



U.S. ENVIRONMENTAL PROTECTION AGENCY  
Office of Pesticide Programs  
Biopesticides and Pollution Prevention Division (7501W)  
401 M Street, S.W.  
Washington, DC 20460

EPA Reg. Number: 069916-2  
Date of Issuance: MAY 9 1997

Term of Issuance: Unconditional

Name of Pesticide Product:  
Hormodin 2

NOTICE OF PESTICIDE:

X Registration  
       Reregistration  
(under FIFRA, as amended)

Name and Address of Registrant (include ZIP Code):  
E.C. Geiger, Inc.  
c/o Frederick D. Obenchain  
Bionet International Corp.  
9619 Evans Ford Road  
Manassas, VA 20111-2635

Note: Changes in labeling differing in substance from that accepted in connection with this registration must be submitted to and accepted by the Registration Division prior to use of the label in commerce. In any correspondence on this product always refer to the above EPA registration number.

On the basis of information furnished by the registrant, the above named pesticide is hereby registered under the Federal Insecticide, Fungicide and Rodenticide Act. Registration is in no way to be construed as an endorsement or recommendation of this product by the Agency. In order to protect health and the environment, the Administrator, on his motion, may at any time suspend or cancel the registration of a pesticide in accordance with the Act. The acceptance of any name in connection with the registration of a product under this Act is not to be construed as giving the registrant a right to exclusive use of the name or to its use if it has been covered by others.

The Food Quality Protection Act (FQPA) was signed into law on August 3, 1996. Although full implementation of FQPA has not been achieved, the Agency has no reason to believe that the registration of this product will, in any way, violate the terms of the Act. If EPA determines, as a result of the FQPA implementation process, that the decision to register this product is no longer appropriate, the Agency will consider itself free to pursue whatever action may be appropriate, including, but not limited to, reconsideration of the registration decision.

This product is unconditionally registered in accordance with FIFRA Sec. 3(c)(5) provided you:

1. Submit and /or cite all data required for registration/reregistration of your product under FIFRA Sec.3(c)(5) when the Agency requires all registrants of similar products to submit such data; and submit acceptable responses required for reregistration of your product under FIFRA Sec.4.
2. Rearrange the Statements of Practical Treatment on the label so that the "If on skin..." statement is first, the "If in eyes..." statement is second, and the "If inhaled..." statement is third.
3. Submit five (5) copies of the final printed label for the record.

A stamped copy of the final draft label is enclosed for your records. Any questions may be directed to Roy Sjoblad, Branch Chief, Biochemical Pesticides Branch, at (703) 308-8269, fax (703) 308-7026.

Sincerely,

Janet L. Andersen, Ph.D.  
Director  
Biopesticides and Pollution  
Prevention Division (7501W)

Signature of Approving Official:

Date:

**Hormodin® 2**  
A ROOT INDUCING SUBSTANCE

HORMODIN 2 is prepared specially for propagating many woody and semi-woody types of plants, including some of the evergreens.

For further details see *Directions for Use* in enclosed folder.

Lot

**Easy to Use**

**Just Dip  
and Plant**

**Clean**

Net Wt. 50 LBS

|||||Bar Code|||||

Made in Canada

**Simplifies Rooting of  
Cuttings**

**NET Wt. 50 LBS**  
(Alt. Sizes = 25g, 4 oz, 8 oz & 1 LB)

# Hormodin® 2

A ROOT INDUCING SUBSTANCE

Active Ingredient:

Indole-3-butyric Acid . . . . . 0.3%

Inert Ingredients: . . . . . 99.7%

PRECAUTIONARY STATEMENTS  
Hazards to Humans and Domestic Animals  
**KEEP OUT OF REACH OF CHILDREN**

**CAUTION**

Causes moderate eye injury. Harmful if inhaled or absorbed through the skin. Avoid contact with skin, eyes, or clothing. Avoid breathing dust. Wash thoroughly with soap and water after handling. Remove contaminated clothing and wash before reuse.

STATEMENT OF PRACTICAL TREATMENT

If in eyes: Wash with plenty of water. Get medical attention if irritation persists.

If inhaled: Remove victim to fresh air. If not breathing give artificial respiration, preferably mouth-to-mouth. Get medical attention.

If on skin: Wash thoroughly with soap and water.

Environmental Hazards

Do not apply directly to water, to areas where surface water is present or intertidal areas below the mean high water mark. Do not contaminate water by cleaning of equipment or disposal of equipment wash waters.

EPA REG. NO. 69916-2

EPA EST. NO. 69697-CAN-001

**Agricultural Use Requirements**

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR part 170. Refer to supplemental labeling under "Agricultural Use Requirements" in the Directions for Use section for information about this standard.

**One pound of HORMODIN 2 will  
treat at least 35,000 average  
cuttings.**

For further details see *Directions for Use* in enclosed folder.

**E. C. Geiger, Inc.**  
**Horticultural Supplies**  
**Rte. 63, Box 285**  
**Harleysville, PA 19438**  
**Phone: (800) 443-4437**

ACCEPTED  
with COMMENTS  
In EPA Letter Dated

MAY 9 1997  
Under the Federal Insecticide,  
Fungicide, and Rodenticide Act  
as amended, for the pesticide  
registered under EPA Reg. No.  
69916-2

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**Hormodin® 2**

A ROOT INDUCING SUBSTANCE

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Lot

**Easy to Use**

**Just Dip  
and Plant**

**Clean**

Net Wt. 1 LB



Made in Canada

EPA REG. NO. 69916-2

EPA EST. NO. 69697-CAN-001

**Simplifies Rooting of  
Cuttings**

**NET Wt. 1 LB**

(Alt. Sizes = 4 oz, 8 oz, 1 & 50 LB)

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**PRECAUTIONARY STATEMENTS**

Hazards to Humans and Domestic Animals

**KEEP OUT OF REACH OF CHILDREN**

**CAUTION**

See label insert for additional  
precautionary statements.

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**HORMODIN 1, 2 or 3 – MASTER LABEL – Page 1 of LABEL INSERT**  
**August, 1996 - Revised in response to Agency letter dated April 24, 1997**

LABEL INSERT      DIRECTIONS FOR TREATING CUTTINGS WITH

**HORMODIN®**

A Root Inducing Substance

**HORMODIN is supplied in the following strengths:**

Active Ingredient	No. 1	No. 2	No. 3
Indole-3-butyric Acid	70.1%	00.3%	00.8%
Inert Ingredients	99.9%	99.7%	99.2%
EPA Reg. No.	69916-1	69916-2	69916-3

**PRECAUTIONARY STATEMENTS**

**KEEP OUT OF REACH OF CHILDREN.**

**CAUTION!**

**Hazards to Humans and Domestic Animals**

**Causes moderate eye injury. Harmful if inhaled or absorbed through the skin. Avoid contact with skin, eyes or clothing. Avoid breathing dust. Wash thoroughly with soap and water after handling. Remove contaminated clothing and wash before reuse.**

**STATEMENT OF PRACTICAL TREATMENT**

**If on skin: Wash thoroughly with soap and water.**

**If in eyes: Wash with plenty of water. Get medical attention if irritation persists.**

**If inhaled: Remove victim to fresh air. If not breathing give artificial respiration, preferably mouth-to-mouth. Get medical attention.**

**PERSONAL PROTECTIVE EQUIPMENT (PPE) REQUIREMENTS:** All pesticide handlers must wear the following minimum PPE while handling, transferring or applying this product. The minimum PPE include: long sleeved shirt, long pants, shoes, socks, and chemical resistant or waterproof gloves.

**USER SAFETY RECOMMENDATIONS:** Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet. Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing. Remove PPE immediately after handling the product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

**Environmental Hazards**

Do not apply directly to water, to areas where surface water is present or intertidal areas below the mean high water mark. Do not contaminate water by cleaning of equipment or disposal of equipment wash waters.

**DIRECTIONS FOR USE**

It is a violation of Federal law to use this product in a manner inconsistent with its labeling. Do not apply this product 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. For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation.

**AGRICULTURAL USE REQUIREMENTS:** Use this product only in accordance with its labeling and with the Worker Protection Standard (WPS), 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 interval. The requirements in this box only apply to the uses of this product that are covered by the Worker Protection Standard (WPS).

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

**EARLY ENTRY PPE:** 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, shoes, socks and chemical resistant or waterproof gloves.

**STORAGE AND DISPOSAL**

**PROHIBITIONS:** Do not contaminate water, food or feed by storage or disposal. Open dumping is prohibited. Do not reuse container.

**STORAGE:** Store in a cool dry place. Keep in original container.

**PESTICIDE DISPOSAL:** Pesticide or rinse waters that cannot be used according to label instructions must be disposed of according to applicable Federal, State or local procedures under the Resource Conservation and Recovery Act. Wastes resulting from the use of the product may be disposed on site or at an approved waste disposal facility.

**CONTAINER DIAPOSAL (metal container):** Triple rinse (or equivalent). Then offer for recycling, or reconditioning, or puncture and dispose of in a sanitary landfill, or by other procedures approved by state and local authorities.

**CONTAINER DIAPOSAL (fiber drums with liners):** Completely empty liner by shaking and tapping sides and bottom to loosen clinging particles. Empty residue into application equipment. Then dispose of liner in a sanitary landfill or by incineration if allowed by State and local authorities. If drum is contaminated and cannot be reused, dispose of in the same manner.

**INTRODUCTION**

Cuttings from different varieties and species of plants, shrubs, and trees vary greatly in their capacity to form roots. Some are rooted with ease and others with difficulty, or not at all. It is assumed that natural root-forming hormones are present in different plants in varying quantities, and that the ease or difficulty with which a cutting can root is governed by the natural root-inducing hormones present.

The production of different strengths of HORMODIN, paralleling the range of hormones in nature, is a development of striking importance. Different strengths are recommended for different plants, as can be seen in the plant name chart on the following pages. Three strengths of powder are recommended for application to this broad field of propagation from cuttings.

**TYPE OF CUTTING TO USE**

Cuttings of the current season's growth, 4 to 6 inches in length, generally are most satisfactory. Entire shoots of this length, cut at or near the base, should be taken, unless it is known that other parts root more readily. Some plants are readily propagated from leaf-bud cuttings. Propagators are familiar with the fact that tip cuttings of some varieties, and parts below the tip in other varieties, root best. This applies also, but to a lesser extent, to cuttings treated with HORMODIN. The basal cut may be made straight or straight with small pruning shears, or with a knife. Large leafed types of cuttings will need to be trimmed, but it is preferable to use the largest leaf area which can be kept in good condition, and which at the same time meets the requirements for economy of space.

**TIME TO TAKE CUTTINGS**

Cuttings of most deciduous shrubs probably root best when taken during June, July and August in the New York area. A few varieties can be taken the latter part of April, and others during May, depending upon when the new growth starts. Cuttings taken between August and December will vary considerably in their capacity to root, but a number of varieties will root well when taken at that time. Cuttings of certain plants are available over a much wider range of time in the South than in the North, and corresponding season advance must be considered. Cuttings of plants grown indoors are taken according to the condition of the material, without regard to season.

**CARE OF CUTTING MATERIAL**

Cutting material should be kept in a fresh condition from the start. Cuttings of many varieties keep fresh when the basal ends of the stems are immersed in water or wrapped in wet cloth or burlap until ready to place in the HORMODIN. Shoots and branches should not be kept in closed containers for long periods. Frequent spraying of the cutting material, according to the

dryness of the air, or covering with moist cheese cloth, will prevent excessive wilting.

**PLANTING CUTTINGS AND HOW TO CARE FOR THEM**

After treatment with HORMODIN, the cuttings should be planted in a mixture of ¼ peat moss and ¾ sand (by volume), or in sand only, until rooted. Propagators who have a satisfactory rooting medium should continue to use it. Any method of planting cuttings which keeps them in good condition may be used. When cuttings are planted in a vertical position, they require more critical care than when slanted in such a way that the exposed leaves lie flat or close to the surface of the rooting medium. Sufficient shade must be provided at all times, but particularly on hot, bright days, to keep the cuttings fresh, but not dense enough to cause rotting of leaves, or the growth of molds. Immediately after planting, the cuttings should be watered thoroughly and, thereafter, according to climatic conditions. The rooting medium below the surface must not be allowed to become dry.

A temperature in the bed of 70° to 75° F. has proved satisfactory for many species. Temperatures below 60° are not generally satisfactory with tested cuttings.

**APPLICATION OF HORMODIN:**

- 1) If not already moist, the basal ends of the cuttings should be slightly moistened before treatment. (Except geraniums.)
- 2) Stir basal ends in HORMODIN.
- 3) Remove excess powder by tapping on rim of container.
- 4) Plant treated cuttings in rooting medium.

**NOTICE OF WARRANTY – E. C. Geiger, Inc., warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes referred to in the Directions for Use. Buyer assumes all risks of use and handling which are at variance in any way with the directions hereon. E. C. Geiger, Inc., makes no other express or implied warranty of Fitness or Merchantability or any other express or implied warranty. In no case shall E. C. Geiger, Inc., or the seller be liable for consequential, special, or indirect damages resulting from the use or handling of this product. E. C. Geiger, Inc., and the Seller offer this product and the Buyer and user accept it, subject to the foregoing Notice of Warranty which may be varied only by agreement in writing signed by a duly authorized representative of E. C. Geiger, Inc.**

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