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U.S. ENVIRONN FAL PROTECTION AGENCY

Office of Pesticide Programs Registration Division (7505C) Ariel Rios Building 1200 Pennsylvania Ave., NW Washington, D.C. 20460

EPA Reg	Date of Issuance:
100-1309	July 11, 2009

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x RegistrationReregistration(under FIFRA, as amended)

Term of Issuance:	conditional
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Name of Pesticide Product:

Tree-age

Name and Address of Registrant (include ZIP Code):

Thomas Parshley Syngenta Crop Protection, Inc. PO Box 18300 Greensboro, NC 27419

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.

This product is conditionally registered in accordance with FIFRA sec. 3(c)(7)(A) and (B) provided that you:

- 1. Submit and/or cite all data required for registration of your product under FIFRA sec. 3(c)(5) when the Agency requires all registrants of similar products to submit such data.
- 2. Per the indicated EPA Guidelines, submit, cite, or request a waiver for the following within the time period indicated measured from the effective date of this registration.
 - a. one year storage stability (830.6317) tested at 0, 3, 6, 9, 12 months (within 18 months)
 - b. corrosion characteristics (830.6320) tested at 0, 3, 6, 9, 12 months (within 18 months)
- Make the following label changes before you release the product for shipment:
 - Revise the EPA Registration Number to read, "EPA Reg. No. 100-1309."
 - b. On page 1, add scientific name so site reads "ash trees (Fraxinus spp.)".
 - c. On page 1 immediately below ingredient statement, add "contains 0.36 lbs. emamectin per gallon."
 - d. On page 5 in the Directions for Use (DFU), add scientific name so site reads "ash trees (Fraxinus spp.)".
 - e. On page 6 in the DFU, delete section labeled "resinous conifers."
 - f. On page 6 in the DFU/Environmental Conditions, delete sentence that reads "Watering the tree prior to injection is therefore required if they are drought or heat stressed."
 - g. On top of page 7 in the Use section, add "Apply once per year."
 - h. On page 7 in the Rate Table, add "product" so column headers read "ml. product/tree".

(continued)

Signature	of Approving	Official:

15/

Date:

JUL 1 1 2009

Thomas C. Harris

Biologist

Insecticide Rodenticide Branch Registration Division (7505P)

- i. On page 7 in first footnote to Rate Table, delete first sentence beginning "Product/1" DBH: Low - 2.5"
- j. On page 7 in second footnote to Rate Table, delete the sentence "for control, be within +- 1 injection site of this number per tree."
- k. On page 8 in Application in Trees table, delete row labeled "seed and cone".
- On page 8 in first footnote to Application in Trees table, change sentence to read "Apply once per year."
- m. On page 8 in first footnote to Application in Trees table, delete first sentence beginning "Low = 2.5 ml"
- 4. Submit two copies of the revised final printed label for the record.

If these conditions are not complied 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. A stamped copy of the label stamped "accepted with comments" is enclosed for your records.

(Master label)

RESTRICTED USE PESTICIDE

DUE TO ACUTE TOXICITY TO HUMANS
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.

TREE-äge™

Injected insecticide for the control of listed arthropod pests in ash trees

Active Ingredient:	<u>.</u>	
Emamectin Benzoate ¹		4.0%
Other Ingredients:		96.0%
Total:		100.0%

¹CAS No.155569-91-8

KEEP OUT OF REACH OF CHILDREN.

WARNING/AVISO

Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en détalle. (If you do not understand the label, find someone to explain it to you in détail.)

See additional precautionary statements and directions for use on label[in booklet].

EPA Reg. No. 100-xxxxx

EPA Est. xxxxx

Product of xxxxx Formulated in xxxxx

SCP xxxxxA-M(draft-c TREE-äge)

ACCEPTED
With COMMENTS
In EPA Letter Dated:

JUL 1 1 2009
Under the Federal Insecticide, Fungicide and Rodenticide Act, As amended, for the pesticide Registered under EPA Reg. No:

Net Contents

000100-0RGNO.20090710.treeageC.PDF

PRECAUTIONARY STATEMENTS

Hazards to Humans and Domestic Animals

WARNING/AVISO

Causes substantial but temporary eye injury. Do not get in eyes or on clothing. Wear protective eyewear. Harmful if swallowed. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, or using the toilet. Remove and wash contaminated clothing before reuse.

	FIRST AID			
If in eyes	 Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice. 			
If swallowed	 Call poison control center or doctor immediately for treatment advice. Have person sip glass of water if able to swallow. Do not induce vomiting unless told to do so by the poison control center or doctor. Do not give anything by mouth to an unconscious person. 			

NOTE TO PHYSICIAN

Early signs of intoxication include dilation of pupils, muscular incoordination, and muscular tremors. Vomiting within one-half hour of exposure can minimize toxicity following accidental ingestion of the product; rapidly after exposure (< 15 minutes) administer repeatedly medical charcoal in a large quantity of water or ipecac. If toxicity from exposure has progressed to cause severe vomiting, the extent of resultant fluid and electrolyte imbalance should be gauged. Appropriate supportive parenteral fluid replacement therapy should be given, along with other required supportive measures (such as maintenance of blood pressure levels and proper respiratory functionality) as indicated by clinical signs, symptoms, and measurements. In severe cases, observations should continue for at least several days until clinical condition is stable and normal. Since emamectin benzoate is believed to enhance GABA activity in animals, it is probably wise to avoid drugs that enhance GABA activity (barbiturates, benzodiazepines, valproic acid) in patients with potentially toxic emamectin benzoate exposure.

Have the product container or label with you when calling a poison control center or doctor, or going for treatment.

HOT LINE NUMBER

For 24-Hour Medical Emergency Assistance (Human or Animal), Or Chemical Emergency Assistance (Spill, Leak, Fire or Accident) Call 1-800-888-8372

Applicators and other handlers must wear:

Personal Protective Equipment (PPE)

- long-sleeved shirt and long pants
- Chemical–resistant gloves (Category C) such as barrier laminate; butyl rubber ≥14 mils; nitrile rubber ≥14 mils; or neoprene rubber ≥14 mils.
- shoes and socks
- · protective eyewear

Environmental Hazards

This product is highly toxic to fish, mammals and aquatic invertebrates. Do not apply directly to water, to areas where surface water is present or to intertidal areas below the mean high water mark. Do not contaminate water when disposing of equipment washwater. This product is highly toxic to bees exposed to direct treatment or residues on blooming trees.

Physical or Chemical Hazards

Do not use or store near heat or open flame.

CONDITIONS OF SALE AND LIMITATION OF WARRANTY AND LIABILITY

NOTICE: Read the entire Directions for Use and Conditions of Sale and Limitation of Warranty and Liability before buying or using this product. If the terms are not acceptable, return the product at once, unopened, and the purchase price will be refunded.

The Directions for Use of this product must be followed carefully. It is impossible to eliminate all risks inherently associated with the use of this product. Crop injury, ineffectiveness or other unintended consequences may result because of such factors as manner of use or application, weather or crop conditions, presence of other materials or other influencing factors in the use of the product, which are beyond the control of SYNGENTA CROP PROTECTION, Inc. or Seller. To the extent permitted by applicable law, Buyer and User agree to hold SYNGENTA and Seller harmless for any claims relating to such factors.

SYNGENTA warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated in the Directions for Use, subject to the inherent risks referred to above, when used in accordance with directions under normal use conditions. To the extent permitted by applicable law: (1) this warranty does not extend to the use of the product contrary to label instructions or under conditions not reasonably foreseeable to or beyond the control of Seller or SYNGENTA, and, (2) Buyer and User assume the risk of any such use. TO THE EXTENT PERMITTED BY APPLICABLE LAW, SYNGENTA MAKES NO WARRANTIES OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE NOR ANY OTHER EXPRESS OR IMPLIED WARRANTY EXCEPT AS WARRANTED BY THIS LABEL.

To the extent permitted by applicable law, in no event shall SYNGENTA be liable for any incidental, consequential or special damages resulting from the use or handling of this product. TO THE EXTENT PERMITTED BY APPLICABLE LAW, THE EXCLUSIVE REMEDY OF THE USER OR BUYER, AND THE EXCLUSIVE LIABILITY OF SYNGENTA AND SELLER FOR ANY AND ALL CLAIMS, LOSSES, INJURIES OR DAMAGES (INCLUDING CLAIMS BASED ON BREACH OF WARRANTY, CONTRACT, NEGLIGENCE, TORT, STRICT LIABILITY OR OTHERWISE) RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT, SHALL BE THE RETURN OF THE PURCHASE PRICE OF THE PRODUCT OR, AT THE ELECTION OF SYNGENTA OR SELLER, THE REPLACEMENT OF THE PRODUCT.

SYNGENTA and Seller offer this product, and Buyer and User accept it, subject to the foregoing Conditions of Sale and Limitation of Warranty and Liability, which may not be modified except by written agreement signed by a duly authorized representative of SYNGENTA.

DIRECTIONS FOR USE RESTRICTED USE PESTICIDE

It is a violation of Federal law to use this product in a manner inconsistent with its labeling.

IMPORTANT: Read entire label before using this product. Failure to follow label instructions may result in poor control or tree injury. Failure to follow label directions may cause injury to people, animals and environment.

APPLICATION TO TREES

TREE-äge is for control of mature and immature arthropod pests of ash trees, including, but not limited to, those growing in residential and commercial landscapes, parks, plantations, seed orchards, and forested sites (in private, municipal, state, tribal and national areas). TREE-äge contains the active ingredient emamectin benzoate and is formulated to translocate in the tree's vascular system when injected. This product must be placed into active sapwood.

USE DIRECTIONS

TREE-äge is designed for use with tree injection devices that meet the label and dose requirements [(for example, the Arborjet Tree Injection Systems)] for the control of listed pests of trees. Follow manufacturer's directions for equipment use.

Dosages are based on the Diameter (in inches) of the tree at Breast Height (DBH"). Tree DBH is the outside bark diameter at breast height. Breast height is defined as 4.5 feet (1.37m) above the ground on the uphill side of the tree. For the purposes of determining breast height, the ground includes the duff layer that may be present, but does not include unincorporated woody debris that may rise above the ground line.

Often the diameter is determined from measuring the circumference of the tree at this height, and dividing circumference (in inches) by three (3). To determine DBH" for multi-stemmed woody ornamentals, measure the DBH" for each stem or branch and add together for the total DBH" per tree.

Placement of Application/Injection Sites: Inject at the base of the tree. Inject into the stem within 12" of the soil, into the trunk flare or into tree roots exposing them by shallow excavation. Make applications into intact, healthy sapwood. Avoid injured areas or areas with decay. Select injection sites associated with stem growth.

Number of Injection Sites: Work around the tree, spacing injection sites approximately every 6.0 inches of tree's circumference.

Drill Depth: Drill through the bark then 5/8" to 1-5/8" (hardwoods) or 1-5/8" to 2" (conifers) into the sapwood with the appropriate sized drill bit. Use clean, sharp drill bits.



Brad point bits are recommended. Precautions should be taken to avoid diseased areas and transferring infected tissues to other injection sites.

Resinous Conifers

In resinous conifers, such as pine and spruce, start the injection immediately after drilling into the sapwood. A prolonged delay may reduce uptake on account of resin flow into opening.

WHEN TO TREAT

TREE-age contains the active ingredient emamectin benzoate which is a glycoside insecticide. It is active against immature and adult stages of arthropods. The primary route of toxicity is through ingestion.

ENVIRONMENTAL CONDITIONS: Uptake of TREE-äge is dependent upon the tree's transpiration. Transpiration is dependent on a number of abiotic and biotic factors, such as soil moisture, soil and ambient temperature, and time of day. For uptake, apply when soil is moist, soil temperatures are above 45°F, ambient temperatures are between 40° to 90°F, and during the 24 hour period when transpiration is greatest, typically before 2:00 PM. Applications to drought or heat stressed trees may result in injury to tree tissue, poor treatment and subsequent control. Watering the trees prior to injection is therefore required if they are drought or heat stressed.

MONITOR TREE HEALTH and PEST INFESTATIONS: Effective injection treatment is favored by a full canopy (i.e., leaves) and healthy vascular system. Once these tissues are compromised by arthropod damage (larval galleries, defoliation, leaf mining, etc.) an effective and uniform application of TREE-äge may be difficult to achieve and subsequent control may be poor. Optimally, treatment should be made preventively at least 2 to 3 weeks before arthropods historically infest the host tree. As a result of systemic movement and longevity of TREE-äge in trees, this interval may be extended much earlier to 6 months should tree dormancy, adverse weather, management, asynchronous life cycle of pests, etc., allow earlier application timing.

TREE-äge may also be effective as a remedial treatment against some pests, such as those with slower development or if multiple life stages are susceptible to TREE-äge. Pests that attack the stem and branches such as bark beetles and clearwing borers may disrupt vascular tissue resulting in poor distribution in an infested tree. This includes the initial larval stages of pests, such as bark beetles and clearwing borers, that attack the stem and branches, which may disrupt vascular tissue resulting in poor distribution of the product in an infested tree. However, control may be achieved if larvae come into contact or feed on TREE-äge treated tissues.

USE

Use as formulated or dilute with equivalent 1 to 3 volumes of water or more, as necessary.

USE RATE TABLE*

Tree Diameter (DBH) (Inches)	Low ml./tree	Medium ml./tree	Medium - High ml./tree	High ml./tree	Number of Injection Sites**
4 to 6	15	25	50	-	3
7 to 9 .	20	40	80	•	4
10 to 12	30	55	110	165	5
13 to 15	35	70	140	210	6
16 to 18	40	75	150	225	7
19 to 21	50	100	200	300	8
22 to 24	-	115	230	345	10
25 to 27	-	130	260	390	11
28 to 30	- •	145	290	435	12
31 to 33	-	160	320	480	13
34 to 36	-	175	350	525	15
37 to 39	-	190	380	570	16
40 to 42	-	205	410	615	17
43 to 45	-	220	440	660	18
46 to 48	-	235	470	705	20
49 to 51	-	250	500	750	21
52 to 54	-	265	530	795	22
55 to 57	-	280	560	840	23
58 to 60	-	295	590	. 885	25
61 to 63	-	310	620	930	26
64 to 66	-	325	650	975	27
67 to 69	-	340	680	1020	28
70 to 72	-	355	710	1065	30

^{*} Product/1" DBH: Low= 2.5 ml/1"DBH; Medium= 5 mls/1"DBH; High= 10 mls/1"DBH. The use of low, medium and high rates are based on the professional judgement of the applicator as to what constitutes a low, medium or high infestation.
**For control, be within ± 1 injection site of this number per tree.

Higher rates tend to provide longer residual and control of more difficult to control insects. See **Target Pest** for additional information in choosing the amount of product to apply.

Applications Tree Tissue	Target Pest	Recommended Rate ²	Comments	
Seed and Cone	Pine Cone Worm (Dioryctria spp)	Medium to High	For control apply in the fall for early season pests or at least 30 days before insect attack.	
Bud and Leaf	Bagworm Fall Webworm Gypsy Moth Leafminers (including Diptera, Lepidoptera, Coleoptera, Hymenoptera) Orange-striped Oakworm	Low to High	Apply at least 2-3 weeks before the pest has historically been present. Consult with local extension agent for when this will occur in your area.	
,	Mites: Eryiophid mites European red mite Spruce spider mites Twospotted spider mite Sawfly Erythrina gall wasp	Low to High		
	Tent Caterpillars (including Eastern, Forest, Pacific, and Western) Western Spruce budworm Winter Moth	Low to Medium		
Shoot, Stem, Trunk and Branch	Buprestid Borers (Flathead borers including Emerald Ash Borer, Bronze birch borer, two-lined chestnut borer)	Low to High	For control apply at least 30 days before historical egg hatch or adult flight and to trees whose vascular tissue is not	
	Clearwing borers Horntails	Low to Medium		
	Longhorn borers- (Roundhead borers including Eucalyptus, Pine Sawyer) Pine wood nematode Pales Weevil (Hylobius pales) Scolytids (bark beetles) Ips engraver beetles Mountain pine beetle Southern pine beetle Spruce beetle Western pine beetle White pine weevil	Medium to High	If vascular tissue is damaged or plugged by insect galleries, nematodes or fungi, uniform treatment and control may not be achieved.	

Apply once per season.

Low= 2.5 ml/1"DBH; Medium= 5 mls/1"DBH; High= 10 mls/1"DBH. Use low to medium rates as preventive treatments. Use medium to high rates for remedial and longer residual control.

Compatibility

Do not mix TREE-age before injection with other products such as insecticides, fungicides, plant growth regulators, surfactants, adjuvants, and fertilizers.

RESTRICTIONS

- Do not apply to trees that may yield food consumed by humans or used in animal feed.
- Avoid treating trees that are moisture stressed or suffering from herbicide damage.

STORAGE AND DISPOSAL

Do not contaminate water, food, or feed by storage and disposal.

Pesticide Storage

Store in a cool, dry place, away from children and pets. Keep from freezing.

Pesticide Disposal

Waste resulting from the use of this product may be disposed of on site or at an approved waste disposal facility.

Container Disposal

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.

TREE- äge is a registered trademark of Arborjet, Inc.

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For non-emergency (e.g., current product information), call Syngenta Crop Protection at 1-800-334-9481.

Manufactured for: Syngenta Crop Protection, Inc. P.O. Box 18300 Greensboro, North Carolina 27419-8300

SCP xxxxxA-M(draft-c TREE-äge)

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