Hormodin ${ }^{\text {® }} 3$
a rootinducing 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.

## Simplifies Rooting of Cuttings <br> NET Wt. 802 <br> (Alt. Sizes $=25 \mathrm{~g}, 4 \mathrm{oz}, 1 \& 50 \mathrm{LB}$ )

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. Restricted Entry Interval (REI) of this product is 0 hours.

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. Geiger, Inc.

Horticultural Supplies
Rte. 63, Box 285
Harleysville, PA 19438
EPA REG. NO. 69916-3
EPA EST. NO. 69697-CAN-001.

## PRECAUTIONARY STATEMENTS

Hazards to Humans and Domestic Animals

## KEEP OUT OF REACH OF CHILDREN

## CAUTION

See label insert for additional precautionary statements.

Phone: (800) 443-4437


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. | 69916-1 | 69916-2 | 69916-3 |

## PRECAUTIONARY STATEMENTS <br> KeEp OUt OF reach of CHildren. CAUTION!

## Hazards to Humans and Domestic Animals

Causes moderate eye injury. Harmfui 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 handers must wear the following minimum PPE while handing, transfering 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 eationg, drinkling, chewing gum, using tobacco or using the toilet. Remove clothing immediately it pesticle gets inside. Then wash thoroughly and put on cliean clothing. Remove PPE immediately atter 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 ecoordance 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 handiers of agri-cultural pesticioes. It contains requirements for training, decontamination, notification and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on tris labei 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: The restricted entry interval (REI) for thls product is 0 hours.

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## 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, paralieling the range of hormones in nature, is a development of striking imporlance. 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 seasor's growth, 4 to 6 inches in length. generally are mosi satistactory. 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 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 Aprii, 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 $1 / 2$ peal moss and $1 / 2$ 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. Sutficient shade musl 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 walered thoroughly and, thereatter, according to climatic conditions. The rooting medium below the surface must not be allowed to become dry.
A temperature in the bed of $70^{\circ}$ to $75^{\circ} \mathrm{F}$. has proved satisfactory for many species. Temperatures below $60^{\circ}$ are nol 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 sim 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 or, the label and is reasonably fit for the purposes reterred 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 wartanty of Fithess or Merchantability or any other express or implied warranty. in no case shall E. C Geiger, Inc., or the seller be lizble for consequen.iot. ipecial, or indirect damages resuting from the use or handling of this product. E. C Geiget, finc. and the Suther uld this producl and the Buyer arro user accepl it. subject to the foregaing Notice of Warranty which may be varied only by asceement in writiory nyitw wh a duly aulthorized representaliva of $\mathrm{E}: \mathrm{C}$ Geiger is:
E.C. Geiget; Inc. Hortituntural Supplies
Rte. 63, Box 285
Harleysville, PA 19438
Phone: (800) 443-4437

The tolkwing piants have been successtuliy rooted with HORMOOIN．Cuttings which respond salistactority to HORMODIN 1 would undoubtedly be minured by use of HORMODIN 3 ，and in some cases by HORMODIN 2 ．
For species not mentioned in the following list it is suggested that HORMODIN 1 or 2 be used

| Common Name | Scientuic Name | HORMODIN |
| :---: | :---: | :---: |
| Acaruhopanax | Acminopanax sp ．．．．． | 3 |
| Alrican Vrotet | Sampauth Sp． | ， |
| Ageratum | Ageraturn sp． | 1 |
| Andromeda | Androweda japonica ．．．．．．．．．．． | 1 |
| Apple | Matus 5p．．．．．．．．．．．．．．． | 2 or 3 |
| Abor Vitae（Thual）vars． | Thuya ellwangeriana aurea nath | 2 |
|  | Thuja occrientahs vars．．． | 2 or 3 |
| Arbulus（Trating） | Eppaea repens | 3 |
| Adilsta | Ardista japonica | 2 |
| Azalea vars． | Azalea arborescens（June－Aug）．．．．．． | 3 |
|  | Azalea arbouescens granuitiora | 3 |
|  | Azsiea calendulaceum | 3 |
|  | Anatal candailise | 3 |
|  | Adatoa canescens | ． 3 |
|  | Azdiea Christrinas Cheer | 1 |
|  | Aritea conletianum | 3 |
| \％ | Asatea Cotal beell |  |
| 品 | Asided daurniomf（Jurie Juty）． | 2 |
| $\omega$ | Aralea gandavense（hybrids） | 2 |
| $\bigcirc$ | Azalea hosternauma Miss Loursa Hunnewell | 3 |
| 产 | Azalea kurume vars．（June－July） |  |
| 굴 | Azalea mollis | 2 |
| ¢ |  |  |
| $\stackrel{( }{0}$ | Azatea obbusa henochari |  |
|  | Aratea obuss kiompuesi |  |
|  | Azabaa Pink Peant | ． 1 |
|  | Azalea roseum | ． 3 |
|  | Aratea sctuppernactum |  |
|  | Azalea Snow | ． 1 |
|  | Acatea vaseyt |  |
| － | Azalea viscosum | 2 |
|  | Azalea yedvense poukhanense | 1 |
| Batberty | Berbers sp． | ． 1 |
| Baytetry | myrica sp． |  |
| Beauty Berry | Calicatpasp． | 1 |
| Bedaty Busn |  | 3 |
| Beech | Fagus sp（Aug） | 2 |
| Berynia | Begonat 5 s ． | ， |
| Burch | Geluta sp．．．． | 3 |
| Billersweet | Cetastrus sp ． | ． 3 |
| Biackberry | Rubus so． | $\ldots 1$ |
| Bruebeird | Caryoplers sp． | 1 |
| Bhemerry | vaccmam conmbosum vars． | $\ldots 102$ |
| Boxuganvillea | Bouganvitea sp． | 1 |
| Bowsturig－Kemp（Snake Plam） | Samsevom | ． 1 |
| Berwors | Burus sp | ． 3 |
| Bremem | Cystisus sp． | lor 2 |
| Gusididenas |  | ， |
| Gutlertiytush | Butderid sp | ． |
| Canmela | Carmethas sp ．．．．．．．．．．． | ．．． 3 |
| Cardytut | thers sp ．．．．．．．．．．．．． | ．．．． 1 |
| Cumation | Dianthyus vars． | ．．．． 1 |
| Cilturia | Cubutua sp．．．n．．．．．．．．．．．．．．．．． | ． 3 |
| Chaste Tree | vitexsp ．．．．．．．．．．．．．．．．．．．．．．．． | ．．． 3 |
| Chesimut | Castianea sp．．．． | $\cdots 2$ |
| Cishera ry | Arurasp．．．．．．．． | 2 or 3 |
| Chysaminimum | Crrysantemuni vars．．－．．．．．．．．．．．． | 1 |
| Curcuectort． | Pon mharsp． | 2 |
| Clemins | Chernutis sp ．．．．．．．．．．．．．．．． | ．．．． 2 |
| Ceveruchention | clerodendion | ．． 1 |
| Clockuine | Thunbergut 5 p ．．．．．．．．．．．．．．．． | ．．．． 1 |
| Cobeus | Cistes＇s birmer | ．． 1 |
| Cotorieaster | $\cong$ voreastir homicorlats | 3 |
| Cratapule | M．sius st ．．．．．．．．．．．．．．．．．． | ．．．． 2 or 3 |
| Crape myrte | Lrgersitrema makia ．．．．．．． | ． |
| Clısssulis | Ctassula tubaclurda ．．．．．．．．．．． | 1 |



Scientific Name
authenocissus sp．
Codaeum．
Cryptomena sp
Rises ienuflorimt
Oallhaz wars．
D．lphne sp
Deutra magrutica
Aubs sp．
Cornus lionda（July）
Pseudorsuin
Dracena sanderiana
Aristioioctia sp．
．Ansimbucuas sp

Evonymus Sp
Thifforsis sp
Aburs sp．
Pytiaththa sp
Ptumus sp ard vars
$C h$, menornetes sp
Chuenonetes sp
Fortanesa 50
Fontanestas sp．
Forsyitha so and
Forsythal sp，and vars
Gordoma ahtamatha
Choonanthus sp．
Fuchsta
Gazderna Itonda
Getannum ．．
Levarium sp．
Vhis sp．and vars．
Crateagus sp．．．
Corytus sp．（thene）
Calluna vulgaris vars
ars．（Sepl．June）
Henscus（hapoca
Hhbscus symacus vars（ieaty and domant）
thex opacia
Hex pernyt
hex comuta
Hex aquatotuan
Hex crenala vars．
Loncera sp
Hydranged
Jassmmurn nuadilorum
Ahodotypus sp
Ahodotypus sp．
Junoperus chniensts vars．
Jumpens cturestsis niporica
Jumperus churensis plizenanat
Junperus communs vals．
Junperus confertat
Jumperus ngrcat
Jumputus sadivina tastrgiata
Juniperus squarmata turges
九unperus vigwinetavars．
Kemia sp．
Polygonuin sp．
Luoumocytisus Sp
Lambana SD
Kumhut $5 p$.
Liviarnuila sp
Leucothoe sp
Syzarg．a vulgans vars ．．．．．．．．．．．．
Lidunn \｛sciales）
Tha； 5 p．
$7,1, x$ sp．
Robuna sp
Magnobia Sp
Ginko bilcer

Canmmon Narne ${ }^{-}$
Munzauntr

| Itld | Arctostaphyios sp． |
| :---: | :---: |
| Maple（Jipanese）vais | Acer raporicum patmatum vars． |
| Muturnony vire | Lrcoun haturitotum |
| Mciduturtas | Mehisturna |
| Muck Otange | Ptorudetytus sp． |
| Multeriy | Morus alid |
| Nureporth | Plysocurpos sp． |
| O．，${ }^{\text {a }}$ | Quercus sp． |
| Ofeander | Oteinder nestum |
| Inve | Oras sp |
| Orange（sour） | Cilus auranturn |
| Orxa | Ofixa sp． |
| Osage Orange | mactura sp． |
| Osmantios | Osfratritus sp |
| Pachysandia | Pacnysandia termunats |
| Ped Sniub | C．irugatiasp． |
| Pear（stock） | frus serotna |
| Pecan | Potion |
| Prasturtus | Aemstetmons |
| Pernurikie | Viciesp |
| Pethrin | Fothinas sp |
|  | Purumerneun sp ． |
| P4tase | poltex sp |
| Prowates | shatricisp． |
| Pute | Prous sp |
| Parrselar | Euprortha vars． |
| Poplar | Proputus sp． |
| Prichlypear Cactus | Opunta sp． |
| Ptevet | Lnystrun ovaliotum |
| Raspberry | Rubus sp． |
| Returospora vars． | Chanaecypans oblusa vars． |
|  | Chambecypars pistera vars． |
| Rhododenchon | Rhododendion（hyteris） |
|  | Shododendon catawtwense hybuds |
|  | Rhodedendron wisorm |
| Rose | Hosid vars． |
| Hussian oive | Elieagnus sp． |
| Sage | Sutha sp． |
| Sequora \｛Gam？ | Sequar grania |
| Siverteyll | Hallesid sp． |
| Stheputagus： | Anturturum sp |
| Stuwbeli | Stycax sp．．．． |
| Sluwteny | Ss\％mprompus sp |
| Sicermud | Orriewnumsp． |
| Speectwet | Veronicasp． |
| Splea | Sprea sp． |
| Spirigscent | Foltergilla mapor |
| Spruce（Biue） | Prica pungens |
| Spruce（Norway）wars | Psica excelsa vars（Nov－Feb） |
| Slevia | Sicuasp． |
| Stemartuat | Stew，intit pentagya |
| St Juhnswort | Hypertum sp |
| Siwuetteal | Symplocus |
| Tuans（See Yew） |  |
| Tilotiate－Orange | Ponhitus so． |
| Trunuel creeper | Campsis sp． |
| Tulptee | Luroutenctonsp． |
| Untretila Pue | Scladopays verticilata |
| Verbena | verbena sp． |
| Vibumum | viburnum sp． |
| Wuxnytle | Mytacasp． |
| Wergehid | Duervitasp． |
| Willow | S．thx sp |
| Wentergreen | Guatheras 50 |
| Wisteria | Wisterus 5 S． |
| Wich Hazel | H．indamehs sp |
| Yelluwwoud | Cturustis sp． |
| Yew | taxus buccata vars |
|  | Tomus cuspidita vars． |
|  | Taxus meda hattrelar |
|  | Taxus medta nicksu |


[^0]:    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 Ifiner 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.

