosion or damage to surrounding ecosystems.	3	Visual inspection of soil extraction sites
6	The farm utilizes mitigation practices on soil excavation sites, like organic material and revegetation.	3	Visual inspection of soil extraction sites
7	The farm has developed written phytosanitary control policies and procedures that include minimum requirements for sanitation or replacement of hydration vessels, post-harvest handling areas, and the sharpening and sanitation of cutting instruments.	3	Copy of phytosanitary control policies and procedures
8	The farm has developed and implements a container waste reduction plan that aims to reduce the amount of container waste going to landfill. The plan should include the use of reusable containers, compostable containers, or container return systems.	3	Copy of container waste reduction plan; records of container waste recycling/return; purchase records of reusable or compostable containers
9	The farm maintains records of container waste volume going to landfill.	3	Copies of receipts from delivery of container waste to landfill
10	The farm demonstrates a continuous reduction in the volume of container waste going to landfill.	3	Copies of receipts from delivery of container waste to landfill
11	The farm implements reuse of containers from culled or repotted plants when possible.	3	Visual inspection

Glossary of Terms

Cut Flowers are flowers or flower buds, often with some stem and leaf, that have been cut from the plant bearing it, and are typically used or sold in bouquets, vase arrangements, wreaths and garlands.

Cut Greens in this Standard refers to all cultivated decorative foliage cut from growing plants that are used as decorative foliage in bouquets, vase arrangements, wreaths and garlands. Within this Standard, "cut greens" does not apply to any non-cultivated (wild-harvested) decorative foliage cut from growing plants.

Potted Plants refer to plants that are planted and grown in containers rather than in the ground.

Modules are the categories of practices in the Standard.

Practices are the individual requirements of the Standard, organized by Module.

Certification Points are the scoring points earned by fulfilling each practice. Point values for each practice are listed next to the practice.

Audit Requirements are the required observations, inspections, or documentation required to evidence compliance with a given practice. Audit Requirements are listed for each practice.

Appendix I: BloomCheck® Pesticide Do Not Use List and Limited Use Policy Version 1.1 June 2019

Contents

I. Introduction

The purpose of the BloomCheck Do Not Use List and Limited Use Policy is to serve as a reference related to pesticide active ingredients on the Do Not Use List as well as those pesticide ingredients allowed for Limited Use. This policy complements the individual standards in the BloomCheck Standard V2.0 June 2019 and is part of the scope of the audit if the operation is applying Limited Use pesticides with one or more active ingredients as listed in Section III of this policy.

Growers certified by BloomCheck are required to follow an Integrated Pest Management (IPM) approach in determining which active ingredients to employ and when to employ them. In particular, Module 3 (Pest Management – FARM) and Module 4 (Pest Management – BLOCK) of the Standard aim to promote practices that reduce not only economic risks from pest outbreaks, but also the potential risks to the environment and the people in it posed by pesticides. Standards 3.21 and 3.22 refer directly to the Do Not Use List and Limited Use Policy. While the use of any pesticide requires steps to mitigate risk, this policy highlights specific pesticide active ingredients considered for Limited Use that require special attention to risk mitigation measures.

II. Policy General Requirements

Growers that do not comply with the requirements in this policy and the BloomCheck Standard V2.0 may be deemed ineligible for BloomCheck certification. Many of the practices contained in the modules are focused on using pesticides only when necessary. If their use is required, there are risk mitigation practices included that ensure they are handled safely and applied in ways that minimize the amount required and maximize their efficacy.

In addition to adherence to the BloomCheck IPM standards, growers are required to comply with all applicable state and federal laws related to pesticide use, handling, and storage, including but not limited to pesticide application, re-entry intervals, storage, mixing, disposal, and worker health and safety. In addition, the substances listed in this policy may only be used if applications are registered including the following information:

1. All purchase receipts;
2. Label names of applied products;
3. Active ingredient (AI) name;
4. Quantity of each formulated product applied;
5. Application dates;
6. Location (production plot);
7. Land area over which each product is applied;
8. Type of application equipment; and

9. Names of pesticide handlers.

Growers will be required to submit pesticide use reports required by their respective state agency.

Growers are responsible for understanding the risks associated with using active ingredients in the Limited Use Policy, justifying their usage through documentation of prevention, monitoring, action thresholds, and responses, and identifying appropriate risk mitigation measures. These should be documented in the Pest Management Plan required by Standard 3.23 and submitted in advance of the audit.

III. Limited Use Pesticides

Pesticide with active ingredients designated for Limited Use are organized into three categories: (a) pesticide active ingredients that require additional risk mitigation procedures; (b) pesticide active ingredients with high risk to pollinators that are limited use for particular pests, and (c) pesticide active ingredients that are limited use for particular pests.

(a) *Additional Risk Mitigation*. The list of active ingredients in the table below is allowed within the BloomCheck program when additional risk mitigation measures are implemented to minimize risk to aquatic life, wildlife, pollinators, and humans.

Active Ingredient
Acephate
Acetamiprid
Amitrole
Carbaryl
Chlorpyrifos
Chlorpyrifos Methyl
Diazinon
Dicofol
Dimethoate
Fenitrothion
Phosmet
Resmethrin
Thiacloprid

(b) *Limited Use and High Pollinator Risk.* BloomCheck authorizes the use of four neonicotinoids (clothianidin, imidacloprid, thiamethoxam, dinotefuran), and the phenylpyrazole fipronil only for the pest species indicated in the following table and under implementation of additional specific risk mitigation conditions that emphasize pollinator health.

Active Ingredient	**Pest Species**
Clothianidin	Thrips (*Franklienella occidentalis*); Aphids (*Myzus persicae)*
Fipronil	Thrips (*Franklienella occidentalis*)
Imidacloprid	Thrips (*Franklienella occidentalis*)
Thiamethoxam	Thrips (*Franklienella occidentalis*)

Dinotefuran	Thrips (*Franklienella occidentalis*)

(c) *Limited Use for Specified Pests.* BloomCheck authorizes the use of the active ingredients only for the pest species indicated in the following table, and provided that appropriate risk mitigation measures are employed.

Active Ingredient	**Pest Species**
Borax; disodium tetraborate decahydrate	Leaf-cutting ants and termites
Boric Acid	Leaf-cutting ants and termites
Cadusafos	All nematode species[1]
Carbendazim	*Fusarium sp.*
Fenamiphos	All nematode species[2]
Oxamyl	All nematode species
Phosphine	Thrips (*Franklienella occidentalis*) Mealybugs (*Dysmicoccus brevipes, Orthezia praelonga*)

IV. Risk Mitigation

The BloomCheck Standard includes general measures to mitigate risk of any pesticides used. In addition, for those substances listed as "Limited Use" (Section III of this document and Appendix), it is expected that additional risk mitigation steps are taken by the grower. The grower will need to provide additional justification outlining the specific risks that have been identified for Limited Use substances as well as related additional risk mitigation efforts. Examples of risk mitigation steps are outlined below, but it is the grower's responsibility to determine which additional measures are necessary. Risk Mitigation measures should be documented in the Pesticide Management Plan required by Standard 3.23 and submitted in advance of the audit.

1. Substances are rotated with other active ingredients that have different modes of action for resistance management;
2. Pesticide handlers use appropriate Personal Protective Equipment (PPE) and as specified in the product's MSDS or safety tag;
3. Pesticide handlers use full protective clothing to avoid skin exposure (hat, gloves, overall or shirts and pants with long sleeves, rubber boots);
4. Potentially affected persons or communities are identified and notified regarding pesticide applications, and prevented from access to application areas prior to established re-entry interval; and,
5. Farms establish and maintain non-crop vegetative barriers or other effective mechanisms to reduce drift; and,
6. If beehives are used, they are temporarily covered during application, and hive bees are provided with a clean water source outside the treated area.

[1] Open field use only; prohibited in greenhouse conditions.
[2] Open field use only; prohibited in greenhouse conditions.

BloomCheck Do Not Use and Limited Use Pesticide List

Active Ingredient	**Do Not Use**	**Limited Use**
Acephate		YES
Acetamiprid		YES
Aldicarb	YES	
Allethrin	YES	
Amitrole		YES
Azinphos methyl	YES	
Borax; disodium tetraborate decahydrate		YES
Boric Acid		YES
Cadusafos		YES
Carbaryl		YES
Carbendizum		YES
Carbofuran	YES	
Chlorpyrifos		YES
Chlorpyrifos methyl		YES
Clothianidin		YES
Demeton (Demeton S-Methyl)	YES	
Diazinon		YES
Dichlorvos (DDVP)	YES	
Dicofol		YES
Dimethoate		YES
Disulfoton	YES	
Endosulfan	YES	
Ethoprop	YES	
Fenamiphos		YES
Fenitrothion		YES
Fenvalerate	YES	

Fipronil		YES
Hexachlorobenzene	YES	
Imidacloprid		YES
Lindane	YES	
Methamidophos	YES	
Methomyl	YES	
Methyl Parathion	YES	
Monocrotophos	YES	
Omethoate	YES	
Oxamyl		YES
Oxydemeton Methyl	YES	
Parathion Ethyl	YES	
Pentachlorophenol	YES	
Phorate	YES	
Phosmet		YES
Phosphine		YES
Profenofos	YES	
Propetamphos	YES	
Resmethrin		YES
Sumithrin (phenothrin)	YES	
Thiacloprid		YES
Thiamethoxam		YES
Thiazopyr	YES	