



JOHN ELIAS BALDACCI
GOVERNOR

STATE OF MAINE
DEPARTMENT OF AGRICULTURE, FOOD AND RURAL RESOURCES
BOARD OF PESTICIDES CONTROL
28 STATE HOUSE STATION
AUGUSTA, MAINE 04333-0028

SETH H. BRADSTREET III
COMMISSIONER

HENRY JENNINGS
DIRECTOR

June 3, 2008

To: Board of Pesticides Control members and Staff

From: Wes Smith

Re: Special Local Need (24c) application for the use of DuPont Coragen Insecticide (EPA Reg # 352-729) on potatoes to control Colorado Potato Beetle.

DuPont has submitted the above referenced 24c application at the request of James Dwyer, Crops Specialist with the University of Maine Cooperative Extension. As indicated in Jim's letter of support the requested product would provide an alternative mode of action to the neonicotinoid based insecticides. These insecticides have been used to control Colorado potato beetle populations for over 10 years and there are increasing resistance issues, especially in Southern and Central Maine.

Attached are copies of DuPont's cover letter, the 24c application, the proposed 24c label, and Jim Dwyer's letter of support. The package submitted by DuPont also contained a great deal of data on the established tolerance and efficacy. Lebel will review this data and be at the Board meeting to participate in the discussion. Jim will be unable to attend the Board meeting, but he indicated that someone from the potato industry will be there.



DuPont Crop Protection
Stine-Haskell Research Center
P.O. Box 30
Newark, DE 19714-0030

Attention: Wesley C. Smith
Board of Pesticides Control
ME Dept. of Agriculture
28 State House Station
Augusta, ME 0433-0028

May 30, 2008

Subject: *Special Local Need 24 (c) Labeling for DuPont™ Coragen® insect control for use on Potatoes in the State of Maine (EPA Reg. No. 352-729).*

Dear Mr. Smith:

E. I. du Pont de Nemours and Company is herein applying for a Special Local Need (SLN) registration for DuPont™ Coragen® insect control (EPA Reg. No. 352-729) in the State of Maine for control of Colorado potato beetle, Cabbage looper and European corn borer in potatoes.

This SLN 24(c) is warranted because of Colorado potato beetle (CPB) populations that cannot be adequately controlled by the use of any available federally-registered pesticide product. A special local need exists for the control of CPB populations as alternative products are insufficient to meet this local need. In particular, growers have very limited tools to use against the more destructive second generation of CPB which often consists of a combination of beetle lifestages. This mixture of CPB lifestages poses a special problem as no currently available chemistries will control both immature and adult stages of this pest species.

Additionally, the active ingredient – chlorantraniliprole - was identified as a Reduced Risk pesticide by the US EPA because its “mammalian toxicity risk profile and ecotoxicity profile compared favorably with many of the registered alternatives.” EPA also states: “Chlorantraniliprole is expected to be... an alternative to pyrethroids for vegetables.” (Quotations from EPA Fact Sheet for chlorantraniliprole which can be found at: <http://www.epa.gov/opprd001/factsheets/chloran.pdf>)

Coragen® (18.4% a.i.; suspension concentrate) is currently not registered for use on potatoes. DuPont™ Altacor® insect control (EPA Reg. No. 352-730; 35% a.i.; water dispersible granule), which contains the same active ingredient, is registered for use on potatoes. Although the initial Coragen® Federal Section 3 registration did not include potatoes, DuPont will be submitting amended labeling to the EPA adding potatoes to the Coragen® label in the near future. The SLN 24(c) is requested for Coragen® to ensure that this product will be available to potato growers in the state of Maine.

Although Altacor® is registered on potatoes, growers will prefer to use Coragen® because of its improved value. DuPont has discussed the addition of potatoes to the Coragen® label with EPA and understands that this should not be a problem. DuPont also asked if EPA would have any concerns with requests for FIFRA SLN 24(c) labeling on potatoes and received a preliminary opinion that this would probably be acceptable as an interim solution. While there are limited supplies of both products, Coragen® is also expected to be more readily available to potato growers in Maine.

Additionally, resistance to the chloronicotinal insecticide class is building in local populations of CPB. Coragen®, a novel mode of action in the new insecticide class anthranilic diamide, will be an excellent choice in Insecticide Resistance Management programs. This new technology will be a great addition to the arsenal of controlling CPB on fields where the in-furrow treatments of chloronicotinal insecticides are starting to provide less than adequate control.

Enclosed are the following SLN application materials:

- EPA Form 8570-25, Application/Notification of State Registration of a Pesticide to meet a Special Local Need.
- DuPont™ Coragen® insect control FIFRA Section 3 stamped approved labeling.
- DuPont™ Coragen® insect control FIFRA Section 3 final printed label.
- Proposed DuPont™ Coragen® insect control Special Local Needs labeling for control of Cabbage Looper, Colorado Potato Beetle, and European Corn Borer in potatoes in the state of Maine.
- Copy of Federal Register Notice establishing a tolerance for chlorantraniliprole on potatoes (0.01 ppm)
- DuPont report (DuPont-24403) demonstrating the residue levels in edible commodities following applications with either of the two formulations (Altacor® or Coragen®) are comparable.
- Confidential Statement of Formula.
- Letter of support from:
 - James D. Dwyer, Crops Specialist
- DuPont™ Coragen® insect control Material Safety Data Sheet
- Supporting product performance data.

If you have any questions or concerns around this application, please feel free to contact me via phone at 302.451.4517 or via email at Richard.a.carver@usa.dupont.com. You can also contact Jonathan Janis, US Registration Specialist, via phone at 302.451.4525 or via email at jonathan.janis@usa.dupont.com.

Sincerely,



Richard A. Carver
Sr. US Product Registration Manager

Enclosures

United States Environmental Protection Agency
Office of Pesticide Programs, Registration Division (7505C)
Washington, DC 20460

For State Use Only
Registration No. Assigned
Date Registration Issued



**Application for/Notification of State Registration
of a Pesticide To Meet a Special Local Need**
(Pursuant to section 24(c) of the Federal Insecticide,
Fungicide, and Rodenticide Act, as Amended)

1. Name and Address of Applicant for Registration Attention: Jonathan A. Janis E. I. du Pont de Nemours & Company DuPont Crop Protection Stine-Haskell Research Center, S300/416 P.O. Box 30 Newark, DE 19714-0030	2. Product is (Check one)	
	<input checked="" type="checkbox"/> EPA-Registered	EPA Registration Number 352-729
	<input type="checkbox"/> New (not EPA-registered) Attach EPA Form 8570-4, Confidential Statement of Formula for new products.	EPA Company Number 352
3. Active Ingredient(s) in Product Chlorantraniliprole		

4. Product Name DuPont Coragen Insect Control	5. If this is a food/feed use, a tolerance or other residue clearance is required. Cite appropriate regulations in 40 CFR Part 180, 185, and/or 186. 180.628 - Potatoes- 0.01ppm
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6. Type of Registration (Give details in Item 13 or on a separate page, properly identified and attached to this form): <input type="checkbox"/> a. To permit use of a new product. <input checked="" type="checkbox"/> b. To amend EPA registrations for one or more of the following purposes:	7. Nature of Special Local Need (check one) <input type="checkbox"/> There is no pesticide product registered by EPA for such use. <input checked="" type="checkbox"/> There is no EPA-registered pesticide product which, under the conditions of use within the State, would be as safe and/or as efficacious for such use within the terms and conditions of EPA registration. <input type="checkbox"/> An appropriate EPA-registered pesticide product is not available.
<input checked="" type="checkbox"/> (1) To permit use on additional crops or animals.	9. Has an EPA Registration or Experimental Use Permit for this chemical ever been (check applicable box(es), if known): <input checked="" type="checkbox"/> Sought <input checked="" type="checkbox"/> Issued <input type="checkbox"/> Denied <input type="checkbox"/> Cancelled <input type="checkbox"/> Suspended <input checked="" type="checkbox"/> Registration <input checked="" type="checkbox"/> Experimental Use Permit <input type="checkbox"/> No Previous Permit Action
<input type="checkbox"/> (2) To permit use at additional sites.	
<input type="checkbox"/> (3) To permit use against additional pests.	
<input type="checkbox"/> (4) To permit use of additional application techniques or equipment.	
<input type="checkbox"/> (5) To permit use at different application rates.	
<input type="checkbox"/> (6) Other (specify below)	

10. Has FIFRA section 24(c) registration for this use of the product ever, by another State, been (check appropriate box(es), if known): <input checked="" type="checkbox"/> Sought <input type="checkbox"/> Issued <input type="checkbox"/> Denied <input type="checkbox"/> Revoked If any of the above are checked, list States in Item 13 below. <input type="checkbox"/> No FIFRA section 24(c) Action	11. Endangered Species Act: (Give details in Item 13 or on a separate page, properly identified and attached to this form) Identify the counties where this pesticide will be used. If Statewide, indicate "all." Provide a list of Federally protected endangered/threatened species which occur in the areas of proposed use.
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Certification I certify that the statements I have made on this form and all attachments thereto are true, accurate, and complete. I acknowledge that any knowingly false or misleading statement may be punishable by fine or imprisonment or both under applicable law.	12. Indicate use status of Special Local Need, i.e., planned dates of use: From: 05/23/2008 To: 12/31/2013
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Signature of Applicant or Authorized Representative <i>Jonathan A. Janis</i>	13. Comments (attach additional sheet, if needed) Coragen(18.4% a.i.; SC) is currently not registered for use on potatoes. DuPont Altacor insect control (EPA Reg. No. 352-730; 35% a.i.; WG), containing the same ai, is registered for use on potatoes. Although the initial Coragen® Federal Section 3 registration did not include potatoes, DuPont will be submitting amended labeling to the EPA adding potatoes to the Coragen® label in the near future. The SLN 24(c) is requested for Coragen® to ensure that this product will be available to potato growers in the state of Maine.
Title Product Registration Specialist	
Telephone Number (302) 451-4525	
Date 5/30/2008	

Determination by State Agency
This registration is for a Special Local Need and is being issued in accordance with section 24(c) of FIFRA, as amended. To the best of our knowledge, the information above is correct, except as noted in "Comments" below or in attachments.

Name, Title, and Address of State Agency Official	Comments (by State Agency Only)	Received by EPA
Title		
Telephone Number		
Date		

**DuPont Crop
Protection**

**SPECIAL LOCAL NEED
24(C)LABELING**

**DUPONT™ CORAGEN®
INSECT CONTROL
WITH ACTIVE INGREDIENT RYNAXYPYR®
FOR USE ON POTATO
IN THE STATE OF MAINE**

FOR DISTRIBUTION AND USE ONLY WITHIN THE STATE OF MAINE

DUPONT™ CORAGEN® INSECT CONTROL

EPA Reg. No. 352-729

**FOR CONTROL OF CABBAGE LOOPER, COLORADO POTATO
BEETLE, AND EUROPEAN CORN BORER IN POTATOES
IN THE STATE OF MAINE**

DIRECTIONS FOR USE

It is a violation of Federal law to use this product in a manner inconsistent with its labeling. Dupont™ CORAGEN® insect control is recommended for use on potatoes to control Cabbage looper, Colorado potato beetle, and European corn borer in Maine.

APPLICATION

Apply at the specified rates when insect populations reach locally determined economic thresholds. Consult the cooperative extension service, professional consultants or other qualified authorities to determine appropriate threshold levels for treatment in your area.

Apply follow-up treatments of DuPont™ CORAGEN®, as needed, to keep pest populations within threshold limits. Do not apply more than 15.4 fl oz CORAGEN® (0.2 lbs. a.i.) per acre per crop. Refer to the Resistance Management section of the Section 3 Federal product label for further guidance on follow-up treatments. See individual crop sections of the product label for specific minimum spray interval.

Use sufficient water to obtain thorough, uniform coverage. CORAGEN® may be applied by: ground (foliar), or aerial application equipment. For aerial application use a minimum of 5 gallons per acre (GPA) of water. For all other application methods use the following directions, unless otherwise specified in this label: use a minimum of 10 gal per acre (GPA) of water. Use of Adjuvants: In some situations where coverage is difficult to achieve such as closed canopy, dense foliage, plants with waxy leaf surfaces, or less than optimum application equipment, an adjuvant may improve performance. Use only adjuvant products that are labeled for agricultural use and follow the directions on the manufacturer's label. Always conduct a premix test for compatibility. Use a proven, EPA-approved adjuvant that does

not affect foliage and/or fruit finish. Refer to specific crop sections of this label for additional adjuvant guidance.

IMPORTANT

Before using CORAGEN®, read and follow all applicable directions, restrictions and precautions on the EPA Registered label. This bulletin contains new or supplemental instructions for use of this product, which do not appear on the EPA-registered package label. Follow the instructions carefully. This labeling must be in the possession of the user at the time of pesticide application. Read the Limitations of Warranty and Liability on the Section 3 Federal product label before buying or using this product. If terms are not acceptable, return the unopened package at once to the Seller for full refund of purchase price paid. Otherwise, use by the Buyer or any other User constitutes acceptance of the terms of the Limitation of Warranty and Liability on the Section 3 Federal product label.

DR-815 052308

For product information call 1-888-6-DUPONT

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Crop	Application Method	Target Pest	DUPONT™ CORAGEN® RATE		Last Application (Days to Harvest)	REI (Hours)
			Lb. ai per acre	fluid ounces product per acre		
Potato	FOLIAR	Cabbage looper Colorado potato beetle European corn borer	0.045 – 0.065	3.5 – 5.0	14	4 hr.
<p>Do not apply more than 15.4 fl oz CORAGEN® (0.2 lbs. a.i.) per acre per crop. The minimum interval between treatments is 5 days. Colorado potato beetle resistance management: Do not apply CORAGEN® more than twice to a generation of Colorado potato beetle or within any 30 day period. Application(s) to the next generation of Colorado potato beetle must be with an effective product with a different mode of action. Do not apply CORAGEN® more than once to Colorado potato beetle via overhead chemigation.</p> <p>Instructions for the Use of CORAGEN® in Overhead Sprinkler Chemigation Systems. Types of Chemigation Systems: CORAGEN® may be applied only through overhead sprinkler irrigation systems. Overhead irrigation systems include the following; center pivot, end tow, hand move, lateral move, side roll, solid set and wheel line. The irrigation system used must provide uniform water distribution.</p> <p>General Directions for Chemigation: Preparation A pesticide tank is recommended for the application of CORAGEN® in chemigation systems. Thoroughly clean the injection system and tank of any fertilizer or chemical residues using a standard clean-out procedure. Dispose of any residues in accordance with State and Federal laws. With the mix tank 1/4 to 1/2 full with water and the agitator running, measure the required amount of CORAGEN® and add it to the tank. Then add additional water to bring your total pesticide mixture up to the desired volume for your application. Note: Always add the CORAGEN® to water, never put CORAGEN® into a dry tank or other mixing equipment without first adding water. See "Tank Mixing Sequence" section of the container label for tank mixing sequence. Continue to agitate the mixture throughout the application process. Use mechanical or hydraulic agitation, do not use air agitation.</p> <p>Injection Into Chemigation Systems Inject the proper amount of CORAGEN® into the irrigation water flow using a positive displacement injection pump. Injection should occur at a point in the main irrigation water flow to ensure thorough mixing with the irrigation water. For continuously moving systems, inject the solution containing CORAGEN® into the irrigation water line continually and uniformly throughout the irrigation cycle. Apply in no more than 0.2 inches of water per acre. For overhead sprinkler systems that are stationary, add the solution containing CORAGEN® to the irrigation water line and apply no more than 0.2 inches of water per acre.</p> <p>Uniform Water Distribution The irrigation system used for application of CORAGEN® must provide for uniform distribution of CORAGEN® treated water. Non-uniform distribution can result in crop injury, lack of effectiveness or illegal pesticide residues in or on the crop being treated. Ensure the irrigation system is calibrated to uniformly distribute the chemigation application to the crop. Contact the equipment manufacturer, the local University Extension agent or other experts if you have questions about achieving uniform distribution of the application.</p> <p>Equipment Calibration Calibrate the irrigation system and injector before applying CORAGEN®. Calibrate the injection pump while the system is running using the expected irrigation rate. If you have questions about calibration, you should contact your state extension service specialists, equipment manufacturer or other experts.</p> <p>Monitoring of Chemigation Applications A person knowledgeable of the chemigation system and responsible for its operation, or under the supervision of a responsible person, shall shut the system down and make necessary adjustments should the need arise. Wear the personal protective equipment as defined in the PPE section of the label for applicators and other handlers when making adjustments or repairs on the chemigation system when CORAGEN® is in the irrigation water.</p> <p>Required System Safety Devices Do not connect any irrigation system used for pesticide applications to a public water system unless the pesticide label-prescribed safety devices are in place. Public water system means a system for the provision to the public of piped water for human consumption, if such a system has at least 15 service connections or regularly serves an average of at least 25 individuals at least 60 days out of the year.</p> <ol style="list-style-type: none"> 1. 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. 2. The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection pump. 3. 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. 4. The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops. 5. 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. 6. 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. 7. Chemigation systems connected to public water systems must contain a functional, reduced-pressure zone, backflow preventer (RPZ) or the functional equivalent in the water supply line upstream from the point of pesticide introduction. As an option to the RPZ, the water from the public water system should be 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 the top or overflow rim of the reservoir tank of at least twice the inside diameter of the fill pipe. 						

For product information call 1-888-6-DUPONT

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May 29, 2008

Richard Carver, Ph.D.
Dupont Crop Protection
Stine-Haskell Research Center
1090 Elkton Rd.
Newark, Delaware 19714-0030

Dear Dr. Carver,

I am writing this letter in support of Dupont Crop Protection Corporation's request for a special local needs label under section 24-C of the Federal Insecticide Fungicide Rodenticide Act as administered by the U.S. Environmental Protection Agency and the Maine Board of Pesticides Control for rynaxypyr to be sold as Coragen.

Here in Maine commercial potato producers have managed Colorado potato beetle populations primarily through the use of neonicotinoid based insecticides for over 10 years. In 2007 82% of our commercial potato growers used a neonicotinoid based insecticide at the time of planting. Insecticide resistance issues have been significant in the Fryeburg area of Southern Maine, moderate resistance issues have been encountered in the central Maine area and are of building concern in the Aroostook County area. Our growers have been advised to implement a resistance management strategy by not following neonicotinoids with neonicotinoids within the same cropping year and by rotating insecticide modes of action. As you know efficacious chemistry for Colorado potato beetle control is rather limited due to resistance issues. The potential cross resistance between spinosad and the neonicotinoids as reported by Dr. Gaylen Dively of the University of Maryland further complicates the issue.

Having a new class of chemistry to assist in managing Colorado potato beetles would be a great benefit for potato growers in Maine. Having a product such as rynaxypyr would reduce the dependence on the neonicotinoids and be a great asset to resistance management in this state.

My understanding is that the active ingredient rynaxypyr has a full section 3 registration for use on potatoes as the product Altacor. It is also my understanding that Altacor even

though labeled for use on potatoes is targeted for the higher valued tree fruit market. The product Coragen which has the same active ingredient is being targeted for the vegetable market with a lower price point to be competitive within that market. If coragen could be labeled for use on potatoes in Maine via a 24-C Special Local Needs Registration this would be an excellent benefit for the Maine potato grower.

Sincerely,

James D. Dwyer
Crops Specialist