



**LINDANE 20% CONCENTRATE**

E.P.A. Reg. No. 2169-110

The following Insect Control Chart gives the plants that may be attacked by the listed insects with a dilution rate and comments for proper application. (1 tsp = 1 fluid teaspoonful, 1 tbsp = 1 fluid tablespoonful)

**INSECT CONTROL FOR ORNAMENTALS, FRUIT TREES, FLOWERS, BULBS, VEGETABLES**

(Do not use on root crops or in soil in which root crops are to be planted)

PLANTS	INSECTS	DOSAGE RATE IN FLUID MEASURE	COMMENTS
Elm, Birch, Locust, Holly	Leaf Miners	1 tsp gal water OR 1 pint 100 gals	Apply when adult miners appear in April & mid-May. Treat when smaller miners appear in July
Pine	Pine Bark Beetles	3 Fluid Ounces per gal water OR 1 gal 10 gals	Apply to trunks up as high as sprayer will reach. Spray to point of run-off in April or May
Pine, Spruce	White Pine Weevil	1 tbsp gal water OR 3 pints 100 gals	Thoroughly spray entire tree in late April when buds swell
Taxus, Hemlock	Texas Weevil	1 tbsp gal water OR 3 pints 100 gals	Apply in May or early June to the trunks & around tree base. Soak the bark and soil surface
Dogwood, Lilac, Rhododendron	Dogwood Borer, Lilac Borer, Rhodo Borer	1 tbsp gal water OR 3 pints 100 gals	Make 3 applications: May 1st, June 1st, July 1st. Treat limbs, twigs and base of trunk
Apple, Peach, Cherry	Bark Beetles Flat-headed & Round-headed Borer	1 tbsp gal water OR 3 pints 100 gals	Apply to bark of tree and large limbs in spring. Apply to trunk, crotch to ground. Soak bark to runoff. Do not apply to fruit or foliage. Do not apply within 60 days of harvest
Peaches	Peach Tree Borer	1 tbsp gal water OR 3 pints 100 gals	Apply to bark of tree and large limbs in spring. Apply to trunk, crotch to ground. Soak bark to runoff. Do not apply within 60 days of harvest
Maple, Aspen, Poplar, Ash, Willow, Elm, Locust	Aphids, Bark Beetles, Borers	2 tbsp gal water OR 3 quarts 100 gals	Apply in spring when buds begin to break. Repeat in 10-14 days. For Aphids, apply when present in summer & fall.
Birch	Bronze Birch Borer	1 tbsp gal water	Make 3 treatments: May 1st, June 1st, July 1st. Soak bark
Bulbs (Tulip, Iris, Gladiolus, Lilies)	Aphids, Bulb Fly, Iris Borer, Thrips	1 tbsp gal water	Treat when insects appear. For the borer, soak soil around tuberos roots May & June
Vegetable Sets Cabbage	White Grubs, Cutworms, Wireworms, Soil Treatment	1 tbsp / 2 gal water. Use 2 gal of mixture to treat 250 sq ft of soil area	Do not apply after thinning. Do not treat plant foliage. Do not use in soil to be used for root crops. Apply around base of plant within 24 hours after sets are placed in soil. Repeat in 14 days.
Strawberries, Peppers, Onions, Tomatoes	Same for insects as for Cabbage	Same as for cabbage	Do not apply after edible parts start to form
Flowers, Roses, Petunias, Camellias, etc	Aphids, Thrips, White Flies, Leafhoppers	1 tbsp / 2 1/2 gal OR 1 1/4 pt - 100 gal	Apply as insect appear. Repeat sprays as needed for control. Thoroughly spray

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APR 27

Mr. H. R. McLane  
Patterson Green-Up Company  
Div. Curry-Cartwright, Inc.  
1331 Union Avenue  
Kansas City, MO 64101

Dear Mr. McLane:

Subject: Amendment - Update per Lindane PD-4  
Patterson's 20% Lindane Emulsifiable Concentrate  
EPA Registration No. 2169-110  
Your Application dated November 18, 1983

The amendment referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), is acceptable, provided that you make the labeling changes listed below before you release the product for shipment bearing the amended labeling:

1. Revise the RESTRICTED USE PESTICIDE block text to read as follows:

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.

2. Delete "For Commercial/Agricultural Use Only" as this has been superseded by the Restricted Use Pesticide classification.
3. Add "Aerial application of lindane is prohibited" After the misuse precaution under the heading Directions for Use, and also over the pecan use directions in the supplemental labeling.
4. Revise the respirator advice in the "For structural Treatment" to read "must wear a pesticide respirator jointly approved by MSHA (Mine Safety and Health Administration) and NIOSH (National Institute for Occupational Safety and Health) under the provisions of 30 CFR Part 11."

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5. Revise the Pesticide Disposal section to read:

Pesticide wastes are toxic. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal law. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

6. Add "Poultry Houses" to "Do not apply in Dairy Barns or Milk Rooms" at the beginning of the Premise Spray and Treatments directions.
7. Add "Do not use in the home" to the second paragraph of this same section after "(8 ounces per 4 gallons of water)."
8. In the future do not submit draft labeling for amendments that already bears an EPA accepted stamp to avoid the problem of dual accepted dates.

Submit five (5) copies of your revised final printed labeling before you release the product for shipment with the amended labeling.

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

If you hold a Federal registration, a supplemental registration, or a Special Local Needs registration, you may continue to produce new stocks of such products, using current labeling, until ~~April 30~~ 1984. After that date, all remaining inventories of affected products will fall under the Existing Stocks provisions stated in our letter of October 28, 1983.

Please note that the master product name of record is Patterson's 20% Lindane Emulsifiable Concentrate. You may wish to request a formal name change to the apparent desired name "Lindane 20% Concentrate" which appears on the submitted labeling. We apologize for not bringing this to your attention earlier during your general label revision submitted June 16, 1982, which showed the new name on the label and the previously accepted name on the cover letter which did not request a change in the product name.

Sincerely yours,

George T. LaRocca  
Product Manager (15)  
Insecticide-Rodenticide Branch  
Registration Division (TS-767)

Enclosure

DCR-28613:RD-4:LaRocca:GG:Raven557-2226:4/10/84:Del.4/21/84

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**RESTRICTED USE PESTICIDE**  
For Application Only By Or Under The Supervision Of A Certified Applicator

**PRECAUTIONARY STATEMENTS**  
**HAZARDS TO HUMANS AND DOMESTIC ANIMALS**  
WARNING — Causes eye damage and skin irritation. Do not get in eyes, on skin or on clothing. May be fatal if swallowed or absorbed through the skin. Do not breathe vapor or spray. Use water proof gloves, face shield or goggles and protective clothing when working. Wash hands, arms and face thoroughly with soap and water after handling and before eating or smoking. Do not use on humans or household pets. Keep children and animals away from treated areas until spray has dried. Food utensils such as a teaspoon or measuring cup should not be used for the purposes after use with pesticides.

**ENVIRONMENTAL HAZARDS**  
This product is toxic to fish, birds, and other wildlife. Do not apply directly to lakes, streams or ponds. Do not apply when weather conditions favor drift from areas treated. Do not contaminate water by cleaning of equipment or disposal of wastes. Apply this product only as specified on the label. This pesticide is highly toxic to bees exposed to direct treatment or residues remaining on the treated area. Do not apply when bees are actively visiting the crop. Avoid application to weeds blooming in the treatment area. Applications should be timed to provide the maximum possible interval between treatments and the next period of bee activity.

**PHYSICAL OR CHEMICAL HAZARDS**  
Do not use or store near heat or open flame.

**STORAGE AND DISPOSAL**  
Do not contaminate water, food or feed by storage or disposal. Storage — Store in a cool dry place. Pesticide Disposal — Pesticide spray mixture and waste that cannot be used according to label instructions must be disposed of according to applicable Federal, state or local regulations. Container Disposal — Triple rinse (or equivalent). Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or by other approved state and local procedures.



**LINDANE 20% CONCENTRATE**  
For Commercial/Agricultural Use Only

**INSECT CONTROL FOR ORNAMENTALS — FRUIT TREES — FLOWERS**  
**BULBS — VEGETABLES — LIVESTOCK & RESIDUAL SPRAY**

**ACTIVE INGREDIENTS**  
Lindane (Gamma isomer of Benzene Hexachloride) 20.00%  
Inert 86.85%  
**INERT INGREDIENTS** 13.15%  
**TOTAL** 100.00%

**WARNING: KEEP OUT OF REACH OF CHILDREN**  
See Side Panel For Additional Precautionary Statements

**NET CONTENTS: 1 PINT**

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**DIRECTIONS FOR USE**  
It is a violation of Federal law to use this product in a manner inconsistent with its labeling. See attached supplemental labeling for complete directions for use on ornamentals, fruit trees, flowers, bulbs, vegetables, pecans and livestock.

**STATEMENT OF PRACTICAL TREATMENT**  
If Swallowed — Call a physician or Poison Control Center immediately. Gastric lavage is indicated if material was taken internally. **DO NOT INDUCE VOMITING**; vomiting may cause aspiration pneumonia.  
If Inhaled — Remove victim to fresh air. Apply first aid as respiration is indicated.  
If On Skin — Remove contaminated clothing and wash affected areas with soap and water.  
If In Eyes — Flush eyes with plenty of water. Get medical attention for irritation persists.  
For additional precautions and complete directions for use of this product refer to attached brochure.  
Notice: Seller makes no warranty, expressed or implied, concerning the use of this product other than indicated on the label. Buyer assumes all risk of use and/or handling of this material when purchased and/or handling is contrary to label instructions.

EPA Reg. No. 2169-110 EPA Est. No. 1-19 MS-1  
**NET CONTENTS: 1 PINT**

P. O. Box 4029    patterson GREEN UP company    Kansas City, Missouri 64101    Division Curry-Carrwright Inc

**- Protective Clothing Required -**  
Applicators must wear the following protective clothing during the application process; a light-weight protective suit or coveralls; water-resistant hat; unlined, waterproof gloves; and unlined, lightweight boots. Mixers & loaders must also wear goggles or a face shield, waterproof gloves and a waterproof apron.  
**- For Structural Treatment -**  
Applicators working in enclosed areas such as crawl spaces, must wear a respirator designed for protection against Lindane and approved by OSHA (29 CFR 1910.134).

ACCEPTED with COMMENTS in EPA Letter Dated: APR 27 1984  
Under the Federal Insecticide, Fungicide, and Rodenticide Act as amended, this pesticide is registered under EPA Reg. No. 2169-110

ACCEPTED with COMMENTS EPA Letter Dated: APR 27 1983  
Under the Federal Insecticide, Fungicide, and Rodenticide Act as amended, this pesticide is registered under EPA Reg. No. 2169-110

## PECAN INSECT CONTROL

**PECANS:** For control of Phylloxera (Galls) and the Hickory Shoot Curculio — Mix 1 quart of this product in 100 gallons of water, (2 teaspoonfuls per gallons of water). Apply with a power sprayer in the spring as a "Bud-Break" spray (early to mid April when bud break is no more than 2 inches long) making only one application by thoroughly wetting all portions of the tree and new bud growth. Plan on using approximately 10 to 15 gallons of diluted spray per bearing tree when planted on 60 foot centers (approx. 24 trees per acre. Do not exceed 450 gallons of diluted spray per acre. Do not graze treated areas. NOTE: This control is not effective when typical gall symptoms appear.

### INSECT CONTROL FOR LIVESTOCK

**Precautions** — Do not apply to Dairy cattle or Dairy goats. Do not apply spray to Beef Cattle, Hogs, Sheep and Goats within 30 days of slaughter

Do not apply to these animals within 30 days of giving birth to young nor for at least 3 weeks thereafter. Do not treat nursing animals. Do not apply to Pigs, Sheep and Goats less than 3 months old. Do not apply to calves less than 5 months old. Do not treat animals in cold, stormy weather. Do not treat overheated or sick animals

Do not apply to feed or forage to be fed to or grazed by livestock or poultry. Do not contaminate feed or food crops. Do not use on poultry or in poultry houses.

**HORNFLIES** on Beef Cattle — Mix 1 tbsp. per 2½ gallon water (8 ounces per 40 gallons water). Use a power sprayer to thoroughly treat animals. Treat when flies appear and repeat as needed for control.

**LICE & TICKS** on Beef Cattle, Horses, Sheep & Goats: Mix 1 tbsp. per 2½ gallon water (8 ounces per 40 gallons water). Use a power sprayer to thoroughly wet animals hide. Repeat as needed for control.

**SARCOPTIC MANGE MITE, LICE, TICKS** on Hogs — Mix 2 tbsp. per 2½ gallon water (8 ounces in 20 gallons water) Use a power sprayer to thoroughly

wet hide of animals. Do not apply to young animals. Repeat as needed

**SARCOPTIC MANGE** on Beef Cattle and **PSOROPTIC MANGE (SHEEP SCABIES)** on Sheep and Goats — Mix 1 tbsp. per 2½ gallon water (8 ounces in 40 gallon water). Use a power sprayer to thoroughly wet animals. Use 2 or more treatments at 7 to 10 day intervals as needed for control. Observe good sanitation practices and spray pens and shelters to prevent reinfestation. Treat infested animals before adding to "herd".

### PREMISE SPRAY AND TREATMENTS

Do not apply in Dairy Barns or Milk Rooms.

For **FLIES, ROACHES, SPIDERS, ANTS, AND MOSQUITOES** in Livestock Pens & buildings spray with a .3% spray solution by mixing 4 tbsp. per 1 gallon of water (8 ounces per 4 gallons water.)

Apply 1 gallon of spray mixture to cover 500 sq. ft. of surface. Spray to point of run-off. For crawling insects treat thoroughly cracks, crevices, baseboards and other hiding places. Remove animals before spraying. Do not contaminate milk or milking equipment, feed or drinking water. Repeat as needed for control.

To make a "PAINT" mix 8 ounces per 1 gallon of water. Apply with a brush as a spot treatment to cracks and crevices and other hiding places. Do not use on painted surfaces since it will blister the paint. Do not use in the home. Remove or do not treat or contaminate milk, milking equipment, feed or drinking water.

For **TICKS & CHIGGER** on Lawns, Recreation areas, Camp Grounds, Golf Courses and Play Grounds mix 40 ounces in 50 gallons water and apply at the rate of 50 gallons of the mixture per acre. (equals ½ lb. actual Lindane per acre). For small areas apply 1 gallon of the spray mixture per 1,000 sq. ft. A small pressure sprayer or power sprayer should be used to insure thorough vegetation coverage

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