#### UNIT \_ STATES ENVIRONMENTAL PROTECTION AGENCY

Mr. Jeff W. Popp Registration Specialist II Regulatory Affairs Sandoz Agro, Inc. 1300 East Touhy Avenue Des Plaines, Illinois 60018 पत्रा तिर SEP 29 1993

Dear Mr. Popp:

Javelin® WG Master Label Revision Subject: EPA Registration No. 55947-136

The labeling referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide, Rodenticide Act is acceptable subject to the following comments.

- Delete the statement "When kept at room temperature... will keep its activity approximately 2 years." in the storage and disposal block and add additional disposal instructions that comply with PR Notices 83-3 and 84-1 for residential packaging. Storage stability claims must be supported by appropriate data.
- Delete the word "specific" in the phrase "..is a biological insecticide specific for the control..."

Note that this acceptance of your label does not relieve you of your obligation to comply with the Worker Protection Standard. This product is covered by this standard and you are required to submit, and receive the Agency's approval by April 21, 1994, a revised label reflecting the required label statements of 40 CFR 156, published in the FEDERAL REGISTER on August 21, 1992 (57FR 38102). You must comply with PR Notices 93-7 & 93-11, including the due dates named in those notices. According to 40 CFR 156, subpart K: "No product to which this subpart applies shall be distributed or sold without amended labeling by any registrant after April 21, 1994. Please call 1-800-777-2185 if you have any labeling questions regarding the Worker Protection Standard.

CONCURRENCES						
SYMBOL ) HXOSC						
SURNAME ) MY LEST						
DATE 9/28/93						
FO1 F 4000 44 (4 mg)		OFFICIAL FILE COPY				

EPA Form 1320-1A (1/90)

Printed on Recycled Paper

## UNI. D STATES ENVIRONMENTAL PROTECTION AGENCY

-2-

A stamped copy of the label is enclosed for your records. Submit five (5) copies of final printed labeling.

Sincerely,

Phil Hutton

Product Manager 18

Insecticide-Rodenticide Branch Registration Division (H7505C)

		CONCURRENC	ES			
SYMBOL						
SURMAME )	 	•••••			***********	
DATE )			***************************************			

# JAVELIN® WG BIOLOGICAL INSECTICIDE

For Control Of Insect Pests Of Vegetables, Fruit and Field Crops

#### **ACTIVE INGREDIENT:**

\*Equivalent to 24.0 billion Spodoptera Units per pound (14.4 billion International Units per pound)

Potency units should not be used to adjust use rates beyond those specified in the Directions for Use Section

# KEEP OUT OF REACH OF CHILDREN WARNING

SEE SIDE PANEL FOR ADDITIONAL PRECAUTIONARY STATEMENTS

Made in the U.S.A.

EPA REG. NO.: 55947-136 EPA EST. NO.: 55947-CA-2 Lot No.: Net Contents:

Manufactured by: SANDOZ AGRO, INC. DES PLAINES, IL 60018

ACCEPTED
with COMMENTS
to EPA Letter Dated

Javelin® WG is a registered trademark of Sandoz Ltd.

SEP 29 1993

Under the Federal Innecticities. Fungicide, and Redunticitie Act as amounted, for the recticitie registered under EPA Reg. No. 55997-136

# PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS (AND DOMESTIC ANIMALS) WARNING

Causes eye irritation. Do not get in eyes, on skin, or on clothing..

Prolonged or frequently repeated skin contact may cause an allergic reaction in some individuals. Harmful if inhaled or absorbed through the skin. Avoid breathing vapors or spray mist. Discontinue use if reaction occurs.

#### STATEMENT OF PRACTICAL TREATMENT

If in Eyes: Immediately flush with plenty of water for at least 15 minutes..

Get medical attention.

If On Skin: Wash with plenty of soap and water.

Get medical attention, if irritation persists.

#### **ENVIRONMENTAL HAZARDS**

Do not contaminate water when disposing of equipment washwaters.

#### **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 through any type of irrigation system.

Refer to the Directions for Use Bookiet attached to this container for further directions.



STORAGE AND DISPOSAL

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

#### STORAGE:

Store in original container in a cool, dry place inaccessible to children and pets and away from heat and direct sunlight. Protect from freezing. Storage at temperatures above 90° F. may Impair effectiveness. When kept at room temperature (+21° C. to 24° C.) JAVELIN WG will keep its activity approximately 2 years.

#### PESTICIDE DISPOSAL

Pesticide, spray mixture, or rinse water that cannot be used according to label instruction may be disposed of on site or at an approved waste disposal facility.

#### CONTAINER DISPOSAL

Completely empty container or bag into application equipment. Triple rinse or equivalent. Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill or by incineration, or if allowed by state and local authorities, by burning. If burned, stay out of smoke. Do not reuse container or bag. Discard bag in trash.

#### LIMITATION OF WARRANTY AND LIMITATION OF LIABILITY

NOTICE: Read this Limitation of Warranty and Limitation of Liability before buying or using this product. If the terms are not acceptable, return the product at once, unopened, and the purchase price will be refunded. It is impossible to eliminate all risks inherently associated with the use of this product. Crop injury, ineffectiveness, or other unintended consequences may result because of such factors as weather conditions, presence of other materials, or the manner of use or application, all of which are beyond the control of Sandoz or seller. All such risks shall be assumed by buyer or user. Sandoz warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated in the Directions for Use, under normal use conditions, subject to the risks described above. Sandoz makes no other express or implied warranty of fitness or of merchantability or any other express or implied warranty. In no event shall Sandoz or seller be liable for any incidental, consequential or special damages resulting from the use or handling of this product. The exclusive remedy of the user or buyer, and the exclusive liability of Sandoz or seller for any and all claims, losses, injuries or damages (including claims based on breach of warranty, contract, negligence, tort, strict liability or otherwise) resulting from the use or handling of this product, shall be the return of the purchase price of the ' product or, at the election of Sandoz or seller, the replacement of the product. Sandoz and seller offer this product, and buyer and user accept it, subject to the foregoing limitations of warranty and limitation of liability, which may not be modified by any oral or writter: agreement.

7

# DIRECTIONS FOR USE JAVELIN® WG BIOLOGICAL INSECTICIDE

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

Do not apply this product through any type of irrigation system.

This labeling must be in the possession of the user at the time of the pesticide application.

JAVELIN® WG is a biological insecticide specific for the control of lepidopterous larvae (see Recommended Application Rates section).

JAVELIN® WG attacks the larval gut and must be ingested by the insect to be effective.

JAVELIN® WG may be applied up to and on the day of harvest.

#### NOTICE:

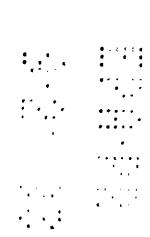
Read "Limited Warranty and Liability" on the container before buying or using. If terms are not acceptable, return at once unopened.

Prosper with pesticides by using them properly! Read and follow label directions.

Made in the U.S.A. EPA REG. NO.: 55947-136

Manufactured by: SANDOZ AGRO, INC. DES PLAINES, IL 60018

Javelin® WG is a registered trademark of Sandoz Ltd.



#### **GENERAL USE INSTRUCTIONS**

For most consistent control, apply at first sign of newly hatched worms (1st and 2nd instar larvae). Instructions for specific crops are located in the Additional Information section in the Use Directions.

Reapply as necessary under a pest management program that includes close scouting.

If rapid knockdown of heavy worm or non-lepidopterous populations is necessary, include an effective contact insecticide in tank mix or sequential combination with JAVELIN® WG.

For heavy worm infestations, use the higher JAVELIN® WG rate. During situations of dense foliage and/or rapid growth, increasing water carrier volumes will provide better crop coverage and improve JAVELIN® WG performance.

Tank mix recommendations are for use only in states where the tank mix partner product and application sites are registered.

#### Mixing:

Fill spray or mixing tank 3/4 full. Turn on agitation and pour JAVELIN® WG into water while maintaining continuous agitation. Add other spray material (if any) and add balance of water. Agitate as necessary to maintain suspension. Do not allow diluted sprays to remain in the tank for more than 48 hours. JAVI:LIN® WG is formulated to provide desirable coverage and adherence to leaf surfaces. Additional adjuvants, spreaders, or stickers may be added to improve product performance, especially under heavy dew or rainy conditions. Combinations with commonly used insecticides, fungicides, or other spray tank adjuvants are generally not deleterious to JAVELIN® WG if the mix is used promptly. JAVELIN® WG can be tank mixed with other products for use on labelled crops in accordance with the most restrictive of label limitations and precautions. No label dosage should be exceeded. This product cannot be mixed with any product containing a label prohibition against such mixing. Before mixing in the spray tank, it is advisable to test physical compatibility by mixing all components in a small container in proportionate quantities.

#### **GROUND APPLICATION**

Unless otherwise stated, use recommended amount of JAVELIN® WG in a minimum of 20 gallons of water per acre depending on type of crop and requirements of state regulations. If lower volumes are used, proper application equipment must be used to insure adequate coverage. Thorough and uniform crop coverage is required for adequate insect control.\*

#### **AERIAL APPLICATION**

Use recommended amount of JAVELIN® WG in at least 3 gallons of water per acre.

Applications at higher water volumes have demonstrated improved control of targeted pests.

Apply early morning or evening when air is calm.

#### **VEGETABLE CROPS**

Artichokes  Artichoke Plume Moth  Artichoke Plume Moth  Apply in a minimum of 100 gal. of water per acre with a spray interval of 10 days or less.  Apply 1 lb/A in combination with ASANA XL, AMBUSH, or SUPRACIDE aerially to aid in resistance management of the	VEGETABLE C	ROPS	RATE	ADDITIONAL
Moth  Moth  100 gal. of water per acre with a spray interval of 10 days or less.  Apply 1 Ib/A in combination with ASANA XL, AMBUSH, or SUPRACIDE aeriality to aid in rosistance management of the artichoke plume moth. Use and follow at label directions of the tank mix partner regarding application, timing, gallonage, and schedules.  Artichokes  Asparagus Armyworm 1/2-1 1/2 Repeat as necessary to maintain control.  Green, Lima, Mung)  Broccoli Bab (Rappini)  Brussel Sprouts Green Cloverworm 1/4-1/2 Cabbage Hornworms 1/8-1/2 Cardoon  Carrots Imported Caulilliower Cabbageworm 1/4-1/2 Celeriac Loopers 1/4-1 1/4 Celeriac Loopers 1/4-1 1/4 Celeriac Loopers 1/4-1 1/4 Celeriac Collards Caterpillar Cucumbers Dry Bulb Onions Eggplants European Corn 1-1 1/2 Garlic Borer  Green Clondelion, Turnip, Mustard, Beet, China) Herbs (Basil, Cilantro, Dill, Cilantro, Dill	CROP	INSECT		
ASANA XL, AMBUSH, or SUPRACIDE aerially to aid in resistance management of the artichoke plume moth. Use and follow all label directions of the tank mix partner regarding application, timing, gallonage, and schedules.  Artichokes  Artichokes  Artichokes  Asparagus Armyworm 1/2-1 1/2 Repeat as necessary to maintain control.  Green, Lima, Mung)  Broccoli Raab (Rappini)  Brussel Sprouts Green Cloverworm 1/4-1/2 Cabbage Hornworms 1/8-1/2 Cardoon Carrots Imported Cauliflower Cabbageworm 1/4-1/2 Celeriac Loopers 1/4-1 1/4 Celeriac Loopers 1/4-1 1/4 Celeriac Calorias Caterpillar Collards Caterpillar Coucumbers Dry Bulb Onions Eggplants European Corn 1-1 1/2 Garilic Borer Green Onions Greens (Dandelion, Tomato pinworm 3/4-1 1/4 Turnip, Mustard, Beet, China) Herbs (Basil, Cilantro, Dill, Oregano, Thyme, etc.) Horseradish Kale Kohl Rabi	Artichokes		1/2-1 1/4	100 gal. of water per acre with a spray interval of 10 days
Asparagus Armyworm 1/2-1 1/2 Repeat as necessary to maintain control.  (Green, Lima, Mung) Broccoli Diamondback Moth Broccoli Raab (Rappini) Brussel Sprouts Green Cloverworm 1/4-1/2 Cabbage Hornworms 1/8-1/2 Cardoon Carrots Imported Cauliflower Cabbageworm 1/4-1/2 Celeriac Loopers 1/4-1 1/4 Celery Chick Peas Chinese Broccoli Chinese Cabbage Collards Caterpillar Cucumbers Dry Bulb Onions Eggplants European Corn Borer Green Onions Greens (Dandelion, Turnip, Mustard, Beet, China) Herbs (Basil, Cilantro, Dill, Oregano, Thyme, etc.) Horseradish Kale Kohl Rabi				SUPRACIDE aerially to aid in resistance management of the artichoke plume moth. Use and follow all label directions of the tank mix partner regarding application, timing, gallonage,
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Horseradish Kale Kohl Rabi		tc.)		
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Leeks	Kohl Rabi			
	Leeks			·

#### **VEGETABLE CROPS**

CROP

INSECT

RATE LBS./ACRE ADDITIONAL INSTRUCTIONS

Lettuce (Endive, Romaine, Head

Lettuce, Escarole

Butter Crunch,

Leaf, etc.)

Melons (Cantaloupe,

Crenshaw, Honeydew,

Muskmelon,

Watermelon, etc.)

Okra

**Onions** 

**Parsley** 

**Parsnips** 

Peas

**Peppers** 

**Potatoes** 

**Fumpkins** 

**Radishes** 

Rutabaya

Salsify

Spinach

Squash (Summer

and Winter)

Sweet Corn

**Sweet Potatoes** 

**Swiss Chard** 

**Table Beets** 

**Tomatoes** 

Turnip Root

Watercress

Yams

CROP	INSECT	RATE LBS./ACRE	ADDITIONAL INSTRUCTIONS
Apples and Pears	Fruittree Leafroller	1/2-1	Apply when newly hatched larvae appearand before leaves are rolled.
	Gypsy Moth	1/2-1	Continue applying as a part of the normal cover spray program until pest is
	Redbanded Leafroller	1/2-1	adequately controlled.
	Tufted Apple	1/2 1	
	Budmoth	1/2-1	
	Variegated Leafroller	1/2-1	
	Omnivorous		
	Leafroller Tent Caterpillar	1/2-1 1/4 1/2-1	Apply when caterpillars are actively feeding (2nd-4th instars).
	Peach Twig Borer	1-3	
	Oriental Fruit Moth	1-3	
	Navel Orangeworm Codling Moth	1-3 1-4	
Avocados	Loopers Orange Tortrix	1-1 1/4 1/2-1	Apply as necessary to maintain control.
	Omnivorous Leafroller	1/2-1	Begin treatment as soon as possible after hatching and before larvae are protected by leaf folds.
	Amorbia	1	Suppression only.
Bananas	Banana Skipper	1/2-1	Hawaii only. Use calibrated ground equipment with adequate water to apply to point of runoff.
Citrus	Citrus Cutworm	1/2-1 1/2	Use 50-600 gallons of water per acre when using ground equipment and 10
	Fruittree Leafroller	1/2-1	gallons of water minimum per acre by air.
	Orangedog	1/4-1/2	
	Amorbia	1-1 1/2	Suppression only.

CROP	INSECT	RATE LBS./ACRE	ADDITIONAL INSTRUCTIONS
Blueberries Caneberries	Blueberry Leafroller	1/2-1	Apply by ground equipment only. Begin treatment as soon as possible after
Currants	Cherry Fruitworm	1/4-1/2	hatching. For leafrollers, apply before larvae are protected by leaf folds
Kiwi	Fruittree		•
	Leafroller	1/2-1	
	Gypsy Moth	1/2-1	
	Green Fruitworm	1/4-1/2	
	Loopers	1/2-1	
	Orange Tortrix Omnivorous	1/2-1	
	Leafroller Blueberry	1/2-1	
	spanworm	1/2-1	
Grapes	Grape Leaffolder Grapeleaf	1/2-1 1/4	Apply by ground equipment in up to 200 gallons total spray per acre to obtain
	Skeletonizers Omnivorous	1/2-1 1/4	thorough coverage of leaf surfaces. Start treating as soon as possible after
	Leafroller	1/2-1 1/4	hatching and before larvae are protected
	Orange Tortrix Saltmarsh	1/2-1 1/4	by leaf folds.
	Caterpillar	1/2-1 1/4	

rkuli, Nui,	& VINE CHOPS	RATE	ADDITIONAL
CROP	INSECT	LBS./ACRE	INSTRUCTIONS
Almonds	Fall Webworm	1/2-1	For leafrollers, start treating as
Apricot	Filbert Webworm	1/2-1	soon as possible after hatching and before larvae are protected
Cherries	Omnivorous		by leaf folds.
Filberts	Leafroller	1/2-1	
Nectarines	Citrus Cutworm	1/2-1 1/4	
Peaches	Redhumped		
Pecans	Caterpillar	1/2-1	
Persimmons	Roughskinned		
Plums	cutworm	1/4-1/2	
Pomegranate		•	
Prunes	Tent Caterpillar	1/2-1	Apply when caterpillars are actively feeding
Walnuts			(2nd to 4th instar).
	Dance and		
	Pecan nut	0/4 4 4/4	Amelianta desira is
	casebearer	3/4-1 1/4	Application timing is very important for good casebearer suppression. Consult your local university or extension agent for information concerning specific modeling that predicts egg lay, typical application dates, and scouting techniques for your area. JAVELIN® WG must be present at egg hatch for best control. Make application when the majority of eggs are in the pink stage. Fcr best control make two applications 7 days apart. If only one application is made, a minimum of 1 lb should be applied
	Peach Twig Borer	1-3	••
	Oriental Fruit Moth	1-3	
	Navel Orangeworm	1-3	
	Codling Moth	1-4	
	_		

CROP	INSECT	RATE LBS./ACRE	ADDITIONAL INSTRUCTIONS
Melons (Also see Vegetables	Rindworm Complex )	1/2-3/4	Apply at first sign of hatch before larvae enter fruit. Repeat as necessary to maintain control.
Strawberries	Armyworm Gypsy Moth Looper Roughskinned Cutworm	1/2-1 1/2 1/2-1 1/4-1/2 1/2-1	Apply as necessary to maintain control. Use 20 gallons water minimum per acre when using ground equipment and 5 gallons water minimum per acre by aircraft.
			In a tankmix with contact insecticides, rates as low as 1/2 lb. of JAVELIN® WG may be used to adequately control most armyworm populations. For heavy worm infestations use a higher JAVELIN® WG rate in the tankmix

FIEL	D	<b>CROPS</b>
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CROP	INSECT	RATE LBS./ACRE	ADDITIONAL INSTRUCTIONS
Alfalfa (Hay and Seed) Sudan Grass Hay Crops & Other Forage Crops	Alfalfa Caterpillar Armyworm Loopers	1/4-1/2 1/2-1 1/2 1/4-1	Under conditions of rapid plant growth and rapidly increasing armyworm populations (10 worms or greater per 180° sweep), use the highest rate. Against heterogenous worm populations, where 4th and 5th instars are present, and continuous egg-laying, applications may provide variable control. Under these conditions, the addition of a contact insecticide in combination with JAVELIN® WG is recommended.  The addition of a spreader sticker to JAVELIN® WG may provide improved performance.
Small Grains	Armyworm	1-1 1/2	Apply as necessary to maintain control.
Hops	Loopers Omnivorous Leaftier Spotted Cutworm	1/4-1 1/2-1 1/2-1	Apply as necessary to maintain control.
	Oblique Banded Leafroller	1/2-1	Begin treatment as soon as possible after hatching and before larvae are protected by leaf folds.
Canola Evening primrose	Armyworm Diamondback Moth	1/2-1 1/2 1/2-1 1/4	Apply as necessary to "maintain control.
	Imported Cabbageworm Loopers	1/4-1/2 1/4-1	
	Hornworms	1/8-1/4	

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# RECOMMENDED APPLICATION RATES

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CROP	INSECT	RATE LBS./ACRE	ADDITIONAL INSTRUCTIONS
Field Corn Pop Corn Seed Corn	Armyworm	1/2-1 1/2	Make initial application when economically damaging populations exist. Repeat as necessary to maintain control. Applications must be made to early instars prior to entering the ear or plant.
	Southwestern Corn Borer	1-1 1/2	Aids in control.
	European Ccrn Borer	1-1 1/2	
Jojoba	Looper (Anacamptodes spp.)	1/2-1	Apply in a minimum of 50 gallons of water per acre by ground equipment or a minimum of 10 gallons of water by aerial equipment. Thorough coverage of foliage is essential and dictates the minimum spray volumes necessary.
Dry Beans and Peas	Armyworms Green	1/2-1 1/2	Apply as necessary to maintain control.
Lentils Mint	Cloverworm	1/4-1/2	
Peanuts Rice Safflower	Loopers Salt Marsh Caterpillar	1/2-1 1/2-1	
Soybeans Sugar Beets	Velvetbean Caterpillar	1/4-1/2	••
Sunflower Sorghum	Helicoverpa spp. (Heliothis spp.)	3/4-1 1/4	
	Cutworm	1/2-1 1/2	
Tobacco	Looper Tobacco	1/2-1	Apply as necessary to maintain control.
	Hornworm Tobacco Budworm	1/8-1/2 1/2-1 1/4	

COTTON - Except Arizona and California					
	•	RATE	ADDITION		
TIMING	INSECT	LBS./ACRE	INSTRUCTI		

NAL TIONS Tobacco Budworm 1/4-1 1/4 For early season management of Early Bollworm Helicoverpa and Heliothis species. Initiate applications when 50% of plants are at pinhead square cotton stage, independent of Helicoverpa and Heliothis egg and larval counts, or at 1st egg lay, whichever occurs earlier. Continue applications on 5-day spray interval up to synthetic pyrethroid spray window. For added control of Helicoverpa and Heliothis, tankmixing of JAVELIN® WG with a labeled ovicide, such as, methomyl (0.125 lb. a.i./acre), profenofos (0.25 lb. a.i./acre), or thiodicarb (0.125-0.25 lb. a.i./acre) is recommended.

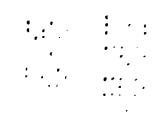
Read and follow all precautions and restrictions on tankmix product labeis.

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## RECOMMENDED APPLICATION RATES

### **COTTON - INCLUDING CA AND AZ**

TIMING	INSECT	RATE LBS./ACRE	ADDITIONAL INSTRUCTIONS
Early and Mid-Season	Armyworm Cotton Leaf Perforator Cotton Leafworm Loopers Saltmarsh Caterpillar	1/2-1 1/2 1/2-1 1/2-1 1/2-1 1/4 1/2-1	Repeat as necessary throughout season to maintain control. If egg laying frequency indicates future moderate to heavy worm populations, time application spray to coincide with the 2nd instar larvae. During periods of high temperatures, worms will progress through 1st and 3rd instars very rapidly and early application timing is necessary for control.
			To be effective, JAVELIN® WG spray must be deposited at the larval feeding site. When plant cover is dense and worms are feeding in the lower 2/3 portion of the plant, aerial application of JAVELIN® WG may not provide adequate control.
	Bollworm Tobacco Budworm	1/2-1 1/2 1/2-1 1/2	For the suppression of light to moderate infestations, apply at first sign of egg-laying or newly-hatched worms (1st instar larvae).



## **SHADE TREES, ORNAMENTALS (Including Roses)**

PESTS	RATE LBS./ACRE	ADDITIONAL INSTRUCTIONS
Spring and Fall Cankerworm	1/4-1/2	Apply when leaf expansion
Elm Spanworm	1/4-1/2	reaches 40% to 50% as
Tent Caterpillar Gypsy Moth	1/4-1/2 1/4-1/2	infestation warrants. If eggs hatch over a long period of time, or if reinfestation occurs, spray about 14 days after first applications.
Spruce Budworm	1/4-1/2	Apply when most larvae are 3rd-4th instar. Also consider the opening of the bud cap to ensure foliage exposure.
Jackpine Budworm	1/4-1/2	
Douglas Fir Tussock Moth	1/4-1/2	
Bagworm	1/4-1/2	•
California Oak Moth	1/4-1/2	Apply after eggs have hatched
Western Tussock Moth	1/4-1/2	and early instar larvae are
Fruittree Leafroller	1/4-1/2	feeding on exposed foliage.
Mimosa Webworm	1/4-1/2	
Redhumped Caterpillar	1/8-1/2	
Fall Webworm	1/8-1/4	
Armyworm	1-1 1/4	
Omnivorous leafroller	1/2-1	
TURF AND GRASS SEED F	PRODUCTION	
Tropical Sodwebworm	1	Repeat as necessary
Armyworm	1	throughout season to
Sodwebworm	1	maintain control.

(Indian Meal Moth, Almond Moth)

To control and prevent Indian Meal Moth and Almond Moth infestations of stored soybeans and grains, prepare a spray mixture which includes 1 gallon of water for every 1.5 oz. by weight of JAVELIN® WG. The spray mixture may be applied either by treating the top 4 inches of grain as it is being augered into storage (applying 0.6 pint of mixture per bushel in the grain stream), or by treating the surface of grain after it is in the bin. The Table below can be used as a guide in determining the total amount of JAVELIN® WG needed according to the bin diameter or the number of bushels to be treated.

Bin Diameter (ft)	Surface Area (sq. ft.)	Bushels (to 4 in. depth)	JAVELIN® WG Rate (by weight)	
			Grams	OZ.
8	50	13	21	0.75
12	113	30	50	1.75
16	201	<b>5</b> 3	<b>8</b> 5	3.00
20	314	84	120	4.25
24	452	120	185	6.50
28	615	163	255	9.00
32	804	214	326	11.50

To insure thorough coverage when making applications to the grain surface after it is in the bin, apply spray mixture in three (3) applications. Mix the grain with a scoop or rake to a depth of four (4) inches after each application.

Stored grain may be treated anytime, but for best results, treat grain at the time it is placed into storage or shortly thereafter, or in the early spring prior to egg-laying. Full season control is normally experienced. Re-treat only if reinfestation occurs.

For the protection of bagged grain, apply spray mixture to entire grain mass, and mix thoroughly prior to bagging. **JAVELIN® WG** at 6 oz. by weight per 10 gallons of water will treat approximately 100 bushels.

Treated grain may be used at any time after treatment.

#### **FLOWERS AND ORNAMENTALS**

JAVELIN® WG may also be used on flowers and ornamentals outdoors and in the greenhouse at a rate of 1/4-1 1/2 lb. per 100 gallons of water for control of listed insects on this label.

#### **GUIDE FOR SMALL SPRAY VOLUME MIXING**

Rate	Conversion Rate*
Lbs./A	<u>Teaspoons/Gallon</u>
1/4	1/2
1/2	1
1	2

<sup>\*</sup>Assumes Application to spray runoff.