

## U.S. ENVIRONMENTAL PROTECTION AGENCY

Office of Pesticide Programs Registration Division (7505C) Ariel Rios Building 1200 Pennsylvania Ave., NW Washington, D.C. 20460 EPA Reg. Number:

71512-10

Date of Issuance:

APR 1 2 2006

NOTICE OF PESTICIDE:

x Registration

Reregistration (under FIFRA, as amended)

Term of Issuance: conditional

Name of Pesticide Product:
Floricamid 50 SG

Name and Address of Registrant (include ZIP Code):

Myron Bliss, Jr. Ph.D.

ISK Biosciences

7470 Auburn Road Suite A

Concord, Ohio 44077

APR | 7 2000

Note: Changes in labeling differing in substance from that accepted in connection with this registration meet be submitted to and accepted by the Registration Division prior to use of the label in commerce. In any correspondence on this product always refer to the above EPA registration number.

On the basis of information furnished by the registrant, the above named pesticide is hereby registered/reregistered under the Federal Insecticide, Fungicide and Rodenticide Act. Registration is in no way to be construed as an endorsement or recommendation of this product by the Agency. In order to protect health and the environment, the Administrator, on his motion, may at any time suspend or cancel the registration of a pesticide in accordance with the Act. The acceptance of any name in connection with the registration of a product under this Act is not to be construed as giving the registrant a right to exclusive use of the name or to its use if it has been covered by others.

This product is conditionally registered in accordance with FIFRA Sec. 3(c) (A) and (B) provided that you submit the data listed in attachment A and make the label changes listed below. Once a pesticide is registered, however, it is not regarded as permanently acceptable. Registration does not eliminate the need for continual reassessment of pesticides. If the Agency determines that, at any time, additional data are required to maintain in effect an existing registration, the Agency will require submission of such data under FIFRA section (3)(c)(2)(B).

#### Label changes:

- 1. Change the EPA Reg. No. to 71512-10.
- 2. You must submit a new primary brand name that clearly distinguishes this product from Flonicamid 50SG Insecticide, EPA Reg. No. 279-3287.
- 3. On page 1, revise the four First Aid statements to read as follows:

IF SWALLOWED: Call a poison control center or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by a poison control center or doctor. Do not give anything by mouth to an unconscious person.

IF ON SKIN OR CLOTHING: Take off contaminated clothing. Rinse skin immediately with plenty of water for 15 to 20 minutes. Call a poison control center or doctor for treatment advice.

Signature of Approving Official:

Date:

Richard Gebken

Product Manager 10

Insecticide Branch

Registration Division (7505C)

EPA Form 8570-6

APR 1 2 2006

page 2 EPA Reg. No. 71512-10

IF IN EYES: Hold eye open and rinse slowly and gently with water for 15 to 20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eyes. Call a poison control center for treatment advice.

IF INHALED: Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth if possible. Call a poison control center or doctor for further treatment advice.

- 4. On page 1, delete the following implied safety claims: This mixture has low oral, dermal and inhalation toxicity. It is non-irritating to the skin but irritating to the eyes.
- 5. Add "Net Contents" to the label.
- 6. On page 2, revise the precautionary statements to read as follows: Harmful if swallowed or absorbed through the skin. Causes moderate eye irritation. Avoid contact with skin, eyes or clothing. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum or using tobacco. Remove and wash contaminated clothing before reuse.
- 7. On page 2, the User Safety Recommendations must be revised to read as follows: Remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.

Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible wash thoroughly and change into clean clothing.

- 8. Under the Environmental Hazards, delete the following implied safety claim: No bee caution required.
- 9. On page 2, under the heading Personal Protective Equipment (PPE), add the following: When handlers used closed systems, enclosed cabs or aircraft in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides (40 CFR 170.240(d)(4-6)), the handler PPE requirements may be reduced or modified as specified in the WPS.
- 10. On page 2, you may delete the Physical or Chemical Hazards statement, as the data cited indicate it is not needed.
- 11. On page 3, in the first paragraph of the Agricultural Use Requirements box, revise the 4<sup>th</sup> sentence to read as follows:

It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE), restricted-entry interval (REI) and notification to workers (as applicable).

12. On page 4, in the first paragraph under General Instructions, delete the reference to "(excluding brassica)".

page 3 EPA Reg. No. 71512-10

- 13. On page 4, in the section on Crop Rotation Restrictions, delete the reference to "registered crop" and use "crop listed on this label".
- 14. On page 4, under the heading General Instructions, add a subheading entitled "Use Restrictions". Under this subheading place the following statements:

Do not use this product in greenhouses.

Do not use this product in home gardens.

- 15. On page 4, in the section on Tank Mixing, add a subheading entitled "Adjuvant Use". Under this subheading place the following statement: Flonicamid 50 SG [new primary brand name] may not be used with spray adjuvants.
- 16. On page 5, delete the section on Crop Response. As presently drafted, it disclaims use according to label directions and conveys a vague concern about phytotoxicity. However, it provides no additional guidance to the applicator on how to avoid phytotoxicity.
- 17. On page 5, revise item 4 in the spray Equipment Clean Out to refer the mixer/loader to the Environmental Hazards statements regarding disposal of equipment washwaters.
- 18. On page 5, under application Information, delete the formula for banded applications, as it is confusing in its present form. Review the references to banded applications in the application rate tables and revise if needed.
- 19. On page 5, in the section on chemigation, remove the reference to greenhouse systems. This product may not be used in greenhouses.
- 20. On page 6, in the section on Using Water from Public Water Systems, review the 4<sup>th</sup> sentence about the air gap and revise as appropriate.
- 21. On page 6, in the section on spray drift management, remove the reference to forestry applications, public health uses or applications of dry materials. This product is not labeled for such uses.
- 22. On page 6, in the section on spray drift management, revise the sentence on Aerial Drift Reduction Advisory to read as follows:

The applicator should be familiar with and take into account the information covered in the Aerial Drift Reduction Advisory below:

23. On page 6, insert after the sentence on Aerial Drift Reduction Advisory, add a subheading "Aerial Drift Reduction Advisory". Following this heading, insert the following:

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

- 24. On page 7, review the first sentence under Nozzle Orientation and revise as needed.
- 25. On page 9, the residue chemistry review has specifically cleared the reference to

page 4 EPA Reg. No. 71512-10

Mustang Max and Capture 2EC. However, all references to Fury 1.5 EC and Capture 2EC on pages 10 through 16 must be removed as they are not on the label of the similar product Flonicamid 50WG.

- 26. On pages 9-17, the application rates tables must include the following: Do not apply more than 3 applications per year.
- 27. On pages 10-17, in footnote 1 to the application rate tables, reference is made to "Application Instructions." Verify that this is the appropriate heading and correct if needed. As noted in comment 18 above, the reference to banded application may require revision.
- 28. On pages 9-17, the comments and footnotes about viruses, plant diseases, and pathogens must be revised to clarify that the product controls/suppresses insects which may carry viruses, plant diseases and/or pathogens.
- 29. On pages 9-17, delete the suppression footnote from the footnotes to all the application rate tables, as it detracts from label directions.

At the next revision of this label, review all statement in accordance with PR Notice 2000-5, Guidance for Mandatory and Advisory Labeling Statements.

Submit two copies of the revised final printed label for the record.

If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA sec. 6(e). Your release for shipment of the product constitutes acceptance of these conditions.

A stamped copy of the label is enclosed for your records.

The confidential statement of formula dated 1/9/04 is acceptable and has been placed in the file jacket for this registration.

If you have questions, please call Ann Sibold at 703 305-6502.

## Flonicamid 50SG

EPA Reg. No. 71512-xxxx

**EPA Est. xxx-**

 Active Ingredient:
 By Wt.

 \*Flonicamid
 50.0%

 Inert Ingredients
 50.0%

 Total
 100.0%

ACCEPTED
with COMMENTS
In EPA Letter Dated:
APR 1 2 2006

Under the Found Insecticide, Fungicide, and Medienticide Act, as amended, for the pesticide registered under EPA Reg. No. 7/5/2~/0

## KEEP OUT OF REACH OF CHILDREN CAUTION

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

#### **FIRST AID**

If Swallowed: Call a poison control center or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by the poison control center or doctor. Do not give anything by mouth to an unconscious person.

If Inhaled: Remove person to fresh air. If person is not breathing, give artificial respiration, preferably by mouth-to mouth. Get medical attention.

If on Skin or Clothing: Wash with plenty of soap and water. Get medical attention if irritation persists.

If in Eyes: Hold eye open and rinse slowly and gently with water for 15- 20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice.

Note to Physician: This mixture has low oral, dermal, and inhalation toxicity. It is non-irritating to the skin, but irritating to the eyes. Treatment is otherwise controlled by removal of exposure followed by symptomatic and supportive care.

#### HOTLINE NUMBER

Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may also contact 1- 888-484-7546 for emergency medical treatment information.

For Emergency Assistance Call: ISK (888) 484-7546. See other panels for additional precautionary statements.

#### ISK Biosciences Logo

ISK Biosciences Corporation 7470 Auburn Road, Suite A Concord, Ohio 44077

<sup>\*</sup>Contains 0.5 pounds active ingredient per pound of formulated product U.S. Patent No. 5360806

# PRECAUTIONARY STATEMENTS Hazards to Humans (& Domestic Animals) CAUTION

Harmful if swallowed, inhaled or absorbed through skin. Causes mild eye irritation. Avoid contact with skin, eyes or clothing. Avoid breathing dust or spray mist. Wash thoroughly with soap and water after handling. Remove contaminated clothing and wash clothing before reuse.

#### Personal Protective Equipment (PPE)

Applicators and other handlers must wear: long-sleeved shirt and long pants, shoes plus socks, and waterproof gloves.

Follow manufacturer's instructions for cleaning/maintaining PPE. If there are no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

#### **User Safety Recommendations**

Users should:

Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet.

Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.

#### **Environmental Hazards**

Do not apply directly to water, or to areas where surface water is present or to intertidal areas below the mean high water mark. Do not contaminate water when cleaning equipment or disposing of equipment wash waters.

No bee caution required.

#### **Physical or Chemical Hazards**

Do not use or store near heat or open flame.

#### DIRECTIONS FOR USE

It is a violation of Federal law to use this product in a manner inconsistent with its labeling.

Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation.

Resistance. Some insects are known to develop resistance to products used repeatedly for control. Because the development of resistance cannot be predicted, the use of this product should conform to resistance management strategies established for the use area. Consult your local or state agricultural authorities for details.

#### AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR part 170. This Standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE) and restricted-entry interval. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

Do not enter or allow worker entry into treated areas during the Restricted Entry Interval (REI) of 12 hours.

PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil, or water, is: Coveralls, waterproof gloves, and shoes plus socks.

#### STORAGE AND DISPOSAL

Do not contaminate water, food, or feed by storage and disposal.

#### Pesticide Storage

Keep out of reach of children and animals. Store in original containers only. Store in a cool, dry place and avoid excess heat. Carefully open containers. After partial use, fold and roll back bags, clamp and close tightly. Do not put concentrate or dilute material into food or drink containers. Do not contaminate other pesticides, fertilizers, water, food or feed by storage or disposal.

In case of spill, avoid contact, isolate area and keep out animals and unprotected persons. Confine spills. Call CHEMTREC (800) 424-9300.

To confine spill: Cover to prevent dispersal. Place damaged package in a holding container, Identify contents,

Pesticide Disposal Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility.

Container Disposal Completely empty container into application equipment. Then dispose of empty bag in a sanitary landfill or by incineration, or, if allowed by State and Local authorities, by burning. If burned, stay out of smoke.

#### **GENERAL INSTRUCTIONS**

Flonicamid 50SG is a 50 percent water dispersible granular formulation of the insecticide flonicamid. Flonicamid 50SG provides control for a variety of aphid pests and suppression for a variety of non-aphid pests in head and stem Brassica and mustard greens, cotton, cucurbit vegetables, fruiting vegetables and leafy vegetables (excluding Brassica), potato, pome fruit and stone fruit.

The rate of application is dependent upon the insect species present, the level of insect pressure, and the length of residual control desired. Initiate applications when insect populations reach economic thresholds. Refer to local Cooperative Extension Guideline and/or time applications to scouting results. Lower rates may be used for building populations and/or when shorter residual control is desired. Use the higher rates when populations have built beyond the economic threshold, when a dense canopy is present and/or when longer residual control is desired.

#### **Crop Rotation Restrictions**

Following application of Flonicamid 50SG, any registered crop may be planted at any time. All other crops may be planted 30 days after the last application of Flonicamid 50SG.

#### Maximum Seasonal Use and Pre-Harvest Intervals

Crop	Maximum Seasonal Total	PHI
	(pounds active ingredient)	Days
Brassica Vegetables	0.267	0
Cotton	0.267	30
Cucurbit Vegetables	0.267	0
Fruiting Vegetables	0.267	0
Leafy Vegetables	0.267	0
Potato	0.267	7
Pome Fruit	0.267	21
Stone Fruit	0.267	14

#### Mixing and Loading Instructions

Ensure the spray system is clean and free of residues from previous applications. Fill the spray tank 1/2 full with clean water. Ensure the agitation system is operating and sufficient to provide uniform spray mixing during application and until the spray tank has been emptied. Complete filling the spray tank to the desired level.

Avoid the overnight storage of Flonicamid 50SG spray mixtures.

Premixing Flonicamid 50SG solutions in nurse tanks is not recommended. Prepare no more spray mixture than is needed for the immediate application.

Do not use liquid fertilizer as a carrier for Flonicamid 50SG.

#### Tank Mixtures

Flonicamid 50SG may be tank mixed with products approved for use on the crops listed on this label. Read and follow all manufacturer's label recommendations for the companion product. Flonicamid 50SG is generally compatible with other insecticides, fungicides, fertilizers and micronutrient products provide sufficient free water is available for dispersion of all the tank mix products. However, the physical compatibility of Flonicamid 50SG with tank mix partners should be evaluated using a jar test before use.

The crop safety of all potential tank mixtures on all crops may not have been tested. Before applying any tank mixture not specifically recommended on this label, the safety to the target crop must be confirmed.

In general, tank mix partners should be added in the following order: products in water-soluble packaging, wettable powders or wettable granules or dry flowables, liquid flowables, liquids then emulsifiable concentrates. Allow each tank mix partner to become completely dispersed before adding the next product.

#### Spray Equipment Clean Out:

After spraying Flonicamid 50SG and before using sprayer equipment for any other applications, the sprayer must be thoroughly cleaned using the following procedure. In addition, users must take appropriate steps to ensure proper equipment clean out for any other products mixed with Flonicamid 50SG as required on the other product labels.

- Drain sprayer tank, hoses, and spray boom. Use a high pressure wash to remove physical sediment and residues from the inside of the sprayer tank and thoroughly rinse. Then thoroughly flush sprayer hoses, boom and nozzles with clean water.
- Fill the tank 1/2 full with clean water, and add appropriate tank cleaner (follow manufacturer's directions for use). Fill the tank to capacity and operate the sprayer for 15 minutes to flush hoses, boom and nozzles.
- Drain the sprayer system. Rinse the tank with clean water and flush through the hoses, boom, and nozzles. Remove and clean spray tips and screens separately.
- 4. Properly dispose of all cleaning solution and rinsate in accordance with Federal, State, and local regulations and

#### **Crop Response**

The crops listed on this label exposed to dilute applications of Flonicamid 50SG have demonstrated no adverse responses. However, no amount of field evaluation can anticipate or duplicate any particular set of environmental conditions, environmental or crop interactions, or Flonicamid 50SG combinations with other pesticides, which may potentiate an adverse reaction. The applicator or grower is advised to test Flonicamid 50SG and combinations under such conditions to determine the potential for adverse crop responses.

#### **Application Information**

All aerial and ground application equipment must be properly maintained and calibrated using appropriate carriers. Use the largest droplet size consistent with good pest control.

Thorough spray coverage of plant foliage is essential for optimum control. Apply in sufficient water to ensure good coverage. Finished spray volumes should be increased under extreme pest populations or dense plant foliage.

#### **Ground Application**

Utilize a boom and nozzle sprayer equipped with the appropriate nozzles, spray tips and screens and adjusted to provide optimum spray distribution and coverage at the appropriate operating pressures. Utilize nozzles that produce minimal amounts of fine spray droplets. Do not exceed 30 psi spray pressure unless otherwise required by the manufacturer of drift reducing nozzles. Sprayers should be adjusted to position spray tips a minimum of 18 inches above the crop. Be aware that overlaps and slower ground speeds while starting, stopping or turning while spraying may result in higher application rates.

For banded applications, calculate the amount of Flonicamid 50SG used per planted acre according to the following formula:

Band Width (inches) x	Rate Per	=	Amount Needed Per Acre For
Row Width (inches)	Broadcast Acre		Banded Application

#### **Aerial Application**

Utilize a boom and nozzle sprayer equipped with the appropriate nozzles, spray tips and screens and adjusted to provide optimum spray distribution and coverage at the appropriate operating pressures. Utilize nozzles that produce minimal amounts of fine spray droplets. Do not exceed 30 psi spray pressure unless otherwise required by the manufacturer of drift reducing nozzles. Use nozzle types and arrangements that will provide optimum coverage while producing a minimal amount of fine droplets.

#### **Chemigation Application**

Apply this product only through sprinkler including center pivot, lateral move, end tow, side (wheel) roll, traveler, big gun, solid set, or hand move irrigation systems. Do not apply this product through any other type of irrigation system. Do not connect any irrigation system, including greenhouse systems, used for pesticide application to a public water system. Crop injury, lack of effectiveness or illegal residues in the crop can result from non-uniform distribution of treated water. If you have questions about calibration, you should contact State Extension Service specialists, equipment manufacturers, or other experts. A person knowledgeable of the chemigation system and responsible for its operation, or under the supervision of the responsible person, shall shut the system down and make necessary adjustments should the need arise.

The system must contain a functional check valve, vacuum relief valve, and low-pressure drain appropriately located on the irrigation pipeline to prevent water source contamination from backflow. The pesticide injection pipeline must also contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection pump. The pesticide injection pipeline must also contain a functional, normally closed, solenoid-operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down. The system must contain functional interlocking controls to automatically shut off the pesticide

injection pump when the water pump motor stops. The irrigation line or water pump must include a functional pressure switch, which will stop the water pump motor when the water pressure decreases to the point where pesticide distribution is adversely affected.

Systems must use a metering pump, such as a positive displacement injection pump (e.g., diaphragm pump) effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock. Do not apply when wind speed favors drift beyond the area intended for treatment Flonicamid 50SG should be applied continuously for the duration of the water application. Flonicamid 50SG should be diluted in sufficient volume to insure accurate application over the area to be treated. Use the appropriate amount of water to carry the product to the target pest. Agitation generally is not required when suitable diluents are used. A diluents test should be conducted to ensure that phase separation would not occur during dilution and application. Failure to achieve a uniform dilution throughout the time of application may result in undesirable residues or less than desirable control.

Using Water from Public Water Systems: DO NOT APPLY Flonicamid 50SG THROUGH ANY IRRIGATION SYSTEM PHYSICALLY CONNECTED TO A PUBLIC WATER SYSTEM. Public water system means a system for the provision to the public of piped water for human consumption, if such system has at least 15 service connections or regularly serves an average of at least 25 individuals daily at least 60 days out of the year. Flonicamid 50SG may be applied through irrigation systems, which may be supplied by a public water system only if water from the water system is discharged into a reservoir tank prior to pesticide introduction. There shall be a complete physical break (air gap) between the outlet end of the fill pipe and to top or overflow rim of the reservoir tank of at least twice the inside diameter of the fill pipe. Before beginning chemigation, always make sure that the air gap exists and that there is no blockage of the overflow of the reservoir tank.

#### **Spray Drift Management**

## AVOIDING SPRAY DRIFT AT THE APPLICATION SITE IS THE RESPONSIBILITY OF THE APPLICATOR AND THE GROWER.

OBSERVE THE FOLLOWING PRECAUTIONS WHEN SPRAYING IN THE VICINITY OF AQUATIC AREAS SUCH AS LAKES; RESERVOIRS; RIVERS; PERMANENT STREAMS, MARSHES OR NATURAL PONDS; ESTUARIES AND COMMERCIAL FISH FARM PONDS.

- Risk of exposure to sensitive aquatic areas can be reduced by avoiding applications when wind direction is toward the aquatic area.
- Do not cultivate within 10 feet of the aquatic area so as to allow growth of a vegetative filter strip.
- Do not apply by ground equipment within 25 feet, or by air within 150 feet of lakes; reservoirs, rivers, permanent streams, marshes or natural ponds, estuaries, and commercial fish farm ponds. Increase the buffer zone to 450 feet when ultra low volume, ULV, application are made.

The interaction of many equipment and weather related factors determine the potential for spray drift. The applicator and the grower are responsible for considering all these factors when making decisions.

The following drift management requirements must be followed to avoid off-target movement from aerial applications to agricultural field crops. These requirements do not apply to forestry applications, public health uses or to applications of dry materials.

- The distance of the outer most nozzles on the boom must not exceed 3/4 the length of the wingspan or rotor.
- 2. Nozzles must always point backward parallel with the air stream and never be pointed downwards more than 45 degrees.

Where states have more stringent regulations, they must be observed.

The applicator should be familiar with and take into account the information covered in the Aerial Drift Reduction Advisory.

#### Information on Droplet Size

The most effective way to reduce drift potential is to apply large droplets. The best drift management strategy is to apply the largest droplets that provide sufficient coverage and control. Applying larger droplets reduces drift potential, but will not prevent drift if applications are made improperly, or under unfavorable environmental conditions (See Wind, Temperature and Humidity, and Temperature Inversions).

#### Controlling Spray Droplet Size

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

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

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

Nozzle Orientation – For aerial application, orient nozzles so that the spray is released parallel to the air stream produces larger droplets than other orientations and is the recommended practice. Significant deflection from horizontal will reduce droplet size and increase drift potential.

Nozzle Type - Use a nozzle type that is designed for the intended application. With most nozzle types, narrower spray angles produce larger droplets.

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

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

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

Wind - Drift potential is lowest between winds speeds of 3 to 10 mph. However, many factors, including droplet size and equipment type determine drift potential at any given speed. Application should be avoided below 3 mph due to variable wind direction and high inversion potential. NOTE: Local terrain can influence wind patterns. Every applicator should be familiar with local wind patterns and how they affect spray drift.

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

Temperature Inversions - Applications should not occur during a temperature inversion because drift potential is high. Temperature inversions restrict vertical air mixing, which causes small suspended droplets to remain in a concentrated cloud. This cloud can move in unpredictable directions due to the light variable winds common during inversions. Temperature inversions are characterized by increasing temperatures with altitude and are common on nights with limited cloud cover and light to no wind. They begin to form as the sun sets and often continue into the morning. Their presence can be indicated by ground fog; however, if fog is not present, inversions can also be identified by the movement of smoke from a ground source or an aircraft smoke generator. Smoke that layers and moves laterally in a concentrated cloud, under low wind conditions, indicates an inversion, while smoke that moves upward and rapidly dissipates indicates good vertical air mixing.

Sensitive Areas - The pesticide should only be applied when the wind is blowing away from adjacent sensitive areas such as residential areas, bodies of water, known habitat for threatened or endangered species, non-target crops.

#### **Insect Spectra**

The following tables list various insect species, which are either effectively controlled or suppressed when appropriate application rates of Flonicamid 50SG are made at appropriate timings. See specific crop sections for recommendations on specific pests.

<sup>1</sup> Suppression may be erratic control ranging from good to poor, or a consistent level of control below that generally considered commercially acceptable.

#### **Aphids**

Common Name	Scientific Name
Black Cherry aphid	Myzus cerasi
Cabbage aphid	Brevicoryne brassicae
Cotton / Melon aphid	Aphis gossypii
English Grain aphid	Macrosiphum avenae
Green Peach aphid	Myzus persicae
Greenbug	Toxoptera graminum
Leafcurling Plum aphid	Anuraphis helichrysi
Mealy Plum aphid	Hyalopterus pruni
Pea Aphid	Acyrthosiphon pisum
Potato aphid	Macrosiphum euphorbiae
Rosy apple aphid	Dysaphis plataginae
Spirea aphid	Aphis spiraecola
Turnip aphid	Lipaphis erysimi

### Non-Aphid Insect Pests

Common Name	Scientific Name
Greenhouse Whitefly	Trialeurodes vaporariorum
Tarnished Plant Bug	Lygus lineolaris
Western Plant Bug	Lygus hesperus

#### Rate Conversion Chart for Flonicamid 50SG

Ounces Flonicamid 50SG/A	Pounds Flonicamid 50SG / A	Pounds Al / A	Treated Acres / Pound Flonicamid 50SG	Kilogram Al/ Hectare	Treated Ha / Kg Flonicamid 50SG
1.2	0.08	0.036	13.3	0.04	12.5
1.7	0.11	0.054	9.4	0.06	8.3
2.0	0.125	0.063	8.0	0.07	7.1
2.3	0.14	0.071	7.0	0.08	6.3
2.6	0.16	0.080	6.1	0.09	5.6
2.8	0.18	0.089	5.7	0.10	5.0

### Head and Stem Brassica and Mustard Greens (0 day PHI) including:

Broccoli (Brassica oleracea var. botrytis); Chinese broccoli (Brassica alboglabra); Brussels sprouts (Brassica oleracea var. gemmifera); Cabbage (Brassica oleracea); Chinese cabbage (napa) (Brassica pekinensis); Chinese mustard cabbage (Brassica campestris); Cauliflower (Brassica oleracea var. botrytis); Cavalo broccoli (Brassica oleracea var. botrytis); Kohlrabi (Brassica oleracea var. gongylodes); and Mustard greens (Brassica iuncea).

	Rate of Application Oz. Flonicamid 50SG / Acre (lbs. Al/Acre)		
	LOW RATE	HIGH RATE	
PESTS	Up to 7 Days Residual Control	Up to 14 Days Residual Control	COMMENTS <sup>1</sup>
Cabbage Aphid (Brevicoryne brassicae)	1.7 to 2.3 (0.054 to 0.071)	2.3 to 2.8 (0.071 to 0.089)	Begin applications as populations begin to build or at economic thresholds according to local pest
Green Peach Aphid (Myzus persicae)	1.7 to 2.3 (0.054 to 0.071)	2.3 to 2.8 (0.071 to 0.089)	management guidelines. Use LOW RATE for building populations and/ or shorter residual; use HIGH RATE for
Melon Aphid (Aphis gossypii)	1.2 to 1.4 (0.036 to 0.044)	1.7 to 2.0 (0.054 to 0.063)	greater populations, dense foliage and/or longer residual. Rapidly growing plants may need retreatment. Scout fields often and retreat as necessary to maintain populations below damaging
Potato Aphid (Macrosiphum euphorbiae)	1.2 to 1.4 (0.036 to 0.044)	1.7 to 2.0 (0.054 to 0.063)	levels.  Early, prophylactic applications may
Turnip Aphid <i>(Lipaphis erysimi)</i>	1.2 to 1.4 (0.036 to 0.044)	1.7 to 2.0 (0.054 to 0.063)	assist in the reduction of the spread of virus by viruliferous aphids. <sup>2</sup>
Western Plant Bug (Lygus hesperus)	1.2 to 1.7 (0.036 to 0.054)	2.6 to 2.8 (0.08 to 0.089)	Apply the HIGH RATE, at economic threshold, for SUPPRESSION <sup>3</sup> only. Apply the LOW RATE <u>only</u> in combination with other effective products (such as Mustang Max 0.8 EC or Capture 2EC Insecticides) for control. Scout fields often and retreat as necessary to maintain populations below damaging levels.
Greenhouse Whitefly (Trialeurodes vaporariorum)	Low Rate not recommended.	2.8 (0.089)	Apply when adult whiteflies first appear. Do not allow population to increase unchecked before making first application. Application of the HIGH RATE will provide SUPPRESSION <sup>3</sup> only. Apply HIGH RATE in combination with other effective products (such as Capture 2EC Insecticide) for control. Scout fields often and retreat as necessary to maintain populations below damaging levels.

<sup>&</sup>lt;sup>1</sup>Thorough spray coverage of plant foliage is essential for optimum control. Apply in sufficient water to ensure good coverage; use a minimum of 10 gallons per acre when applied by ground; use a minimum of 3 gallons per acres by air. Finished spray volumes should be increased under extreme pest populations or dense plant foliage. Do not apply more than 2.8 oz./ per acre Flonicamid 50SG (0.089 lbs. ai per acre) per application; do not apply more than 8.4 oz./ per acre Flonicamid 50SG (0.267 lbs. ai per acre) per season. Allow a minimum of 7 days between applications. If identification of aphid species has not been confirmed, use HIGH RATE.

<sup>2</sup> Reductions in plant disease result from reductions in insects as vectors of plant pathogens.

<sup>&</sup>lt;sup>3</sup> Suppression may be erratic control ranging from good to poor, or a consistent level of control below that generally considered commercially acceptable.

#### Cotton (30 day PHI):

	Rate of Application Oz. Flonicamid 50SG / Acre (lbs. Al/Acre)		
PESTS	LOW RATE  Up to 7 Days Residual Control	HIGH RATE  Up to 14 Days Residual Control	COMMENTS <sup>1</sup>
Cotton Aphid (Aphis gossypii)	1.2 to 1.7 (0.036 to 0.054)	1.7 to 2.3 (0.054 to 0.071)	Begin applications as populations begin to build or at economic thresholds according to local pest management guidelines. Use LOW RATE for building populations and/ or shorter residual; use HIGH RATE for greater populations, dense foliage and/or longer residual. Rapidly growing cotton may need retreatment. Scout fields often and retreat as necessary to maintain populations below damaging levels.
Tarnished Plant Bug ( <i>Lygus lineolaris</i> ) Western Plant Bug ( <i>Lygus hesperus</i> )	1.2 to 1.7 (0.036 to 0.054)	2.6 to 2.8 (0.080 to 0.089)	Apply the HIGH RATE, at economic threshold, for SUPPRESSION <sup>2</sup> only. Apply the LOW RATE <u>only</u> in combination with other effective products (such as Fury 1.5 EC or Capture 2EC Insecticide) for control. Scout fields often and retreat as necessary to maintain populations below damaging levels.

<sup>1</sup>Thorough spray coverage of plant foliage is essential for optimum control. Apply in sufficient water to ensure good coverage; use a minimum of 10 gallons per acre when applied by ground; use a minimum of 3 gallons per acres by air. Finished spray volumes should be increased under extreme pest populations or dense plant foliage. Banded applications should reduce the total treated area proportionally; see general APPLICATION INSTRUCTIONS. Do not apply more than 2.8 oz./ per acre Flonicamid 50SG (0.089 lbs. ai per acre) per application; do not apply more than 8.4 oz./ per acre Flonicamid 50SG (0.267 lbs. ai per acre) per season. Allow a minimum of 7 days between applications. If identification of aphid species has not been confirmed, use HIGH RATE.

<sup>2</sup> Suppression may be erratic control ranging from good to poor, or a consistent level of control below that generally considered commercially

acceptable

#### Cucurbit Vegetables (0 day PHI) including:

Chayote (fruit) (Sechium edule); Chinese waxgourd (Chinese preserving melon) (Bemincasa hispida); Citron melon (Citrullus lanatus var. citroides); Cucumber (Cucumis sativus); Gherkin (Cucumis anguria); Gourd, edible (Lagenaria spp.) (includes hyotan, cucuzza); (Luffa spp.) (includes hechima, Chinese okra); (Momordica spp.) (includes balsam apple, balsam pear, bitter melon, Chinese cucumber); Muskmelon (hybrids and/or cultivars of Cucumis melo) (includes true cantaloupe, cantaloupe, casaba, crenshaw melon, golden pershaw melon, honeydew melon, honey balls, mango melon, Persian melon, pineapple melon, Santa Claus melon, and snake melon); Pumpkin (Cucurbita spp.); Squash, summer (Cucurbita pepo var. melopepo) (includes crookneck squash, scallop squash, straightneck squash, vegetable marrow, zucchini); Squash, winter (Cucurbita maxima; C. moshata) (includes butternut squash, calabaza, hubbard squash; (C. mixta; C. pepo) includes acorn squash, spaghetti squash); Watermelon (includes hybrids and/or varieties of Citrullus spp.).

	Rate of Application Oz. Flonicamid 50SG / Acre (lbs. Al/Acre)		
PESTS	LOW RATE  Up to 7 Days	HIGH RATE Up to 14 Days	COMMENTS'
	Residual Control	Residual Control	
Green Peach Aphid (Myzus persicae)	1.7 to 2.3 (0.054 to 0.071)	2.3 to 2.8 (0.071 to 0.089)	Begin applications as populations begin to build or at economic thresholds according to local pest management guidelines. Use LOW RATE for building populations and/ or shorter residual; use
Melon aphid (Aphis gossypii)	1.2 to 1.7 (0.036 to 0.054)	1.7 to 2.3 (0.054 to 0.071)	HIGH RATE for greater populations, dense foliage and/or longer residual. Rapidly growing plants may need retreatment. Scout fields often and retreat as necessary to maintain populations below damaging levels.
Pea Aphid (Acyrthosiphon pisum)	1.2 to 1.7 (0.036 to 0.054)	1.7 to 2.3 (0.054 to 0.071)	Early, prophylactic applications may assist in the reduction of the spread of virus by viruliferous aphids. <sup>2</sup>
Greenhouse Whitefly ( <i>Trialeurodes</i> vaporariorum)	Low Rate not recommended.	2.8 (0.089)	Apply when adult whiteflies first appear. Do not allow population to increase unchecked before making first application. Application of the HIGH RATE will provide SUPPRESSION <sup>3</sup> only. Apply HIGH RATE in combination with other effective products (such as Capture 2EC Insecticide) for control. Scout fields often and retreat as necessary to maintain populations below damaging levels.

<sup>&</sup>lt;sup>1</sup>Thorough spray coverage of plant foliage is essential for optimum control. Apply in sufficient water to ensure good coverage; use a minimum of 10 gallons per acre when applied by ground; use a minimum of 3 gallons per acres by air. Finished spray volumes should be increased under extreme pest populations or dense plant foliage. Banded applications should reduce the total treated area proportionally; see general APPLICATION INSTRUCTIONS. Do not apply more than 2.8 oz./ per acre Flonicamid 50SG (0.089 lbs. ai per acre) per application; do not apply more than 8.4 oz./ per acre Flonicamid 50SG (0.267 lbs. ai per acre) per season. Allow a minimum of 7 days between applications. If identification of aphid species has not been confirmed, use HIGH RATE.

Reductions in plant disease result from reductions in insects as vectors of plant pathogens.

Suppression may be erratic control ranging from good to poor, or a consistent level of control below that generally considered commercially acceptable.

#### Fruiting Vegetables (except cucurbits) (0 day PHI) including:

Eggplant; groundcherry (*Physalis* spp.); pepino; pepper (includes bell pepper, chili pepper, cooking pepper, pimento, sweet pepper); tomatillo; tomato.

	Rate of Application Oz. Flonicamid 50SG / Acre (lbs. Al/Acre)		
PESTS	LOW RATE  Up to 7 Days Residual Control	HIGH RATE  Up to 14 Days Residual Control	COMMENTS <sup>1</sup>
Green Peach Aphid ( <i>Myzus persicae</i> )	1.7 to 2.3 (0.054 to 0.071)	2.3 to 2.8 (0.071 to 0.089)	Begin applications as populations begin to build or at economic thresholds according to local pest
Melon Aphid ( <i>Aphis gossypii</i> )	1.2 to 1.7 (0.036 to 0.054)	1.7 to 2.3 (0.054 to 0.071)	management guidelines. Use LOW RATE for building populations and/ or shorter residual; use HIGH RATE for greater populations, dense foliage and/or longer residual. Scout fields often and retreat as necessary to
Potato Aphid (Macrosiphum euphorbiae)	1.2 to 1.7 (0.036 to 0.054)	1.7 to 2.3 (0.054 to 0.071)	maintain populations below damaging levels. Rapidly growing plants may need retreatment.
Turnip Aphid ( <i>Lipaphis erysimi</i> )	1.7 to 2.3 (0.054 to 0.071)	2.3 to 2.8 (0.071 to 0.089)	Early, prophylactic applications may assist in the reduction of the spread of virus by viruliferous aphids. <sup>2</sup>
Western Plant Bug (Lygus hesperus)	1.2 to 1.7 (0.036 to 0.054)	2.6 to 2.8 (0.08 to 0.089)	Apply the HIGH RATE, at economic threshold, for SUPPRESSION <sup>3</sup> only. Apply the LOW RATE <u>only</u> in combination with other effective products (such as Fury 1.5 EC or Capture 2EC Insecticides) for control. Scout fields often and retreat as necessary to maintain populations below damaging levels.
Greenhouse Whitefly ( <i>Trialeurodes vaporariorum</i> )	Low Rate not recommended.	2.8 (0.089)	Apply when adult whiteflies first appear. Do not allow population to increase unchecked before making first application. Application of the HIGH RATE will provide SUPPRESSION <sup>3</sup> only. Apply HIGH RATE in combination with other effective products (such as Capture 2EC Insecticide) for control. Scout fields often and retreat as necessary to maintain populations below damaging levels.

¹Thorough spray coverage of plant foliage is essential for optimum control. Apply in sufficient water to ensure good coverage; use a minimum of 10 gallons per acre when applied by ground; use a minimum of 3 gallons per acres by air. Finished spray volumes should be increased under extreme pest populations or dense plant foliage. Banded applications should reduce the total treated area proportionally; see general APPLICATION INSTRUCTIONS. Do not apply more than 2.8 oz./ per acre Flonicamid 50SG (0.089 lbs. ai per acre) per application; do not apply more than 8.4 oz./ per acre Flonicamid 50SG (0.267 lbs. ai per acre) per season. Allow a minimum of 7 days between applications. If identification of aphid species has not been confirmed, use HIGH RATE. <sup>2</sup> Reductions in plant disease result from reductions in insects as vectors of plant pathogens.

<sup>3</sup> Suppression may be erratic control ranging from good to poor, or a consistent level of control below that generally considered commercially acceptable.

#### Leafy Vegetables (except Brassica) (0 day PHI) including:

Amaranth (leafy amaranth, Chinese spinach, tampala); Arugula (Roquette); Cardoon; Celery; Celery, Chinese; Celtuce; Chervil; Chrysanthemum, edible- leaved and garland; Corn salad; Cress, garden; Cress, upland (yellow rocket, winter cress); Dandelion; Dock (sorrel); Endive (escarole); Fennel, Florence (finochio); Lettuce, head and leaf; Orach; Parsley; Purslane, garden; Purslane, winter; Radicchio (red chicory); Rhubarb; Spinach (including New Zealand and vine, Malabar spinach, Indian spinach); Swiss chard.

	Rate of Application Oz. Flonicamid 50SG / Acre (lbs. Al/Acre)		
	LOW RATE	HIGH RATE	
PESTS	Up to 7 Days Residual Control	Up to 14 Days Residual Control	COMMENTS'
Cabbage Aphid (Brevicoryne brassicae)	1.7 to 2.3 (0.053 to 0.071)	2.3 to 2.8 (0.071 to 0.089)	Begin applications as populations begin to build or at economic thresholds according to local pest
Green Peach Aphid (Myzus persicae)	1.7 to 2.3 (0.053 to 0.071)	2.3 to 2.8 (0.071 to 0.089)	management guidelines. Use LOW RATE for building populations and/ or shorter residual; use HIGH RATE for
Melon Aphid ( <i>Aphis gossypii</i> )	1.2 to 1.4 (0.036 to 0.044	1.7 to 2.0 (0.053 to 0.063)	greater populations, dense foliage and/or longer residual. Rapidly growing plants may need retreatment. Scout fields often and retreat as necessary to maintain populations below damaging
Potato Aphid (Macrosiphum euphorbiae)	1.2 to 1.4 (0.036 to 0.044	1.7 to 2.0 (0.053 to 0.063)	levels.  Early, prophylactic applications may assist in the reduction of the spread of virus by viruliferous aphids. <sup>2</sup>
Western Plant Bug (Lygus hesperus)	1.2 to 1.7 (0.036 to 0.054)	2.6 to 2.8 (0.08 to 0.089)	Apply the HIGH RATE, at economic threshold, for SUPPRESSION³ only. Apply the LOW RATE only in combination with other effective products (such as Fury 1.5 EC or Capture 2EC Insecticides) for control. Scout fields often and retreat as necessary to maintain populations below damaging levels.
Greenhouse Whitefly ( <i>Trialeurodes vaporariorum</i> )	Low Rate not recommended.	2.8 (0.089)	Apply when adult whiteflies first appear. Do not allow population to increase unchecked before making first application. Application of the HIGH RATE will provide SUPPRESSION <sup>3</sup> only. Apply HIGH RATE in combination with other effective products (such as Capture 2EC Insecticide) for control. Scout fields often and retreat as necessary to maintain populations below damaging levels.

<sup>1</sup>Thorough spray coverage of plant foliage is essential for optimum control. Apply in sufficient water to ensure good coverage; use a minimum of 10 gallons per acre when applied by ground; use a minimum of 3 gallons per acres by air. Finished spray volumes should be increased under extreme pest populations or dense plant foliage. Do not apply more than 2.8 oz./ per acre Flonicamid 50SG (0.089 lbs. ai per acre) per application; do not apply more than 8.4 oz./ per acre Flonicamid 50SG (0.267 lbs. ai per acre) per season. Allow a minimum of 7 days between applications. If identification of aphid species has not been confirmed, use HIGH RATE.

<sup>2</sup> Reductions in plant disease result from reductions in insects as vectors of plant pathogens.

<sup>&</sup>lt;sup>3</sup> Suppression may be erratic control ranging from good to poor, or a consistent level of control below that generally considered commercially acceptable.

#### Potato (7 day PHI):

	Rate of Application Oz. Flonicamid 50SG / Acre (lbs. Al/Acre)		
	LOW RATE Up to 7 Days	HIGH RATE Up to 14 Days	
PESTS	Residual Control	Residual Control	COMMENTS'
English Grain Aphid ( <i>Macrosiphum avenae</i> )	1.2 to 1.7 (0.036 to 0.054)	1.7 to 2.3 (0.054 to 0.071)	Begin applications as populations begin to build or at economic thresholds according to local pest management guidelines. Use LOW
Green Peach Aphid <sup>2</sup> ( <i>Myzus persicae</i> )	1.7 to 2.3 (0.054 to 0.071)	2.3 to 2.8 (0.071 to 0.089)	RATE for building populations and/ or shorter residual; use HIGH RATE for greater populations, dense foliage
Greenbug (Toxoptera graminum)	1.2 to 1.7 (0.036 to 0.054)	1.7 to 2.3 (0.054 to 0.071)	and/or longer residual. Rapidly growing plants may need retreatment. Scout fields often and retreat as necessary to maintain populations below damaging
Potato Aphid (Macrosiphum euphorbiae)	1.2 to 1.7 (0.036 to 0.054)	1.7 to 2.3 (0.053 to 0.071)	levels.  Early, prophylactic applications may
Turnip Aphid ( <i>Lipaphis erysimi</i> )	1.2 to 1.7 (0.036 to 0.054)	1.7 to 2.3 (0.053 to 0.071)	assist in the reduction of the spread of virus by viruliferous aphids. 3
Tarnished Plant Bug (Lygus lineolaris)	1.2 to1.7 (0.036 to 0.054)	2.6 to 2.8 (0.08 TO 0.089)	Apply the HIGH RATE, at economic threshold, for SUPPRESSION <sup>4</sup> only. Apply the LOW RATE only in combination with other effective products (such as Fury 1.5 EC or Capture 2EC Insecticides) for control. Scout fields often and retreat as necessary to maintain populations below damaging levels.
Greenhouse Whitefly ( <i>Trialeurodes vaporariorum</i> )	Low Rate not recommended.	2.8 (0.089)	Apply when adult whiteflies first appear. Do not allow population to increase unchecked before making first application. Application of the HIGH RATE will provide SUPPRESSION only. Apply HIGH RATE in combination with other effective products (such as Capture 2EC Insecticide) for control. Scout fields often and retreat as necessary to maintain populations below damaging levels.

<sup>1</sup>Thorough spray coverage of plant foliage is essential for optimum control. Apply in sufficient water to ensure good coverage; use a minimum of 10 gallons per acre when applied by ground; use a minimum of 3 gallons per acres by air. Finished spray volumes should be increased under extreme pest populations or dense plant foliage. Do not apply more than 2.8 oz./ per acre Flonicamid 50SG (0.089 lbs. ai per acre) per application; do not apply more than 8.4 oz./ per acre Flonicamid 50SG (0.267 lbs. ai per acre) per season. Allow a minimum of 7 days between applications. If identification of aphid species has not been confirmed, use HIGH RATE.

<sup>&</sup>lt;sup>2</sup> Flonicamid 50SG is recommended as a supplemental foliar control of Green Peach Aphid in long season potatoes following an at-plant program using systemic insecticides and for primary foliar control of Green Peach Aphid in short season potatoes. Scout fields, before aphid flights begin, at intervals and in locations sufficient to provide representative information on population development. Consult local pest management guidelines for correct procedures. Foliar application of Flonicamid 50SG should begin when Green Peach aphid number reach 5 per 100 leaves, 1 winged aphid per plant or the observation of wingless aphids; consult local pest management guidelines for specific recommendations.

Reductions in plant disease result from reductions in insects as vectors of plant pathogens.

<sup>&</sup>lt;sup>4</sup> Suppression may be erratic control ranging from good to poor, or a consistent level of control below that generally considered commercially acceptable.

#### Pome Fruit (21 day PHI) including:

Apple (Malus domestica); Crabapple (Malus spp.); Loquat (Eriobotrya japonica); Mayhaw (Crataegus aestivalis. C. opaca, and C. rufula); Pear (Pyrus communis); Pear, oriental (Pyrus pyrifolia); Quince (Cydonia oblonga).

	Rate of A Oz. Flonicami (lbs. A	d 50SG / Acre	
	LOW RATE	HIGH RATE	
PESTS	Up to 7 Days Residual Control	Up to 14 Days Residual Control	COMMENTS1
Spirea Aphid (Aphis spiraecola)	1.2 to 1.7 (0.036 to 0.054)	1.7 to 2.3 (0.054 to 0.071)	Begin applications as populations begin to build or at economic thresholds but before damage is evident, according to local pest
Rosy Apple Aphid ( <i>Dysaphis plantaginae</i> )	1.2 to 1.7 (0.036 to 0.054)	1.7 to 2.3 (0.054 to 0.071)	management guidelines. Use LOW RATE for building populations and/ or shorter residual; use HIGH RATE for greater populations, dense foliage and/or longer residual. Scout trees often during green tip through pink growth stages and post-bloom and retreat as necessary to maintain populations below damaging levels.
Tarnished Plant Bug ( <i>Lygus lineolaris</i> )	1.2 to 1.7 (0.036 to 0.054)	2.6 to 2.8 (0.08 TO 0.089)	Apply the HIGH RATE, at economic threshold, for SUPPRESSION <sup>2</sup> only. Apply the LOW RATE <u>only</u> in combination with other effective products (such as Fury 1.5 EC or Capture 2EC Insecticides) for control. Scout trees often and retreat as necessary to maintain populations below damaging levels.

<sup>&</sup>lt;sup>1</sup>Thorough spray coverage of plant foliage is essential for optimum control. Apply in sufficient water to ensure good coverage; use a minimum of 50 gallons per acre when applied by ground, preferably air-blast; use a minimum of 10 gallons per acres by air. Finished spray volumes should be increased under extreme pest populations or dense plant foliage. Do not apply more than 2.8 oz./ per acre Flonicamid 50SG (0.089 lbs. ai per acre) per application; do not apply more than 8.4 oz./ per acre Flonicamid 50SG (0.267 lbs. ai per acre) per season. Allow a minimum of 7 days between applications. If identification of aphid species has not been confirmed, use HIGH RATE.

<sup>&</sup>lt;sup>2</sup> Suppression may be erratic control ranging from good to poor, or a consistent level of control below that generally considered commercially acceptable.

#### Stone Fruit (14 day PHI) including:

Apricot (Prunus armeniaca); Cherry, sweet (Prunus avium); Cherry, tart (Prunus cerasus); Nectarine (Prunus persica); Peach (Prunus persica); Plum (Prunus domestica, Prunus spp.); Plum, Chickasaw (Prunus angustifolia); PlumDamson (Prunus domestica spp. institia); Plum, Japanese (Prunus salicina); Plumcot (Prunus. armeniaca X P. domestica); Prune (fresh) (Prunus domestica. Prunus spp.).

Prune (fresh) (Prunus domestica, i	T		
	Rate of Application Oz. Flonicamid 50SG / Acre (lbs. Al/Acre)		
	LOW RATE	HIGH RATE	
PESTS	Up to 7 Days Residual Control	Up to 14 Days Residual Control	COMMENTS <sup>1</sup>
Green Peach Aphid (Myzus persicae)	1.7 to 2.3 (0.054 to 0.071)	2.3 to 2.8 (0.071 to 0.089)	Begin applications as populations begin to build or at economic thresholds according to local pest management guidelines. Use LOW RATE for building
Mealy Plum Aphid (Hyalopterus pruni)	1.2 to 1.7 (0.054 to 0.071)	1.7 to 2.3 (0.071 to 0.089)	populations and/ or shorter residual; use HIGH RATE for greater populations, dense foliage and/or
Black Cherry aphid (Myzus cerasi)	1.2 to 1.7 (0.036 to 0.054)	1.7 to 2.3 (0.054 to 0.071)	longer residual. Scout trees often and retreat as necessary to maintain populations below damaging levels.
Leafcurling Plum aphid (Anuraphis helichrysi)	1.2 to 1.7 (0.036 to 0.054)	1.7 to 2.3 (0.054 to 0.071)	
Tarnished Plant Bug (Lygus lineolaris)	1.2 to 1.7 (0.036 to 0.054)	2.6 to 2.8 (0.08 to 0.089)	Apply the HIGH RATE, at economic threshold, for SUPPRESSION <sup>2</sup> only. Apply the LOW RATE only in combination with other effective products (such as Fury 1.5 EC or Capture 2EC Insecticides) for control. Scout trees often and retreat as necessary to maintain populations below damaging levels.

<sup>&</sup>lt;sup>1</sup>Thorough spray coverage of plant foliage is essential for optimum control. Apply in sufficient water to ensure good coverage; use a minimum of 50 gallons per acre when applied by ground, preferably air-blast; use a minimum of 10 gallons per acres by air. Finished spray volumes should be increased under extreme pest populations or dense plant foliage. Do not apply more than 2.8 oz./ per acre Flonicamid 50SG (0.089 lbs. ai per acre) per application; do not apply more than 8.4 oz./ per acre Flonicamid 50SG (0.267 lbs. ai per acre) per season. Allow a minimum of 7 days between applications. If identification of aphid species has not been confirmed, use HIGH RATE.

<sup>&</sup>lt;sup>2</sup> Suppression may be erratic control ranging from good to poor, or a consistent level of control below that generally considered commercially acceptable.

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