

PM # 90

Reg # 275-37

1/1/92

Please read instructions on reverse before completing form.

Form Approved, OMB No. 2070-0060. Approval expires 2-28-95



United States  
Environmental Protection Agency  
Washington, DC 20460

Registration  
 Amendment  
 Other

OPP Identifier Number  
226732

Application for Pesticide - Section I

|   |  |  |
|---|--|--|
| 1. Company/Product Number<br>Abbott Laboratories/275-37   | 2. EPA Product Manager<br>Janet Andersen   | 3. Proposed Classification<br><input checked="" type="checkbox"/> None <input type="checkbox"/> Restricted |
| 4. Company/Product (Name)<br>Abbott Laboratories/DiPel 2X   | PM#<br>90  |  |
| 5. Name and Address of Applicant (Include ZIP Code)<br>Chemical and Agricultural Products Division<br>Abbott Laboratories<br>1401 Sheridan, Dept 28R, A1<br>North Chicago, Illinois 60064-4000<br><input type="checkbox"/> Check if this is a new address | 6. Expedited Review. In accordance with FIFRA Section 3(c)(3) (b)(i), my product is similar or identical in composition and labeling to:<br>EPA Reg. No. _____<br>Product Name _____ |  |

Section - II

|  |  |
|--|--|
| <input type="checkbox"/> Amendment - Explain below.                            | <input type="checkbox"/> Final printed labels in response to Agency letter dated _____ |
| <input type="checkbox"/> Resubmission in response to Agency letter dated _____ | <input type="checkbox"/> "Me Too" Application.   |
| <input type="checkbox"/> Notification - Explain below.                         | <input type="checkbox"/> Other - Explain below.  |

Explanation: Use additional page(s) if necessary. (For section I and Section II.)

Change REI to 4 hours

Section - III

|   |   |  |   |   |  |
|---|---|--|---|---|--|
| 1. Material This Product Will Be Packaged In:   |   |  |   | 2. Type of Container  |  |
| Child-Resistant Packaging<br><input type="checkbox"/> Yes*<br><input type="checkbox"/> No   | Unit Packaging<br><input type="checkbox"/> Yes<br><input type="checkbox"/> No | Water Soluble Packaging<br><input type="checkbox"/> Yes<br><input type="checkbox"/> No | Metal<br><input type="checkbox"/> Plastic<br><input type="checkbox"/> Glass<br><input type="checkbox"/> Paper<br><input type="checkbox"/> Other (Specify) _____ |   |  |
| * Certification must be submitted   |   | If "Yes" Unit Packaging wgt. No. per container   | If "Yes" Package wgt No. per container  |   |  |
| 3. Location of Net Contents Information<br><input type="checkbox"/> Label <input type="checkbox"/> Container  |   | 4. Size(s) Retail Container  |   | 5. Location of Label Directions<br><input type="checkbox"/> On Label<br><input type="checkbox"/> On Labeling accompanying product |  |
| 6. Manner in Which Label is Affixed to Product<br><input type="checkbox"/> Lithograph<br><input type="checkbox"/> Paper glued<br><input type="checkbox"/> Stenciled |   |  | <input type="checkbox"/> Other _____  |   |  |

Section - IV

|   |                                       |   |
|---|---------------------------------------|---|
| 1. Contact Point (Complete items directly below for identification of individual to be contacted, if necessary, to process this application.)   |                                       |   |
| Name<br>Marvin H. Alphin  | Title<br>Manager, Ag Registrations    | Telephone No. (Include Area Code)<br>(708) 937-7909 |
| Certification<br>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. |                                       | 6. Date Application Received<br>(Stamped)           |
| 2. Signature<br>  | 3. Title<br>Manager, Ag Registrations |   |
| 4. Typed Name<br>Marvin H. Alphin   | 5. Date<br>6/5/95                     |   |

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DIPEL 2X  
BIOLOGICAL INSECTICIDE

WETTABLE POWDER  
BIOLOGICAL INSECTICIDE

Active Ingredient:

*Bacillus thuringiensis*, subsp. *kurstaki*.....6.4%w/w

Inert Ingredients:.....93.6%w/w

Total: 100.0% w/w

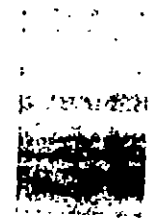
Potency: 32,000 International Units per mg of product  
or 14.52 billion International Units per pound  
of product.

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  
CAUTION

REVISED

EPA Registrations No. 275-37  
EPA Est. No. 33762-IA-1



STATEMENT OF PRACTICAL TREATMENT

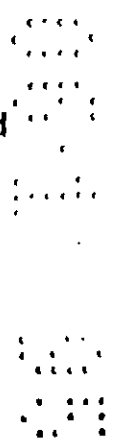
IF IN EYES: Flush with plenty of water. Get medical attention if irritation  
persists.

IF ON SKIN: Wash skin with plenty of soap and water. Get medical attention  
if irritation persists.

PRECAUTIONARY STATEMENTS  
HAZARDS TO HUMANS (AND DOMESTIC ANIMALS)

Harmful if absorbed through the skin. Causes moderate eye irritation. Avoid  
contact with skin, eyes, or clothing.

Personal Protective Equipment



Applicators and other handlers must wear:

- \* Long-sleeved shirt and long pants
- \* Waterproof gloves
- \* Shoes plus socks

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

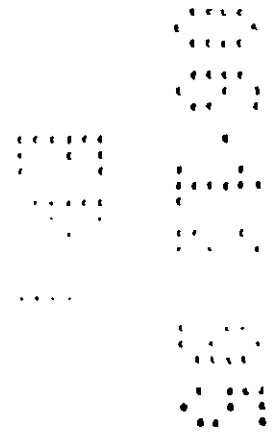
**User Safety Recommendations**

Users should:

- Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet.
- Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

**DIRECTIONS FOR USE**

It is a violation of Federal law to use this product in a manner inconsistent with its labeling. For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation.



1/07/22

### 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 intervals. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

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.

Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of ~~4~~ hours.

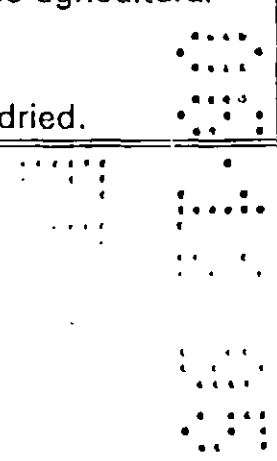
PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil, or water is:

- \* Coveralls,
- \* waterproof gloves
- \* shoes plus socks

### NON-AGRICULTURAL USE REQUIREMENTS

The requirements in this box apply to uses of this product that are NOT within the scope of the Worker Protection Standard for agricultural pesticides (40 CFR Part 170). The WPS applies when this product is used to produce agricultural plants on farms, forests, nurseries, or greenhouses.

Keep unprotected persons out of treated areas until sprays have dried.



**STORAGE AND DISPOSAL**

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

**Storage:** Reclose containers of unused DiPel 2X. Store in a dry place.

**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:** Triple rinse (or equivalent). Then 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.

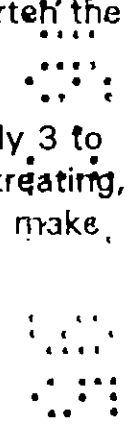
**APPLICATION DIRECTIONS:**

**Days to harvest:** There are no restrictions on applying DiPel 2X up to the time of harvest.

**Sites:** DiPel 2X may be used for any labeled pest in both field and greenhouse uses.

DiPel 2X is a highly selective insecticide for use against listed caterpillars (larvae) of lepidopterous insects. Close scouting and early attention to infestations is highly recommended. Larvae must eat deposits of DiPel 2X to be affected. Always follow these directions:

- Treat when larvae are young (early instars) before the crop is extensively damaged.
- Larvae must be actively feeding on treated, exposed plant parts.
- Thorough spray coverage is needed to provide a uniform deposit of DiPel 2X at the site of larval feeding. For some crops directed drop nozzles by ground machine are required.
- Under heavy pest population pressure, use the higher label rates, shorten the spray interval, and/or raise gallonage to improve spray coverage.
- Repeat applications at an interval sufficient to maintain control, usually 3 to 14 days depending on plant growth rate, moth activity, rainfall after treating, and other factors. If attempting to control a pest with a single spray, make



the treatment when egg hatch is essentially complete, but before extensive crop damage occurs.

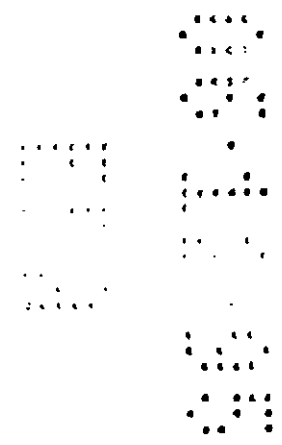
- A spreader-sticker which has been approved for use on growing and harvested crops should be added for hard-to-wet crops such as cole crops, or to improve weather-fastness of the spray deposits.
- DiPel 2X is a non-restricted use pesticide and does not require a restricted use permit for purchase and use.

After eating a lethal dose of DiPel 2X, larvae stop feeding within the hour, and will die within several days. Dying larvae move slowly, discolor, then shrivel, blacken and die.

DiPel 2X may be applied in conventional ground or aerial equipment with quantities of water sufficient to provide thorough coverage of infested plant parts. The amount of water needed per acre will depend on crop size, weather, spray equipment, and local experience. Unless otherwise indicated, use at least 2 gallons of water per acre by air; except in the Western U.S., where 5 to 10 gallons is the usual minimum. Add water to the spray or mixing tank at the level that provides maximum agitation. With the agitator running, slowly sprinkle in the DiPel 2X. Continue agitation. Then add other spray materials (if any). Add the balance of the water and agitate until mixed. Maintain the suspension while loading and spraying. Do not mix more DiPel 2X than can be used in a 12-hour period.

For Smaller Spray Volumes:

| <u>If Rate is</u>         | <u>Use This Amount<br/>Per Gallon</u> |
|---------------------------|---------------------------------------|
| 1/4 lb./acre or 100 gals. | 1/2 tsp.                              |
| 1/2 lb./acre or 100 gals. | 1 tsp.                                |
| 1 lb./acre or 100 gals.   | 2 tsps.                               |
| 2 lb./acre or 100 gals.   | 4 tsps.                               |



## CHEMIGATION USE DIRECTIONS

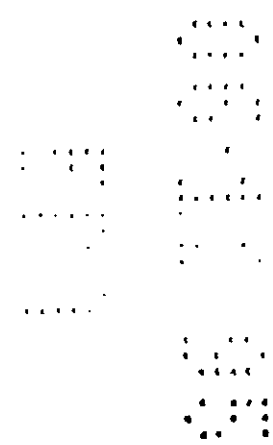
Chemigation directions apply only to the state of Florida and to the following crop categories: Flowers, bedding plants, ornamentals, greenhouse/shade house and outdoor nursery crops. Refer to these label sections under **General Instruction** for application rate information when chemigation is used.

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 systems. Do not connect an irrigation system (including greenhouse systems) used for pesticide applications to a public water system.

### Spray Preparation

First prepare a suspension of DiPel 2X in a mix tank. Fill tank with 1/2 to 3/4 the desired amount of water. Start mechanical or hydraulic agitation. Add the required amount of DiPel 2X, and then the remaining volume of water. Then set the sprinkler to deliver a minimum of 0.1 to 0.3 inch of water per acre. Start sprinkler and uniformly inject the suspension of DiPel 2X into the irrigation water line so as to deliver the desired rate per acre. The suspension of DiPel 2X should be injected with a positive displacement pump into the main line ahead of a right angle turn to insure adequate mixing. Any questions on calibration should be directed to your State Extension Service Specialists, to equipment manufacturers or other experts.

**NOTE:** When treatment with DiPel 2X has been completed, further field irrigation over the treated area should be avoided for 24 to 48 hours to prevent washing the material off the crop.



## GENERAL PRECAUTIONS FOR APPLICATIONS THROUGH SPRINKLER IRRIGATION SYSTEMS

Maintain continuous agitation in the mix tank during mixing and application to insure a uniform suspension.

Greater accuracy in calibration and distribution will be achieved by injecting a larger volume for a more dilute solution per unit time.

Crop injury, lack of effectiveness, or illegal residues in the crop can result from nonuniform distribution of treated water. 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. Allow sufficient time for pesticide to be flushed through all lines and all nozzles before turning off irrigation water.

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.

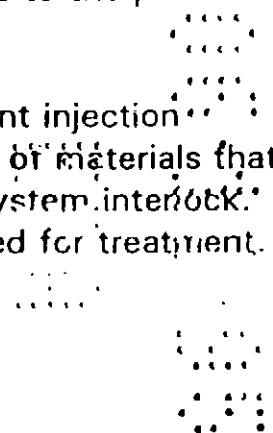
The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection pump.

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.





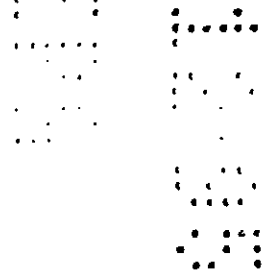
**CHEMIGATION USE DIRECTIONS (continued)**

Do not apply when wind speed favors drift, when system connections or fittings leak, when nozzles do not provide uniform distribution or when lines containing the product must be dismantled and drained.

**GENERAL INSTRUCTIONS**

**APPLICATION RATES**

| Crop Group (Typical Crops)   | PESTS                 | POUNDS/ACRE       |
|--|-----------------------|-------------------|
| <b>Root and Tuber</b> such as Carrots, Potatoes, Beets and Sugarbeets<br><b>Bulb</b> such as Onions (green and bulb) and Garlic<br><b>Leafy and Cole Crops</b> such as Lettuce (head and leaf), Kale, Celery, Spinach, Broccoli, Cabbage, Mustard Greens, Brussels Sprouts, Cauliflower, Collards, Chinese Cabbage, Endive, Kohlrabi and Parsley | Loopers               | 1/2 - 1           |
|  | Omnivorous Leafroller | 1/2 - 1           |
|  | Hornworms             | 1/2 - 1           |
|  | Imported Cabbageworm  | 1/2 - 1           |
|  | Diamondback Moth      | 1/2 - 1           |
|  | Green Cloverworm      | 1/2 - 1           |
|  | Webworm               | 1/2 - 1           |
|  | Saltmarsh Caterpillar | 1/2 - 1           |
|  | Armyworms *           | 1/2 - 2           |
|  | Cutworms              | 1/2 - 1           |
| <b>Fruiting Vegetables</b> such as Tomatoes, Peppers and Eggplant  | Loopers               | 1/2 - 1           |
|  | Hornworm              | 1/2 - 1           |
|  | Tomato Fruitworm      | 1/2 - 1           |
|  | Variegated Cutworm    | 1/2 - 1           |
|  | Saltmarsh Caterpillar | 1/2 - 1           |
|  | Armyworms *           | 1/2 - 2           |
|  | Pinworm               | 1 - 2             |
| <b>Curcubit Vegetables</b> such as Melons, Cucumbers and Squash  | Loopers               | 1/2 - 1.....      |
|  | Melonworms            | 1/2 - 1.....      |
|  | Rindworm complex      | 1/2 - 1.....      |
|  | Armyworms *           | .....1/2 - 2..... |



**APPLICATION RATES (continued)**

\*DiPel 2X may be used to control small armyworms (1st and 2nd instar) when populations are light and full coverage sprays are applied. Repeat treatment as necessary. If mature worms or heavy populations are present a contact insecticide should be used to enhance control.

| Crop Group (Typical Crops)                                  | Pests                  | Pounds/Acre |
|---|------------------------|-------------|
| Legume Vegetables such as Beans, Peas, Lentils and Soybeans | Loopers                | 1/2 - 1     |
|   | Soybean Looper         | 1/2 - 1     |
|   | Green Cloverworm       | 1/2 - 1     |
|   | Velvetbean Caterpillar | 1/2 - 1     |
|   | Armyworms*             | 1/2 - 2     |
|   | Podworms*              | 1/2 - 1     |
| <b>OTHER CROPS:</b>   |                        |             |
| Tobacco   | Tobacco Budworm        | 1/2 - 1     |
|   | Hornworms              | 1/4 - 1/2   |
|   | Loopers                | 1/2 - 1     |
| Safflower   | Loopers                | 1/2 - 1     |
|   | Saltmarsh Caterpillar  | 1/2 - 1     |
|   | Armyworms*             | 1/2 - 2     |
| Sunflowers  | Loopers                | 1/2 - 1     |
|   | Head Moth              | 1/2 - 1     |
| Peanuts   | Loopers                | 1/2 - 1     |
|   | Velvetbean Caterpillar | 1/2 - 1     |
|   | Green Cloverworm       | 1/2 - 1     |
|   | Podworms*              | 1/2 - 1     |

\*DiPel 2X may be used to control small armyworms and/or podworms (1st and 2nd instar) when populations are light and full coverage sprays are applied. Repeat treatment as necessary. If mature worms or heavy populations are present a contact insecticide should be used to enhance control.

**OTHER CROPS (CONTINUED)**

| CROP  | PEST                                | POUND/ACRE |
|---|-------------------------------------|------------|
| Alfalfa (Hay and Seed)<br>Hay and Other Forage<br>Crops | Loopers                             | 1/2 - 1    |
|   | Alfalfa Caterpillar                 | 1/2 - 1    |
|   | European Skipper<br>(Essex Skipper) | 1/2 - 1    |
|   | Armyworms*                          | 1/2 - 2    |
| Cotton  | Tobacco Budworm**                   | 1/2 - 2    |
|   | Cotton Bollworm**                   | 1/2 - 2    |
|   | Loopers                             | 1/2 - 1    |
|   | Saltmarsh Caterpillar               | 1/2 - 1    |
|   | Armyworms*                          | 1/2 - 2    |

\*\* Use to control light to moderate populations of newly hatched worms in integrated pest management conditions. Repeat treatments at 4 to 5-day intervals as long as necessary and results are acceptable. Use in combination with ovicidal rates of labeled Heliothis ovicides.

| CROP        | PEST                  | POUND/ACRE |
|-------------|-----------------------|------------|
| Avocado     | Amorbia Moth          | 1/2 - 2    |
|             | Omnivorous Leafroller | 1/2 - 2    |
|             | Omnivorous Looper     | 1/2 - 2    |
|             | Orange Tortrix        | 1/2 - 2    |
|             | Spanworm              | 1/2 - 2    |
| Malanga     | Saltmarsh Caterpillar | 1/2 - 1    |
|             | Armyworms*            | 1/2 - 2    |
| Water Cress | Loopers               | 1/2 - 1    |
|             | Armyworms*            | 1/2 - 2    |
|             | Diamondback Moth      | 1/2 - 1    |

\*DiPel 2X may be used to control small armyworms (1st and 2nd instar) when populations are light and full coverage sprays are applied. Repeat treatment as necessary. If mature worms or heavy populations are present a contact insecticide should be used to enhance control.

OTHER CROPS (continued)

| CROP   | PEST                  | POUND/ACRE |
|--|-----------------------|------------|
| Kiwi Fruit   | Omnivorous Leafroller | 1/2 - 2    |
| Hops   | Loopers               | 1/2 - 1    |
|  | Armyworms*            | 1/2 - 2    |
| Bananas  | Banana Skipper        | 1/2 - 1    |
| Asparagus  | Armyworms*            | 1/2 - 2    |
| Corn (Sweet and Field)<br>and Sorghum  | Armyworms*            | 1/2 - 2    |
|  | Headworms             | 1/2 - 1    |
| Rape   | Looper                | 1/2 - 1    |
|  | Armyworms*            | 1/2 - 2    |
|  | Heliothis             | 1/2 - 2    |
| Herbs, Spices and Mints<br>such as Basil, Chives,<br>Dill, Leeks and<br>Peppermint | Looper                | 1/2 - 1    |
|  | Saltmarsh Caterpillar | 1/2 - 1    |
|  | Armyworms*            | 1/2 - 2    |

\*DiPel 2X may be used to control small armyworms (1st and 2nd instar) when populations are light and full coverage sprays are applied. Repeat treatments as necessary. If mature worms or heavy populations are present a contact insecticide should be used to enhance control.

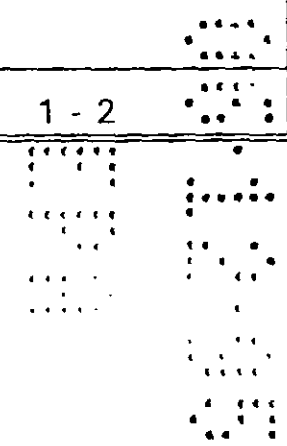
| CROP      | PEST  | POUND/ACRE |
|-----------|---|------------|
| Pineapple | Gummosos-Batrachedra<br>comosae (Hodges)<br>Thecla-Thecla basilides<br>(Geyr) | 1/4 - 1/2  |
| Turf      | Sod Webworm   | 1 - 2      |

OTHER CROPS (continued)

| CROP   | PEST                  | POUND/ACRE |
|--|-----------------------|------------|
| Kiwi Fruit   | Omnivorous Leafroller | 1/2 - 2    |
| Hops   | Loopers               | 1/2 - 1    |
|  | Armyworms*            | 1/2 - 2    |
| Bananas  | Banana Skipper        | 1/2 - 1    |
| Asparagus  | Armyworms*            | 1/2 - 2    |
| Corn (Sweet and Field)<br>and Sorghum  | Armyworms*            | 1/2 - 2    |
|  | Headworms             | 1/2 - 1    |
| Rape   | Looper                | 1/2 - 1    |
|  | Armyworms*            | 1/2 - 2    |
|  | Heliothis             | 1/2 - 2    |
| Herbs, Spices and Mints<br>such as Basil, Chives,<br>Dill, Leeks and<br>Peppermint | Looper                | 1/2 - 1    |
|  | Saltmarsh Caterpillar | 1/2 - 1    |
|  | Armyworms*            | 1/2 - 2    |

\*DiPel 2X may be used to control small armyworms (1st and 2nd instar) when populations are light and full coverage sprays are applied. Repeat treatments as necessary. If mature worms or heavy populations are present a contact insecticide should be used to enhance control.

| CROP      | PEST  | POUND/ACRE |
|-----------|---|------------|
| Pineapple | Gummosos-Batrachedra<br>comosae (Hodges)<br>Thecla-Thecla basilides<br>(Geyr) | 1/4 - 1/2  |
| Turf      | Sod Webworm   | 1 - 2      |

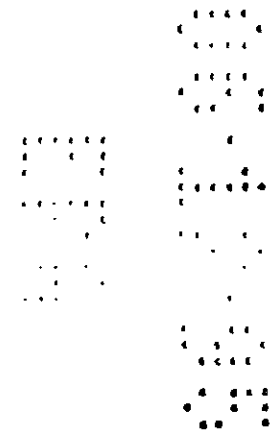


OTHER CROPS (continued)

| CROP   | PEST                  | POUND/ACRE |
|--|-----------------------|------------|
| Flowers, Bedding Plants and Ornamentals**<br>(Note: Aerial application should be applied in a minimum of 5 gallons per acre) | Loopers               | 1/4 - 1/2  |
|  | Tobacco Budworm       | 1/4 - 1/2  |
|  | Omnivorous Looper     | 1/4 - 1/2  |
|  | Omnivorous Leafroller | 1/4 - 1/2  |
|  | Diamondback Moth      | 1/4 - 1/2  |
|  | Armyworms*            | 1/2 - 2    |
|  | Ello Moth (Hornworm)  | 1/4 - 1/2  |
|  | Io Moth               | 1/4 - 1/2  |
|  | Oleander Moth         | 1/4 - 1/2  |
| Azalea Caterpillar   | 1/4 - 1/2             |            |
| Greenhouse/Shadehouse and Outdoor Nursery Crops** such as Leafy, Herbs, Brassica and Fruiting groups                         | Loopers               | 1/2 - 1    |
|  | Heliothis             | 1/2 - 2    |

\*DiPel 2X may be used to control small armyworms (1st and 2nd instar) when populations are light and full coverage sprays are applied. Repeat treatment as necessary. If mature worms or heavy populations are present a contact insecticide should be used to enhance control.

\*\*Chemigation applications only in the state of Florida for flowers, bedding plants, ornamentals, greenhouse/shadehouse and outdoor nursery crops.

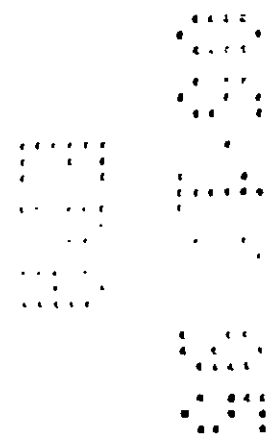


150/22

DiPel 2X for Small Fruits

| CROP   | PEST                                 | POUND/ACRE |
|--|--------------------------------------|------------|
| Small Fruit and Berries<br>such as Grapes,<br>Strawberries,<br>Blackberries and<br>Cranberries | Grapeleaf Skeletonizer (ground only) | 1/2 - 1    |
|  | Grape Leafroller                     | 1/2 - 1    |
|  | Achema Sphinx Moth (Hornworm)        | 1/2 - 1    |
|  | Saltmarsh Caterpillar (ground only)  | 1/2 - 1    |
|  | Omnivorous Leafroller (ground only)  | 1/2 - 1    |
|  | Loopers                              | 1/2 - 1    |
|  | Orange Tortrix                       | 1/2 - 2    |
|  | Oblique Banded Leafroller            | 1/2 - 2    |
|  | Armyworms *                          | 1/2 - 1    |
|  | Tobacco Budworm                      |            |
|  | Grape Berry Moth                     |            |
| Small Grains   | Loopers                              | 1/2 - 1    |
|  | Armyworms *                          | 1/2 - 2    |

\*DiPel 2X may be used to control small armyworms (1st and 2nd instar) when populations are light and full coverage sprays are applied. Repeat treatment as necessary. If mature worms or heavy populations are present a contact insecticide should be used to enhance control.



1,

DiPel 2X for Small Fruits (continued)

DiPel 2X for Tree Fruits, Nuts, Citrus and Tropical Fruit

| CROP  | PEST                     | POUND/ACRE |
|---|--------------------------|------------|
| Stone Fruit such as Cherries, Plum, Peach, Prune and Nectarine<br>Pome Fruit such as Apples and Pears<br>Tree Nuts such as Almonds, Pecan, Walnut and Filbert<br>Pomegranates | Redhumped Caterpillar    | 1/2 - 2    |
|   | Tent Caterpillars        | 1/2 - 2    |
|   | Omnivorous Leafroller    | 1/2 - 2    |
|   | Fall Webworm             | 1/2 - 2    |
|   | Walnut Caterpillar       | 1/2 - 2    |
|   | Cankerworms              | 1/2 - 2    |
|   | Gypsy Moth               | 1/2 - 2    |
|   | Variegated Leafroller    | 1/2 - 2    |
|   | Redbanded Leafroller     | 1/2 - 2    |
|   | Tufted Apple Budworm     | 1/2 - 2    |
|   | Fruittree Leafroller     | 1/2 - 2    |
|   | Filbert Leafroller       | 1/2 - 2    |
|   | Obliquebanded Leafroller | 1/2 - 2    |
| Citrus  | Codling Moth             | 1/2 - 2    |
|   | Cutworms                 | 1/2 - 2    |
|   | Fruittree Leafroller     | 1/2 - 2    |
|   | Orangedog                | 1/4 - 1    |
|   | Citrus Cutworm*          | 1/2 - 2    |

\*Apply to light to moderate populations of newly-hatched worms

| CROP            | PEST              | POUND/ACRE |
|-----------------|-------------------|------------|
| Tropical Fruits | Hornworm          | 1/2 - 2    |
|                 | Leafrollers       | 1/2 - 2    |
|                 | Omnivorous Looper | 1/2 - 2    |
|                 | Loopers           | 1/2 - 2    |



**APPLICATION RATE (continued)**

DiPel 2X for Trees and Forests

| <b>CROP</b>   | <b>PEST</b>                  | <b>LBS/100 GALLONS*<br/>(GROUND EQUIPMENT)</b> | <b>LBS/ACRE<br/>APPLICAT</b> |
|---|------------------------------|--|------------------------------|
| Forest, Shade, Sugar Maple<br>Trees and Ornamentals | Gypsy Moth                   | 1/4 - 3/4                                      | 1/2                          |
|   | Bagworm                      | 1/4 - 3/4                                      | 1/2                          |
|   | Redhumped Caterpillar        | 1/4 - 3/4                                      | 1/2                          |
|   | Spring & Fall Cankerworm     | 1/4 - 3/4                                      | 1/2                          |
|   | Fall Webworm                 | 1/4 - 3/4                                      | 1/2                          |
|   | Elm Spanworm                 | 1/4 - 3/4                                      | 1/2                          |
|   | Tent Caterpillars            | 1/4 - 3/4                                      | 1/2                          |
|   | California Oakworm           | 1/4 - 3/4                                      | 1/2                          |
|   | Pine Butterfly               | 1/4 - 3/4                                      | 1/2                          |
|   | Spruce Budworms              | 1/4 - 3/4                                      | 1/2                          |
|   | Saddle Prominent Caterpillar | 1/4 - 3/4                                      | 1/2                          |
|   | Douglas Fir Tussock Moth     | 1/4 - 3/4                                      | 1/2                          |
|   | Western Tussock Moth         | 1/4 - 3/4                                      | 1/2                          |
|   | Fruittree Leafroller         | 1/4 - 3/4                                      | 1/2                          |
|   | Blackheaded Budworm          | 1/4 - 3/4                                      | 1/2                          |
|   | Mimosa Webworm               | 1/4 - 3/4                                      | 1/2                          |
| Jack Pine Budworm                                   | 1/4 - 3/4                    | 1/2  |                              |
| Saddleback Caterpillar                              | 1/4 - 3/4                    | 1/2  |                              |
| Greenstriped Mapleworm                              | 1/4 - 3/4                    | 1/2  |                              |

\*Rate for hydraulic sprayer. For mist blowers, mix the applicable amounts (lbs.) in 10 gallons of water.

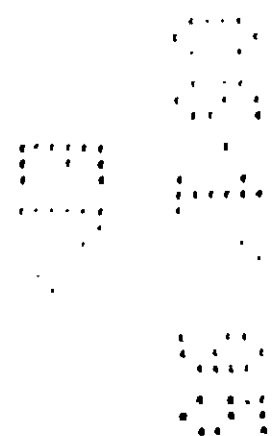
**GRAINS, SOYBEANS, SUNFLOWER SEED, CROP SEED, CONDIMENTAL SEEDS,  
SPICES, HERBS, BIRDSEED<sup>1</sup> AND POPCORN<sup>1</sup>**

| PEST                            | RATE                                     |
|---------------------------------|--|
| Indian Meal Moth<br>Almond Moth | 3/8 lb./100 bu (undiluted and diluted) * |

\*As a surface treatment, apply 1/2 lb. DiPel 2X in 5-10 gal. of water per 500 sq. ft. of grain surface area, mix into top 4 inches. \*\*

<sup>1</sup>For all States except California

For the control and prevention of these pests, apply DiPel 2X in a constantly agitated water suspension to the top four inch surface layer of grain in the bin. Use a sprinkler can or sprayer to apply the dosage into the grain stream as the last (top) four inch layer is augered into the bin. Mix 1/20 lb. DiPel 2X per gallon of water. Apply 0.6 pint of this mixture per bushel as grain is augered into storage. Or, sprinkle the dosage into the surface of the grain in the bin and mix thoroughly with a scoop or rake to the depth of four inches. More thorough coverage may be achieved by dividing the recommended dosage into three applications and mixing the grain between applications.



**APPLICATION RATES (Continued)**

**DiPel 2X FOR STORED AGRICULTURAL COMMODITIES (Continued)**

**GRAINS, SOYBEANS, SUNFLOWER SEED, CROP SEED, CONDIMENTAL SEEDS, SPICES, HERBS, BIRDSEED<sup>1</sup> AND POPCORN<sup>1</sup>. (Continued)**

For the protection of bagged grain including popcorn, apply the dosage to the entire grain mass and mix thoroughly prior to bagging.

Treatments can be applied to stored grain at any time, but for best results, make application immediately after harvest before moth activity occurs. In areas where late fall harvested grain is not subject to infestation because of low temperatures, application can be delayed until late winter or early spring before moth activity begins. Control for a full storage season should normally be expected; however, repeat application if infestation recurs.

This treatment controls the moth larvae. If an infestation is present when the grain is treated, moth emergence may continue for several days. If immediate control of severe infestations is desired, grain should be fumigated prior to application of this treatment. DiPel 2X will not control weevils or other beetles.

Grain treated with DiPel 2X can be used at any time after treatment for any use.

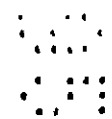
\*\*For commodities coarser than shelled corn, increase depth of treatment according to the habit of the pest.

**PEANUTS**

| PEST                             | RATE         |
|----------------------------------|--------------|
| Indian Meal Moth,<br>Almond Moth | 1/4 lb./ton* |

\*Apply this rate to the top four to eight feet of nuts when filling the warehouse.

To prevent and control these pests, spray an even coating of DiPel 2X on the farmer stock peanuts while filling the warehouse. To make the spray solution, mix 3-3/4 lbs.



**APPLICATION RATES (Continued)**

**DiPel 2X FOR STORED AGRICULTURAL COMMODITIES (Continued)**

**GRAINS, SOYBEANS, SUNFLOWER SEED, CROP SEED, CONDIMENTAL SEEDS, SPICES, HERBS, BIRDSEED<sup>1</sup> AND POPCORN<sup>1</sup>. (Continued)**

DiPel 2X per 5 gallons of water. Apply to 15 tons of commodity. Do not pre-mix more spray solution than will be used within 12 hours. Keep the spray suspension agitated during application, and use pressures and nozzles sufficient to handle this suspension.

Before filling the warehouse, clean thoroughly, then spray interior of the facility with a DiPel 2X suspension at the rate of 1/2 lb. DiPel 2X per 100 gallons water. Spray enough suspension to wet all cracks and crevices.

For bagged peanuts, treat the whole mass of commodity at the rate indicated above.

**FLUE-CURED TOBACCO**

| <b>PEST</b>  | <b>RATE</b>      |
|--------------|------------------|
| Tobacco Moth | 0.2 oz./100 lbs* |

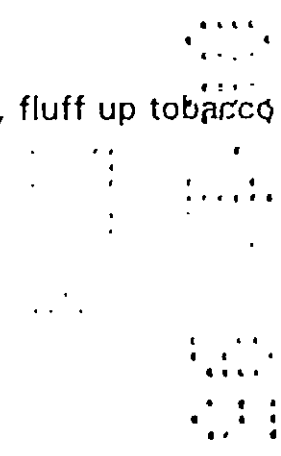
\*Apply 0.2 ounce (approximately 2 1/2 teaspoonsful) of DiPel 2X in one quart of water per 100 pounds of tobacco as a fine mist spray. Avoid oversetting. Tobacco should have just enough moisture to be handled without shattering at the time of application.

**Tobacco to be Stored up to Twelve Months.**

Spray loose leaves as the tobacco is being bundled from the curing barn. For tobacco on sticks, treat both sides of leaves.

**Stored Tobacco.**

For tobacco which is to be carried over, rebundle or restack sticks, fluff up tobacco and spray loose leaves.



For tobacco that has been stored over three weeks, apply at first signs of infestation promptly open bundles, spray loose leaves, then bundle.

**Treatment of Storage Barns.**

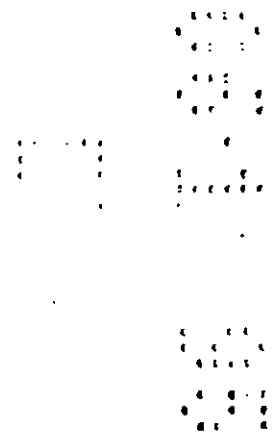
If tobacco has been treated, or is going to be treated, treatment of the floors and walls may be made to aid in control. Sweep out the area, especially cracks and corners, and all of the loose tobacco pieces in which the moth might breed. Make a spray mixture containing 1/2 oz. DiPel 2X per 2 1/2 gallons of water. Apply this at a rate of 1/2 gallon per 1000 sq. ft. of surface area. Be sure to spray into cracks and between floorboards.

**NOTICE TO USER**

Seller makes no warranty, express or implied, of merchantability, fitness or otherwise concerning the use of this product other than as indicated on the label. User assumes all risks of use, storage or handling not in strict accordance with accompanying directions.

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Chemical and Agricultural Products Division  
Abbott Laboratories  
North Chicago, Illinois 60064



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End-Use Product Eligibility for REI Reduction

Product Name: DiPel 2X

EPA Reg. No: 275-37

|                         | cute<br>Dermal<br>Toxicity | Acute<br>Inhalation<br>Toxicity | Primary<br>Eye<br>Irritation | Primary<br>Dermal<br>Irritation | Hypersen-<br>sitivity |
|-------------------------|----------------------------|---------------------------------|------------------------------|---------------------------------|-----------------------|
| Toxicity<br>Category    | III                        | IV                              | III                          | III                             | N                     |
| MRID No.<br>(or waiver) | 42274802                   | 42274803                        | 42274804                     | 42274805                        | 42274806              |
| Bridged<br>(Y/N)        | N                          | N                               | N                            | N                               | N                     |

There have been no reports of hypersensitivity to this product.

CERTIFICATION STATEMENT

I certify that this notification is complete in accordance with the provisions of EPA's reduced REI policy and that no other changes have been made to the labeling or the confidential statment of formula of this product. I further understand that if this notification does not comply with the terms of EPA's reduced REI policy, this product may be in violation of the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA) and I may be subject to enforcement action and penalties under sections 12 and 14 of FIFRA. I understand that the Agency may direct a change in the REI of a product subject to this notice if the Agency determines that a change is appropriate, and that products may be subject to regulatory and enforcement action if the appropriate changes are not made.

Signed: Marvin H. Alphin  
Marvin H. Alphin

Date: 10/5/95

Title: Manager, Ag. Registrations

