52-20

7/27/2009



## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

WASHINGTON, D.C. 20460

OFFICE OF PREVENTION, PESTICIDES AND TOXIC SUBSTANCES

July 27, 2009

Matthew Brooks LG Life Sciences c/o Ag-Chem Consulting 12208 Quinque Lane Clifton, VA 20124

Subject:

Amendment – Supplemental Label LambdaStar Insecticide EPA Reg. No. 71532-20 Your submission dated May 26, 2009

Dear Mr. Brooks:

The labeling referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA), as amended, is acceptable subject to the comments listed below. Two (2) copies of the finished labeling must be submitted prior to releasing the product for shipment. A stamped copy of the label is enclosed for your records.

1. Delete "These new uses can be found on the EPA stamped label for LambdaStar Insecticide (71532-20) dated April 3, 2009" and add "affixed to LambdaStar Insecticide container" to end of the statement beginning "Follow all applicable directions ..." and ending "and precautions on the EPA registered label".

If you have any questions regarding this action, please contact BeWanda Alexander at <u>Alexander.bewanda@epa.gov</u> or (703) 305-7460.

Sincerely, la Alexander Aor

Interim Product Manager 13 Insecticide Branch Registration Division (7505P)

Enclosure

LG Life Sciences

910 Sylvan Ave

Englewood Cliffs, N.J. 07632

ACCEPTED with COMMENTS In EPA Letter Dated JUL 27 2009 Under the Federal Insecticide, Fungicide, and Rodenticide Act. as amended, for the pesticide registered under EPA Reg. No.

## SUPPLEMENTAL LABELING

## RESTRICTED USE PESTICIDE Due to Toxicity to Fish and Aquatic Organisms

For retail sale to and use only by Certified Applicators, or persons under their direct supervision, and only for those uses covered by the Certified Applicator's certification.

**GROUP 3 INSECTICIDE** 

# LAMBDASTAR Insecticide EPA REG. NO. 71532-20

#### SUPPLEMENTAL DIRECTIONS FOR USE ON RICE; WILD RICE; CUCURBIT VEGETABLES; GRASS FORAGE; FODDER AND HAY; OAT, BARLEY, BUCKWHEAT AND RYE; PISTACHIO; AND TUBEROUS AND CORM VEGETABLES

#### DIRECTIONS FOR USE:

It is a violation of Federal law to use this product inconsistent with its labeling. This supplemental labeling must be in the possession of the user at the time of pesticide application. Follow all applicable directions, restrictions, Worker Protection Standard requirements, and precautions on the EPA registered label. These new uses can be found on the EPA stamped label for LambdaStar insecticide (71532-20) dated April 3, 2009.

	Rate		
Target Pests	lb. a.i./A	fl. oz./A	Remarks
Bird Cherry-Oat Aphid Chinch Bug Fall Armyworm Grasshopper spp. Greenbug Leafhopper spp. Rice Stink Bug Riceworm Rice Water Weevil (Adult)	0.025-0.04	3.20-5.12	<ul> <li>Mixers/loaders supporting aerial applications to wild rice at a rate of 0.04 lb. a.i. per acre, and treating 1200 acres (or more) per oay must wear dust-mist respirator.</li> <li>Apply as required by scouting. Timing and frequency of application should be based upon insect populations reaching locally determined economic thresholds. Determine the need for repeat</li> </ul>
	Bird Cherry-Oat Aphid Chinch Bug Fall Armyworm Grasshopper spp. Greenbug Leafhopper spp. Rice Stink Bug Riceworm Rice Water Weevil	Target Pestslb. a.i./ABird Cherry-Oat Aphid0.025-0.04Chinch Bug0.025-0.04Fall ArmywormGrasshopper spp.GreenbugLeafhopper spp.Rice Stink BugRicewormRice Water Weevil(Adult)	Target Pestslb. a.i./Afl. oz./ABird Cherry-Oat Aphid0.025-0.043.20-5.12Chinch Bug0.025-0.043.20-5.12Fall ArmywormGrasshopper spp.GreenbugLeafhopper spp.Rice Stink BugRicewormRice Water Weevil(Adult)

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#### CROP USE RECOMMENDATIONS AGRICULTURAL USES

	True Armyworm Yellow Sugarcane Aphid Yellowstriped Armyworm			<ul> <li>applications, usually at intervals of 5-7 days, by scouting.</li> <li>LambdaStar Insecticide can be safely used when propanil products</li> </ul>
	European Corn Borer <sup>1</sup> Mexican Rice Borer <sup>1</sup> Rice Seed Midge <sup>1</sup>	0.03-0.04	3.84-5.12	<ul> <li>are being used for weed control.</li> <li>Apply by air or by ground equipment using sufficient water to obtain full</li> </ul>
	Rice Stalk Borer <sup>1</sup> Sugarcane Borer <sup>1</sup>			coverage of foliage. When applying by air, apply in a minimum of 2 gallons of water (or a total carrier volume)
				per acre but ensure sufficient volume is used to provide adequate coverage. In addition, adding an emulsifiable
				crop oil (e.g., 1 pt. per acre) when lower aerial application volumes are used is recommended to help
				improve coverage, reduce evaporation, and improve efficacy. Apply a minimum of 10 gallons per
				<ul> <li>acre by ground.</li> <li>For control of rice water weevil in dry seeded rice, make a foliar application as</li> </ul>
				indicated by scouting for the presence of adults and/or feeding scars, usually within a time-frame of 0-5 days after permanent
				flood establishment. Do not exceed 10 days from starting permanent flood until insecticide application unless scouting
				indicates weevils have not been previously present. Adults may also be treated at later stages of rice development to
				<ul> <li>reduce overwintering populations.</li> <li>For control of rice water weevil in water seeded rice, make the first foliar</li> </ul>
				application after pinpoint flood as indicated by scouting for the presence of adults and/or feeding scars usually when
				rice has emerged 0.5 inch above the waterline. Under conditions of prolonged migration into the field, start field
				scouting for rice water weevil adults and/or feeding scars 3-5 days after the initial treatment and, if needed, apply a
				second application within 7-10 days of the first application. Adults may also be treated at later stages of rice development to reduce cuerting an application
· .	) •			<ul> <li>to reduce overwintering populations</li> <li><u>California:</u> In addition to above directions for control of rice water weevil in water seeded rice. I ambdaStar</li> </ul>
				in water seeded rice, LambdaStar Insecticide may be crpfied at the 1-3 leaf growth stage, with the majority at the 2
				leaf growth stage. Adults are vumerable on levees and in the water. Larvae are vulnerable while feeding on the leaf prior to

entering the soil. Monitor for adults, based upon field history and density of population. Monitor field edges and levee areas for adults. Treat in the following manner: a) spray the inside perimeter of the field, or b) spray the entire field.

California: Pre-flood, Pre-plant broadcast soil application for control of rice water weevil in wet-sown rice culture. Uniformly broadcast LambdaStar Insecticide at 3.8-5.1 fl. oz. per acre (0.03 -0.04 lb. a.i. per acre) as a pre-flood, preplant application in wet-sown rice culture. Apply in a minimum of 2 gallons of water (or a total carrier volume) per acre by air or a minimum of 20 gallons of water per acre by ground. For improved efficacy, light incorporation of this product into the upper 1-2 inches of soil following application is recommended - a "roller" may be used for this incorporation. Apply pinpoint flood not more than 5 days after the soil application of this product, or weevil control may be reduced. Scout for feeding scars after plant emergence and apply a second foliar treatment if needed. Do not apply more than 5.1 fl. oz. (0.04 lb. a.i.) per acre under this use pattern.

- Greenbug is known to have many biotypes. Lambdastar Insecticide may only provide suppression. If satisfactory control is not achieved with the first application of Lambdastar Insecticide, a resistant biotype may be present. Use alternate chemistry for control.
- For control of stem borers, scout fields, when rice growth is near panicle differentiation, for early symptoms of damaging populations exhibited as discoloration (orange---tan) around the junction of the leaf sheath and leaf blade which is caused by feeding of young larvae within the sheath. Applications must be made before larvae bore into rice stems. Make the first application at panicle differentiation to 2 inch panicle for partial control. Make the second application at boot to heading for maximum control All rice varieties are susceptible to stem borer damage, but Cocodrie and Priscilla are particularly susceptible.
- Do not release flood water within 7 days of an application.
- Do not apply more than 0.12 lb. a i. (0.96 pt.) per acre per season.

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	<ul> <li>Do not apply more than 0.04 lb. a.i. (0.32 pt.) per acre within 21 to 27 days of harvest.</li> <li>Do not apply within 21 days of harvest.</li> </ul>
	• Do not use treated rice fields for the aquaculture of edible fish and crustacea.
	• Do not apply as an ultra-low volume (ULV) spray.
· · · · · · · · · · · · · · · · · · ·	<sup>1</sup> For control before the larvae bores into the plant stalk.

	· · · · · · · · · · · · · · · · · · ·	. Rate		
Crop	Target Pests	lb. a.i./A	fl. oz./A	Remarks
CEREAL GRAINS:	Cutworm spp. Army Cutworm	0.015-0.025	1.92-3.20	• Apply as required by scouting, usually at intervals of 5 or more days.
Barley Buckwheat Oats Rye Wheat Wheat Hay Triticale	Armyworm Fall Armyworm Yellow-striped Armyworm Flea Beetle spp. Cereal Leaf Beetle Stink Bug spp. English Grain Aphid' Russian Wheat Aphid' Bird Cherry-Oat Aphid' Grasshopper spp. Orange Blossom Wheat Midge	0.02-0.03	2.56-3.84	<ul> <li>Timing and frequency of applications should be based upon insect populations reaching locally determined economic thresholds.</li> <li>Apply with ground or air equipment using sufficient water and application methods to obtain full coverage of foliage. Apply in a minimum of 2 gallons per acre by air and a minimum of 10 gallons per acre by ground.</li> <li>For chinch bug control, repeat applications at 3- to 5-day intervals if needed. LambdaStar Insecticide may only suppress heavy infestations and/or</li> </ul>
	Hessian Fly <sup>4</sup> Grass Sawfly	0.025-0.03	3.20-3.84	migrations. • Greenbug is known to have many
	Chinch Bug Greenbug <sup>1</sup> , <sup>2</sup> Corn Leaf Aphid <sup>2</sup> Mite Spp. <sup>2</sup>	0.03	3.84	<ul> <li>biotypes. LambdaStar Insecticide may provide suppression only. In this situation, a second application using an alternative chemistry may be needed.</li> <li>Do not apply within 30 days of harves</li> <li>Do not allow livestock to graze in treated areas or harvest treated wheat forage as feed for meat or dairy animals within 7 days after last treatment. Do not feed treated straw to meat or dairy animals within 30 days after last treatment.</li> <li>Do not apply more than 0.06 ib. a.i. (0.48 pt.) /A per season.</li> </ul>
				<sup>1</sup> Best control is obtained before insects begin to roll leaves. (Ince wheat has started to boot, LambdaStar Insecticide may provide suppression only. Higher rates and increased coverage will be necessary. <sup>2</sup> Suppression only. <sup>3</sup> See resistance statement under GENERAL INFORMATION. <sup>4</sup> Make applications when adults emerge.

	Rate			· · · · · · · · · · · · · · · · · · ·	
Crop	Target Pests	lb. a.i./A	fl. oz./A	Remarks	
Crop CUCURBIT VEGETABLES Chayote (fruit) Chinese Waxgourd (Chinese preserving melon) Citron Melon Cucumber Gherkin Gourd (edible) Lagenaria species — includes: hyotan, cucuzza Luffa acutangula, L. cylindrical - includes: hechima, Chinese okra Momordica species — includes: balsam apple, balsam pear, bitter melon, Chinese cucumber Muskmelon (hybrids and/or cultivars of Cucurnis melo) — includes: true cantaloupe, cantaloupe.	Target PestsArmyworm spp.Blister Beetlespp.Cabbage LooperCorn EarwormCricket spp.Cucumber Beetlespp. (adults)Cutworm spp.Flea Beetle spp.Grasshopper spp.June Beetle spp.Leafhopper spp.Lygus Bug spp. <sup>1</sup> MelonwormPicklewormPlant Bug spp.Rindworm spp.complexSaltmarshCaterpillarSquash Bug spp.Squash VineBorer spp.			<ul> <li>Remarks</li> <li>Apply as required by scouting, usually at intervals of 5 or more days. Timing and frequency of applications should be based upon insect populations reaching locally determined economic thresholds.</li> <li>Apply with ground or air equipment using sufficient water and application methods to obtain full coverage of all plant parts. Apply in a minimum of 2 gallons per acre by ground.</li> <li>Use higher application volumes and/or rates when foliage is dense, pest populations are high, larvae are large, weather conditions are adverse and/or as plant size increases. Use higher rates for longer residual.</li> <li>Insects that bore or tunnel into leaves, vines, stems or fruit must be controlled before penetration. Only exposed insects (larvae and/or adults) can be controlled with foliar applications of LambdaStar</li> </ul>	
cantaloupe, cantaloupe, casaba, crenshaw melon, golden pershaw melon, honeydew melon, honey balls, mango melon, Persian melon, pineapple melon, Santa Claus melon, snake melon Pumpkin Squash, summer (Cucurbita	Stink Bug spp. Thrips spp. <sup>1,2</sup> Tobacco Budworm <sup>1</sup> Webworm spp.			<ul> <li>applications of LamodaStar Insecticide.</li> <li>Do not apply more than 0.18 lb. a.i. (1.44 pts.) per acre per season.</li> <li>Do not apply within 1 day of harvest.</li> <li><sup>1</sup>See resistant statement under GENERAL INFORMATION.</li> <li><sup>2</sup>Does not include Western Flower Thrips.</li> <li><sup>3</sup>Suppression only.</li> </ul>	
pepo var. melopepo) — includes: crookneck squash, scallop squash, straightneck squash, vegetable marrow, zucchini Squash, winter (Cucurbita maxima; C. moschata)— includes: butternut squash, calabaza, hubbard squash, calabaza, hubbard squash (C. mixta; C. pepo) - includes: acorn squash, spaghetti squash Watermelon — includes: hybrids and/or varieties of	Aphid spp. <sup>1</sup> Leafminer spp. <sup>1,3</sup> Spider Mite spp <sup>3</sup> Whitefly spp. <sup>1,3</sup>	0.03	3.84		

		] ]	Rate	
Crop	Target Pests	lb.a.i./A	fl.oz./A	Remarks
GRASS FORAGE, FODDER AND HAY Pasture and Rangeland Grass, Grass Grown for Hay or Silage	Army Cutworm Cutworm spp. Essex Skipper Range Caterpillar Striped Grass Looper	0.015-0.025	1.92-3.2	<ul> <li>Apply as required by scouting. Timing and frequency of applications should be based upon insect populations reaching locally determined economic thresholds.</li> <li>Apply with ground or air equipment using sufficient water and application methods to obtain</li> </ul>
and Grass Grown for Seed				full coverage of foliage. Apply in a minimum of 2 gallons per acre by air and a minimum of 10 gallons
	Beet Armyworm Billbug spp. <sup>3</sup> Bird Cherry-Oat Aphid <sup>1</sup> Black Grass Bug Black Turfgrass Beetle (adult) Blue Stem Midge Cereal Leaf Beetle	0.02-0.03	2.56-3.84	<ul> <li>per acre by ground.</li> <li>Use higher application volumes and rates when foliage is dense, pest populations are high, larvae are large and/or weather conditions are adverse. Use higher rates for longer residual.</li> <li>For chinch bug control,</li> </ul>
	Chinch Bug Crane Fly spp. Cricket spp. English Grain Aphid <sup>1</sup> Fall Armyworm Flea Beetle spp. Grass Mealybug			<ul> <li>LambdaStar Insecticide may only suppress heavy infestations and/or migrations. In this situation, a second application using an alternative chemistry may be needed.</li> <li>Greenbug is known to have many biotypes. LambdaStar Insecticide</li> </ul>
	Grass Sawfly (adult) Grasshopper spp. Green June Beetle (adult) Greenbug <sup>1,2</sup> Japanese Beetle (adult) Katydid spp. Leafhopper spp. Mite spp. <sup>3</sup> Russian Wheat Aphid <sup>1</sup>			may provide suppression only. In this situation, a second application using an alternative chemistry may be needed. Pasture and rangeland grass may be used for grazing or cut for forage 0 days after application. Do not cut grass to be dried and harvested for hay until 7 days after the last application.
	Southern Armyworm Spittlebug spp. Stink Bug spp. Sugarcane Aphid Thrips spp. Tick spp. True Armyworm Webworm spp. Yellowstriped Armyworm			Grass grown for seed: Straw and mature seed (seed screenings) may be used as feed 7 days after the last application Regrowth of grass grown for seed may be used for grazing, cut for forage or out to be dried and harvested for hay
				<ul> <li>Do not apply more than 0.03 lb.</li> <li>a.i. (0.24 pt.) per acre per outting for pastures, rangeland and grasses grown for seed. A minimum retreatment interval (RTI) of 30 days is required for pastures and rangeland receiving 0.03 ib. a.i. per acre which have not been cut</li> </ul>

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		between applications.
		• Do not apply more than 0.09 lb. a.i. (0.72 pt.) per acre per season.
		<sup>1</sup> Best control is obtained before insects begin to roll leaves. <sup>2</sup> See resistance statement under GENERAL INFORMATION. <sup>3</sup> Suppression only.

	Rate			1
Crop	Target Pests	lb. a.i./A	fl. oz./A	Remarks
TREE NUTS: Almond Beech Nut Brazil Nut Butternut Cashew Chestnut Chinquapin Filbert (Hazelnut) Hickory Nut Macadamia Nut (Bush Nut) Pistachio Walnut, Black Walnut, English (Persian)	Leafroller spp. Navel Orangeworm Codling Moth Filbertworm Peach Twig Borer Walnut Husk Fly spp. (Adult) Ants Plant Bug spp. Stink Bug spp. Chinch Bug Leaffooted Bug Walnut Aphid	0.02-0.04	2.56-5.12	<ul> <li>Apply as required by scouting, usually at intervals of 5 or more days. Timing and frequency of applications should be based upon insect populations reaching locally determined economic threshold.</li> <li>Apply with ground or air equipment using sufficient water to obtain full coverage of the foliage or target area. Apply in a minimum of 10 gallons per acre by air and a minimum of 50 gallons per acre by ground.</li> <li>Do not apply within 14 days of harvest.</li> <li>Do not apply more than 0.16 lb. a.i. (1.28 pts.) per acre per year.</li> <li>Do not apply more than 0.12 lb. a.i.</li> </ul>
Pecan	Hickory Shuckworm Pecan Casebearer spp. Pecan Weevil Pecan Aphid spp. Pecan Spittlebug Pecan Phylloxera spp. Stink Bug spp.	0.02-0.04	2.56-5.12	(0.96 pt.) per acre per year post bloom.

		R	late	
Crop	Target Pests	lb. a.i./A	fl. oz./A	Remarks
TUBEROUS AND CORM VEGETABLES (Potato, Sweet Potato, Yams and Related)	Cutworm spp. Leafhopper spp. Saltmarsh Caterpillar Sweet Potato Hornworm Woolybear Caterpillar spp.	0.015- 0.025	1.92-3.20	• Apply as required by scouting, usually at intervals of 7 or more days. Timing and frequency of applications should be based upon insect populations reaching locally determined economic thresholds.
Arracacha Arrowroot Artichoke (Chinese and Jerusalem only) Canna (edible) Cassava (bitter and sweet) Chayote (root) Chufa Dasheen Ginger Leren Potato Sweet Potato Tanier Turmeric Yam (bean and true)	Aphid spp. <sup>1</sup> Armyworm spp. <sup>1</sup> Blister Beetle spp. Colorado Potato Beetle <sup>1</sup> Corn Earworm Cricket spp. Cucumber Beetle spp. (adults) European Corn Borer Flea Beetle spp. (adults) Grasshopper spp. Looper spp. <sup>1</sup> Lygus Bug spp. <sup>1</sup> Plant Bug spp. Potato Psyllid Potato Tuberworm Stink Bug spp. Sweet Potato Leaf Beetle (adults) Sweet Potato Vine Borer Thrips spp. <sup>1,2</sup> Tortoise Beetle spp. Webworm spp.	0.02-0.03	2.56-3.84	<ul> <li>Apply with ground or air equipment using sufficient water and application methods to obtain full coverage of all above ground plant parts. Apply in a minimum of 2 gallons per acre by air and a minimum of 10 gallons per acre by ground.</li> <li>Use higher application volumes and/or rates when foliage is dense, pest populations are high, larvae are large, weather conditions are adverse and/or as plant size increases. Use higher rates for longer residual.</li> <li>Insects that bore or tunnel into leaves, vines, stems, tubers or corms must be controlled before penetration. Only exposed insects (larvae and/or adults) can be controlled with foliar applications of LambdaStar Insecticide.</li> <li>Do not apply within 7 days of</li> </ul>
	Leafminer spp. <sup>1,3</sup> Whitefly spp. <sup>1,3</sup> Spider Mite spp. <sup>3</sup>	0.03	3.84	<ul> <li>Do not apply within 7 days of harvest.</li> <li>Do not apply more than 0.12 lb. a.i. (0.96 pt.) per acre per season.</li> <li><sup>1</sup>See resistance statement under GENERAL INFORMATION.</li> <li><sup>2</sup>Does not include Western Flower Thrips.</li> <li><sup>3</sup>Suppression only.</li> </ul>

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