

5/9/97

PM 90

69916-3

Pg 175



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:
069916-3

Date of Issuance:
MAY 9 1997

Term of Issuance: Unconditional

NOTICE OF PESTICIDE:

X Registration
Reregistration

(under FIFRA, as amended)

Name of Pesticide Product:

Hormodin 3

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® 3
A ROOT INDUCING SUBSTANCE

HORMODIN 3 is prepared specially for propagating the more difficult-to-root varieties, including many of the evergreens and dormant leafless cuttings.

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® 3

A ROOT INDUCING SUBSTANCE

Active Ingredient:

Indole-3-butyric Acid 0.8%

Inert Ingredients: 99.2%

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 in 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. 69916-3

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.

Eight ounces of HORMODIN 3 will treat at least 17,500 average cuttings.

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

E. C. Gelger, 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.

69916-3

245

Hormodin® 3

A ROOT INDUCING SUBSTANCE

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(All Sizes = 25g, 4 oz, 1 & 50 LB)

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Hazards to Humans and Domestic Animals

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CAUTION

See label insert for additional
precautionary statements.

EPA REG. NO. 69916-3

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3/5

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	00.1%	00.3%	00.8%
Inert Ingredients	99.9%	99.7%	99.2%
EPA Reg. No.	C9916-1	69916-2	69916-3

PRELIMINARY 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 DISPOSAL (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 DISPOSAL (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 slanting or straight with small pruning shears, or with a knife. Large leaved 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.

E. C. Geiger, Inc.
Horticultural Supplies
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The following plants have been successfully tested with HORMODOM. Cuttings which respond satisfactorily to HORMODOM 1 would undoubtedly be injured by use of HORMODOM 3, and in some cases by HORMODOM 2. For species not mentioned in the following list it is suggested that HORMODOM 1 or 2 be used.

Abbreviations: Species = sp. Varieties = vars.

Common Name*	Scientific Name	HORMODOM No.
Acanthopanax	Acanthopanax sp.	3
African Violet	Streptocarpus sp.	1
Agapanthus	Agapanthus sp.	1
Andromeda	Andromeda japonica	1
Apple	Malus sp.	2 or 3
Apron-Vase (Thuja) vars.	Thuja elwanopsiana aurescens vars.	2
	Thuja occidentalis vars.	2 or 3
Azalea (Trailing)	Epigaea repens	3
Azalea	Ardisia japonica	2
Azalea vars.	Azalea speciosa (June-Aug.)	3
	Azalea eriobotrys	3
	Azalea speciosa grandiflora	3
	Azalea calandrinicum	3
	Azalea canadensis	3
	Azalea ornamentals	3
	Azalea Christmas Cheer	1
	Azalea collinum	3
	Azalea Coral Bell	1
	Azalea deurbium (June-July)	2
	Azalea grandaevans (hybrids)	2
	Azalea kosteriana Miss Louise Hanswell	3
	Azalea kurume vars. (June-July)	1
	Azalea mollis	2
	Azalea mucronata	1
	Azalea obtusa rhododifolia	1
	Azalea obtusa leucophaea	1
	Azalea Pink Pearl	1
	Azalea rosarium	3
	Azalea schlotheimianum	3
	Azalea Snow	1
	Azalea vaseyi	1
	Azalea Vincom	2
	Azalea yodensis poukhanensis	1
Barberry	Saxifraga sp.	1
Bayberry	Myrica sp.	1
Beauty Berry	Callicarpa sp.	1
Beauty Bush	Kivwicia amabilis (Ilos) (June-July)	3
Beech	Fagus sp. (Aug.)	2
Begonia	Begonia sp.	1
Birch	Betula sp.	3
Bittersweet	Celastrus sp.	3
Blackberry	Rubus sp.	1
Bluebird	Caryocarpus sp.	1
Blueberry	Vaccinium corymbosum vars.	1 or 2
Bougainvillea	Bougainvillea sp.	1
Boxwood	Saxifraga	1
Boxwood	Buxus sp.	3
Broom	Cytisus sp.	1 or 2
Bush-Viburnum	Abelia grandiflora rosea alba (Ips best)	1
Butterbush	Bursera sp.	1
Camelia	Camellia sp.	3
Candytuft	Iberis sp.	1
Cannelloni	Dianthus vars.	1
Catalpa	Catalpa sp.	3
Chaste Tree	Viburnum sp.	3
Cherry	Cerasus sp.	2
Chokeberry	Aronia sp.	2 or 3
Chrysanthemum	Chrysanthemum vars.	1
Chrysanthemum	Chrysanthemum sp.	2
Clematis	Clematis sp.	2
Clerodendron	Clerodendron	1
Clostrine	Thunbergia sp.	1
Coconut	Coccoloba blumei	1
Coleus	Coleus horridulus	3
Coleus	Morus sp.	2 or 3
Crape Myrtle	Lagerstroemia indica	1
Crassula	Crassula rubrouna	1

Common Name*	Scientific Name	HORMODOM No.
Creeper	Parthenocissus sp.	1
Croton	Croton	1
Cydonia	Cydonia sp.	3
Cypress	Libos tenuiflorum	1
Dahlia	Dahlia vars.	1
Daphne	Daphne sp.	1 or 2
Deutzia	Deutzia magnifica	1
Dewberry	Rubus sp.	1
Dianthus (Sea Camellion)	Cornus florida (July)	3
Dogwood	Davidia sp.	3
Dove Tree	Pseudotsuga sp.	3
Douglas fir	Douglas fir	1
Drapac	Drapac sandobandii	1
Dutchman's pipe	Aristolochia sp.	1 or 2
Elder	Sambucus sp.	1
Elm	Ulmus sp. (June-July)	1
Escallonia	Escallonia sp.	3
Eucalyptus	Eucalyptus sp.	1
Falsa arborescens	Thuja sp.	1 or 2
Fir	Abies sp.	1
Flowering Cherry	Pyracantha sp.	1 or 2
Flowering quince	Prunus sp. and vars.	1
Fontanella	Chamaecyparis sp.	3
Forsythia	Forsythia sp. and vars.	1
Franklinia	Gordonia alatahata	2
Fringe tree	Chionanthus sp.	2
Fuchsia	Fuchsia	1
Gardenia	Gardenia florida	1, 2 or 3
Geranium	Geranium	1
Germanium	Taxodium sp.	2 or 3
Golden Chain	Laburnum	2
Grape	Vitis sp. and vars.	3
Hawthorne	Crataegus sp.	3
Heath	Corylus sp. (June)	1 or 2
Heather	Erica carnea vars.	3
Heath	Calluna vulgaris vars.	3
Hemlock	Tsuga sp. and vars. (April-June)	2 or 3
Hibiscus	Hibiscus (topical)	2
Hibiscus (Rose of Sharon)	Hibiscus syriacus vars. (late and demitid)	2
Holly (American)	Ilex opaca	3
Holly (Chinese)	Ilex pernyi	3
Holly (English)	Ilex aquilinum	3
Holly (Japanese)	Ilex ornata vars.	2
Honaiyaboku	Lonicera sp.	1
Hydrangea	Hydrangea	1
Jasminum	Jasminum multiflorum	1
Jasminum	Rhododendron sp.	3
Jasminum	Jasminum chinensis vars.	3
Jasminum	Jasminum chinensis japonica	2
Jasminum	Jasminum chinensis plicatense	2
Jasminum	Jasminum obtusum bijul (dwarf)	3
Jasminum	Jasminum communis vars.	3
Jasminum	Jasminum confertiflorum	3
Jasminum	Jasminum rigidum	2
Jasminum	Jasminum sabina fastigiatum	2
Jasminum	Jasminum souzaiense fagassii	2
Jasminum	Jasminum virginiana vars.	3
Jasminum	Kerria sp.	1
Jasminum	Knoxwood	3
Jasminum	Laburnum vars.	1 or 2
Jasminum	Lantana sp.	1
Jasminum	Lantana	3
Jasminum	Kalmia sp.	3
Jasminum	Lavandula sp.	1
Jasminum	Leucosiphon	1
Jasminum	Leucosiphon vars. (April-May-25)	2
Jasminum	Lilium (scapes)	1 or 2
Jasminum	Lilium	1
Jasminum	Ribes sp.	1
Jasminum	Robinia sp.	1
Jasminum	Magnolia sp.	1
Jasminum	Magnolia	2
Jasminum	Ginkgo biloba	2

Common Name*	Scientific Name	HORMODOM No.
Manzanilla	Arctostaphylos sp.	3
Maple (Japanese) vars.	Acer japonicum palmatum vars.	3
Medlony Vine	Lycium halimifolium	3
Melastoma	Melastoma	1
Mock Orange	Philadelphus sp.	1
Mockingbird	Phytolacca sp.	3
Nivea	Quercus sp.	3
Oak	Quercus	3
Oleander	Oleander neriifolium	3
Orange	Citrus aurantium	3
Orange (sour)	Citrus sp.	3
Orchid	Mechira sp.	1
Orchid	Orchid sp.	1
Orange Orange	Orchid sp.	2
Ornamental	Ornamental sp.	2
Pachysandra	Pachysandra terminalis	2 or 3
Pea Shrub	Carex sp.	1
Pea (stock)	Pyrus serotina	1
Pecan	Pecan	3
Penstemon	Penstemon sp.	1
Periwinkle	Vincetoxicum	2
Pellaea	Pellaea sp.	1
Philodendron	Philodendron sp.	1
Phlox	Phlox sp.	1
Phloxia	Phloxia sp.	1
Pine	Pinus sp.	2 or 3
Polka-dot	Euphorbia vars.	1
Poplar	Populus sp.	1
Privet	Osyris sp.	1
Privet	Ligustrum ovalifolium	3
Roseberry	Rubus sp.	1
Railroad	Chamaecyparis obtusa vars.	3
Railroad	Chamaecyparis pisifera vars.	3
Rhododendron	Rhododendron (hybrids)	3
Rhododendron	Rhododendron catalpaense hybrids	3
Rose	Rhododendron wilsonii	3
Rose	Rosa vars.	3
Russian olive	Elaeagnus sp.	3
Sage	Salvia sp.	1
Sage	Sequoia glauca	2
Silverbell	Helix sp.	2
Snake	Anthriscum sp.	3
Snowball	Syrax sp.	3
Snowberry	Symphoricarpos sp.	1
Snowwood	Oxyandrum sp.	3
Spruce	Juniperus sp.	1
Spruce	Juniperus sp.	3
Spruce	Forsythia major	2
Spruce (Blue)	Picea pungens	2
Spruce (Norway) vars.	Picea excelsa vars. (Nov-Feb.)	1
Spruce	Juniperus sp.	1
Stewartia	Stewartia pentagyna	1
Stewartia	Hypericum sp.	1
Sweetleaf	Symplocos	1
Taxus (See Yew)	Panicum sp.	2
Taxus	Campsis sp.	1
Taxus	Linodendron sp.	3
Taxus	Solidago verticillata	3
Taxus	Viburnum sp.	1
Taxus	Myrica sp.	1
Taxus	Devillea sp.	1
Taxus	Salix sp.	1
Taxus	Gaultheria sp.	2
Taxus	Wisteria sp.	2
Taxus	Hemalis sp.	2
Taxus	Witch Hazel	2
Taxus	Chadrasis sp.	2
Taxus	Taxus baccata vars.	3
Taxus	Taxus cuspidata vars.	3
Taxus	Taxus media hastifolia	3
Taxus	Taxus media bicolor	3
Taxus	Zelkova sp.	2

*Standard Plant Names.