10182-261 EPA REGISTRATION US ENVIRONMENTAL PROTECTION AGENCY 10182-26 OFFICE OF PESTICIDES PROGRAMS **REGISTRATION DIVISION (7S-767)** TERM OF ISSUANCE WASHINGTON, DC 20460 REGISTRATION NAME OF PESTICIDE PRODUCT NOTICE OF PESTICIDE: REREGISTRATION Clipper 2SC Tree Growth Regulator (Under the Federal Insecticide, Fungicide, and Rodenticide Act, as amended) NAME AND ADDRESS OF REGISTRANT (Include ZIP code) Cynthia Ann Smith Pesticide Regulatory Specialist ICI Agricultural Products Concord Pike & New Murphy Road Wilmington, DE 19897 NOTE: Changes in labeling formula 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 U.S. EPA registration number. On the basis of information furnished by the registrant, the above named pesticide is hereby Registered/Reregistered under the Federal Insecticide, Fungicide, and Rodenticide Act. A copy of the labeling accepted in connection with this Registration/Reregistration is returned herewith. Registration is in no way to be construed as an indorsement or approval of this product by this 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 This product is conditionally redistered in accordance with FIFRA sec. P(a)(7)(A) provided that you: Submit and/or cite all data required for recistration/ reregistration of your product under FIFRA sec. 3(c)(5) when the Agency requires all registrants of similar products to submit such data. 2. Add the phrase, "EPA Registration No. 10182-264" to your label before you release the product for shipment. Under the Precautionary Statements portion of your label add the Heading: "ENVIROUMENTAL HAZARDS" "Do not apply directly to water or wetlands. Do not contaminate vature".

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PREVIOUS EDITION MAY BE USED UNTIL SUPPLY IS EXHAUSTED.

4. Submit five (5) copies of your final printed labeling before you release the product for shipment. Refer to the A-79 Enclosure for a further description of final printed labeling.

If these conditions are not compiled with, the registration will be subject to cancellation in accordance with FIFRA sec. 6(e). Your release for shipment of the product constitutes acceptance of these conditions.

Please note that any future amendments regarding food uses will not be considered until reviews of initially submitted studies have been completed.

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

Sincerely yours,

Robert J. Taylor Product Manager (25) Fungicide-Herbicide Branch Registration Division (H7505C)

	 	The State of	CONCURRENC	ES	 / /	
SYMBOL						
SURNAME						
DATE						

EPA Form 1320-1 (12-70)

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CLIPPER 2SC Tree Growth Regulator

KEEP OUT OF REACH OF CHILDREN CAUTION

See side panel for additional precautionary statements and statement of practical treatment.

ACTIVE INGREDIENT

Paclobutrazo1

$(\underline{+})-(\underline{R}^*,\underline{R}^*)-\beta-[(4-\text{chlorophenyl})\text{methyl}]-$	
α -(1,1-dimethylethyl)-l \underline{H} -1,2,4-triazole-1-ethanol	21.8%
INERT INGREDIENTS	78.2%
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ICI Agricultural Products Wilmington, Delaware 19897 A Business Unit of ICI Americas Inc. U.S Patent No.: 4,243,405

EPA Est. No.:

EPA Reg. No.: 10182-

Net Contents:

ACCEPTED with COMMENTS in EPA Letter Unied:

JAN 10 1990

Under the Federal Incertible, Fungicide, and Rode words at as amended, for the possence registered under EPA Reg. No.

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PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS AND DOMESTIC ANIMALS CAUTION

HARMFUL IF SWALLOWED OR ABSORBED THROUGH SKIN. Avoid contact with skin, eyes or clothing. Wear protective clothing, long-sleeved shirt, and rubber gloves. Remove contaminated clothing and wash before reuse. Wash thoroughly with soap and water after handling.

STATEMENT OF PRACTICAL TREATMENT

IF SWALLOWED: Call a physician or Poison Control Center. Drink 1 of 2 glasses of water and induce vomiting by touching back of throat with finger. Do not induce vomiting or give anything by mouth to an unconscious person.

IF ON SKIN: Wash with plenty of soap and water.

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

FOR 24-HOUR EMERGENCY MEDICAL ASSISTANCE, CALL (800)-F-A-S-T-M-E-D (327-8633).

IN CASE OF TRANSPORTATION EMERGENCIES, OR SIGNIFICANT SPILL, CALL CHEMTREC (800)-424-9300.

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

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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. This labeling must be in the possession of the user at the time of application.

GENERAL INFORMATION

Read all label directions before using.

CLIPPER 2SC can be used on listed trees found in areas such as utility right-of-ways, urban environments and other non-crop areas.

CLIPPER 2SC is a tree growth retardent that extends the trim cycle of treated trees by slowing vegetative regrowth. CLIPPER 2SC will provide effective trim cycle extension when applied by soil injection or basal drench.

CLIPPER 2SC is a xylem mobile tree growth retardant that slows vegetative growth by inhibiting gibberellin biosynthesis, resulting in internode compression and long-term vegetative growth retardation. CLIPPER 2SC demonstrates little or no phloem mobility, so activity occurs by root uptake and xylem translocation throughout the tree canopy.

Control Symptoms: Results may not be visible following application of CLIPPER 2SC until up to 18 months after application. Initial effects of CLIPPER 2SC will be observed as an intense greening of foliage with no resulting phytotoxicity. At the time that normal vegetative growth extension should occur, trees treated with CLIPPER 2SC will exhibit shortened internodes which are somewhat thickened. Smaller leaf size and enhanced flowering may also be observed.

APPLICATION DIRECTIONS

Timing - Applications can be made throughout the year, weather permitting, except if the soil is frozen. Note: CLIPPER 2SC will only be absorbed by the roots and translocated to the growing tissues during periods of active growth.

If dormant season applications are made, then no uptake of CLIPPER 2SC will occur until bud-break.

Apply this product to listed trees by soil injection or basal drench techniques as described below.

Preparation of Stock Solution

Mix 300 ml (10.2 fluid ounces) of this product with water to make one gallon of stock solution. Eight gallons of this product will make 100 gallons of stock solution.

Soil Injection:

Use equipment that will inject a stock solution of CLIPPER 2SC into the soil in 100 to 250 ml aliquots (3.4 to 8.5 fluid ounces) at 100 to 200 psi.

If other than 250 ml aliquots are used, adjust the number of injections per tree to give the recommended total amount of stock solution per tree from Table 1 and Table 2.

Injections should be spaced uniformly around the trees approximately 6 inches below the soil surface, and within 2 to 8 inches of the trunk base.

Basal Drench:

Use the same amount of stock solution per tree as is recommended for soil injection treatments.

Pour uniformly around the trunk base at the trunk/soil interface, using a graduated pitcher or similar vessel.

TABLE 1

Number of 250 ml injections of stock solution per tree for the following species:

Red maple (Acer rubrum) Norway maple (Acer platanoides) Silver maple (Acer saccharinum) Sweetgum (Liquidambar styraciflua) Australian pine (Casuarina equisetifolia) Laurel oak (Quercus laurifolia) Water oak (Quercus nigra) Live oak (Quercus virginiana) Chinese elm (Ulmus parvifolia) Siberian elm (Ulmus pumila) Boxelder (Acer negundo) Hackberry (Celtis occidentalis) Littleleaf linder (Tilia cordata) American basswood (Tilia americana) Slippery elm (Ulmus rubra) Honey locust (Gleditsia triacanthos)

Size of tree	No. of 250 ml injection	
(DBH) inches	sites per tree	Total ml per tree
6	2	500
7	2	500
8	2 to 3	500 to 750
9	2 to 3	5 0 0 to 750
10	3 to 4	750 to 1000
11	3 to 4	750 to 1000
12	3 to 4	750 to 1000
13	3 to 5	750 to 1250
14	3 to 5	750 to 1250
15	4 to 6	1000 to 1500
16	4 to 6	1000 to 1500
17	4 to 6	1000 to 1500
18	4 to 7	1000 to 1750
19	4 to 7	1000 to 1750
20	5 to 8	1250 to 2000
21	5 to 8	1250 to 2000
22	5 to 8	1250 to 2000
23	5 to 9	1250 to 2250
24	5 to 9	1250 to 2250
25	6 to 10	1500 to 2500

TABLE 2

Number of 250 ml injections of stock solution per tree for the follwoing species:

Eucalyptus (Eucalyptus spp.)
Ash (Fraxinus spp.)
Sycamore (Platanus occidentalis)
hite oak (Quercus alba)
Pin oak (Quercus palustris)
Willow oak (Quercus phellos)
Red oak (Quercus rubra)
Weeping willow (Salix babylonica)

Size of tree (DBH) inches	No. of injection sites per tree	Total ml per tree
6	2 to 4	500 to 1000
7	2 to 5	500 to 1250
8	2 to 6	500 to 1500
9	2 to 7	500 to 1750
10	3 to 8	750 to 2000
11	3 to 8	750 to 2000
12	3 to 9	750 to 2250
13	3 to 10	750 to 2500
14	3 to 11	750 to 2 750
15	4 to 12	1000 to 3000
16	4 to 12	1000 to 3000
17	4 to 13	1000 to 3250
18	4 to 14	1000 to 3500
19	4 to 15	1000 to 3750
20	5 to 15	1250 to 3750
21	5 to 15	1250 to 3750
22	5 to 15	1250 to 3750
23	5 to 15	1250 to 3750
24	5 to 15	1250 to 3750
25	6 to 15	1500 to 3750

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STORAGE AND DISPOSAL

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

STORAGE: Keep container closed when not in use. Do not store near food or feed. Protect from freezing. In case of spill or leak on floor or paved surfaces, soak up with sand, earth or synthetic absorbent. Remove to chemical waste area.

PESTICIDE DISPOSAL: 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 of the nearest EPA Regional Office for guidance.

CONTAINER DISPOSAL: Metal Containers: 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. Plastic containers: Triple rinse (or equivalent). Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or incineration, or if allowed by state and local authorities, by burning. If burned, stay out of smoke. Glass Containers: Triple rinse (or equivalent). Then dispose of in a sanitary landfill or by other approved state and local procedures.

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NOTICE TO BUYER AND USER: Seller warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated on the label when used in accordance with directions under normal conditions of use. This warranty does not extend to the use of this product contrary to label instructions, or under abnormal use conditions, or under conditions not reasonably foreseeable to Seller, and Buyer and User assume the risk of any such use. SELLER DISCLAIMS ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING ANY WARRANTY OF FITNESS OR MERCHANTABILITY. SELLER SHALL NOT BE LIABLE FOR CONSEQUENTIAL, SPECIAL OR INDIRECT DAMAGES RESULTING FROM THE USE OF HANDLING OF THIS PRODUCT AND SELLER'S SOLE LIABILITY AND BUYER'S AND USER'S EXCLUSIVE REMEDY SHALL BE LIMITED TO THE REFUND OF THE PURCHASE PRICE.

GENERAL USE PRECAUTIONS

- Apply only to trees that appear healthy.
- Apply at the recommended rate. Follow safety procedures.
- Do not apply to trees which are stressed due to moisture, temperature,
 low soil fertility, or mechanical or chemical injury.
- The degree and longevity of effect following application of CLIPPER 2SC can be affected by local soil and environmental conditions. Within the rate range given, adjust rates according to your local environmental and tree conditions.
- Do not reapply CLIPPER 2SC until symptoms from previous applications begin to disappear, or within 3 years of the last application, whichever comes first.
- If soil is heavily compacted, use of CLIPPER 20 UL via trunk injections may provide more effective control.
- Soil injections and basal drenches of CLIPPER 2SC may result in localized, temporary discoloration of turfgrass.
- Avoid basal drench applications on slopes or other areas conducive to runoff.
- Avoid treating trees bordered by shrubs and/or herbaceous ornamentals.
- Do not treat sugar maple trees or any other trees that are or could be tapped for sugar.

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- Do not treat nut or fruit trees that will be harvested within one year.
- Do not apply this product through any type of irrigation system.

●ICI Americas Inc. 1990