

Wedge Direct Inject Pest Timing Chart

(248) 366-7799		Pests	Insecticide	April	May	June	July	August	September	October
Adelgids	Pointer		Preventative							
Aphids	Pointer		Preventative				Curative			
Ash Flower Gall (Mite)	Greyhound							Preventative	(For the Following year)	
Asian Longhorn Beetle	Pointer		Preventative				Curative			
Bagworms	Greyhound					Curative				
Beach Bark Disease (Scale)	Pointer		Preventative				Curative			
Black Vine Weevil	Pointer			Preventative						
Bronze Birch Borer	Pointer		Preventative				Curative			
Cankerworms	Greyhound		Preventative			Curative				
Clear Wing Borer	Greyhound			Preventative				Curative		
Cooley Spruce Gall	Pointer		Preventative					Preventative		
Elm Leaf Beetle	Pointer			Preventative			Curative			
Emerald Ash Borer	Pointer			Preventative			Curative			
Emerald Ash Borer	Greyhound			Preventative			Curative			
Fall Webworm	Greyhound			Preventative			Curative			
Gypsy Moth	Greyhound		Preventative		Curative					
Hemlock Wooly Adelgid	Pointer		Preventative						Preventative	
Japanese Beetle	Pointer			Preventative		Curative		(Recommend - 2mls per injection site)		
Lace Bugs	Pointer		Preventative		Curative					
Leafhoppers	Pointer		Preventative		Curative					
Leafminers	Pointer		Preventative		Curative					
Lilac Borer	Greyhound		Preventative				Curative			
Linden Borer	Pointer		Preventative				Curative			
Mealy Bugs	Pointer		Preventative		Curative					
Mimosa Webworm	Greyhound		Preventative				Curative			
Pine Wilt Nematodes	Greyhound					Preventative Only			(3 year treatment)	
Pine Sawfly Larvae	Pointer		Pre-Emergence				Post-Emergence			
Pine Sawfly Larvae	Greyhound									
Psyllids	Pointer		Preventative				Curative			
Scale - Armored	Pointer		Suppression (2 applications yearly - early spring and early summer)							
Scale - Soft Shelled	Pointer		Preventative				Curative			
Spider Mite	Greyhound		Preventative				Curative			
Tent Caterpillar	Greyhound		Preventative				Curative			
Tussock Moth	Greyhound		Preventative				Curative			
Two-Lined Chestnut Borer	Pointer		Preventative				Curative			
Zimmerman Pine Moth Larvae	Pointer		Pre-Emergence				Post-Emergence			
Zimmerman Pine Moth Larvae	Greyhound									
Application	Pointer (Imidacloprid)	1ml per 4" to 6" of trunk circumference measured within 12" of the ground. Dosage may be increased to 2 ml per injection site for trees with diameters over 12" with challenging insect infestations (Such as EAB).								
	Greyhound (Abamectin)	Pine Wilt Nematode: 4-6 ml every 4" of trunk circumference measured within 12" of the ground. Other Insects: 1ml per 4" to 6" of trunk circumference measured within 12" of the ground. Dosage may be increased to 2 ml per injection site for trees with diameters over 12" or with challenging insect infestations.								
Application Note: Depending on type of bark, the dosage per injection site may have to be reduced to 0.5 to 1ml per site and the number injection sites doubled.										
Treatment Note: If possible, during drought or dry periods the tree to be treated should be watered 24 hours prior to injection.										
Timing Note: Timing is approximate depending on local weather conditions, foliage should be out and bark should be pliable. Also, results may vary depending on geographical area.										



(248) 366-7799

Wedge Direct Inject Disease & Nutrient Timing Chart

Disease	Treatment	April	May	June	July	August	September	October
Anthracnose	Shepherd	Suppression				Preventative	(For the Following year)	
Application: 2 ml per injection site. 1 injection site every 3" to 5" of trunk circumference.								
Apple Scab	Shepherd	Suppression				Preventative	(For the Following year)	
Application: 1-2 ml per injection site. 1 injection site every 3" to 5" of trunk circumference.								
Ash Yellow	Terrier	Preventative						
Application: 1-2 ml per injection site. 1 injection site every 4" to 5" of trunk circumference.								
Bacterial Blight	Whippet	Preventative						
Application: 1-2 ml per injection site. 1 injection site every 4" to 5" of trunk circumference.								
Bacterial Leaf Scorch	Terrier	Preventative						
Application: 1-2 ml per injection site. 1 injection site every 4" to 5" of trunk circumference.								
Chlorosis (Birch Trees)	Iron /Manganese Nutribooster							
Application: 1 ml per injection site. 1 injection site every 4" of trunk circumference.								
Chlorosis (Oak Trees)	Iron, Iron/Manganese or Greentree Pro							
Application: 1 ml per injection site. 1 injection site every 4" of trunk circumference.								
Chlorosis (Maple Trees)	Manganese or Iron/Manganese							
Application: 1 ml per injection site. 1 injection site every 4" of trunk circumference.								
Diplodia	Shepherd	Preventative						
Application: 2-4 mls per injection site. 1 injection site every 3" to 5" of trunk circumference.								
Dutch Elm	Shepherd	Preventative						
Application: 5-10 ml per injection site. 1 injection site every 3" to 5" of trunk circumference.								
Fire Blight	Whippet or Terrier	Preventative						
Application: 1-2 ml per injection site. 1 injection site every 4" to 5" of trunk circumference.								
Oak Wilt	Shepherd					Preventative	(For the Following year)	
Application: 3-5 ml per injection site. 1 injection site every 3" to 5" of trunk circumference.								
Phloem Necrosis (Elm Yellows)	Terrier							
Application: 1-2 ml per injection site. 1 injection site every 3" to 5" of trunk circumference.								
Powdery Mildew	Shepherd							
Application: 1-2 ml per injection site. 1 injection site every 3" to 5" of trunk circumference.								
Rust	Shepherd							
Application: 1-2 ml per injection site. 1 injection site every 3" to 5" of trunk circumference.								
Tree Stress	PK Pro Nutribooster							
Application: 1 ml per injection site. 1 injection site every 4" of trunk circumference.								
Lethal Yellow (Palms)	Springer	Registered in the state of Florida only. Application: Refer to label						

Application Note: Depending on type of bark, the dosage per injection site may have to be reduced to 0.5 ml per site and the number injection sites doubled.

Treatment Note: If possible, during drought or dry periods the tree to be treated should be watered 24 hours prior to injection.

Timing Note: Timing is approximate depending on local weather conditions, foliage should be out and bark should be pliable. Results may vary depending on geographic area.

PK Pro Nutribooster can be used with all other treatments at the same application time to enhance tree recovery.



(248) 366-7799

Wedge Direct Inject Fruit & Seed Reduction Timing Chart

Tree	Treatment	April	May	June	July	August	September	October
Crab Apple	Pinscher					Suppression	(For the following year)	
Catalpa	Pinscher					Suppression	(For the following year)	
Coffee Tree	Pinscher					Suppression	(For the following year)	
Cottonwood	Pinscher					Suppression	(For the following year)	
Ginko	Pinscher		Suppression					
Locust	Pinscher		Suppression					
Maple	Pinscher					Suppression	(For the following year)	
Mulberry	Pinscher					Suppression	(For the following year)	
Sweet Gum	Pinscher					Suppression	(For the following year)	
Sycamore	Pinscher		Suppression					
Walnut	Pinscher		Suppression					

Application Rate: (Pinscher, Dikegulac-sodium) Trees 18" to 30" circumference, 0.5 - 1 ml every 4" around the base (flare) of the tree. Trees over 30" circumference, 1-2 ml every 4" around the base of the tree.

Treatment Note: If possible, during drought or dry periods the tree to be treated should be watered 24 hours prior to injection.

Timing Note: The best results on most deciduous trees are obtained when trees are injected with Pinscher PGR in the late summer (One month prior to the typical first frost). First year treatments will be more effective if injections are made in the early spring and again in late summer. In the following years make injections in the late summer for control in following year. Some exceptions to this rule are late fruiting trees such as Locust, Walnut, and Ginko trees, in which fruiting /seeding is better controlled by injecting in early spring.

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E-mail: bannersales360@gmail.com

2016 ArborSystems QC Wedgle Direct-Inject System -- FAX Order Form

Company: _____ Name: _____ Phone: _____ Fax: _____

Shipping Address: _____

Billing Address (if different): _____ Email: _____

Visa/MC/AMEX Number: _____ Exp. Date: _____ Security Code: _____ Name on card: _____

Shipping Method: _____ UPS Ground: _____ UPS 2nd Day: _____ UPS Next Day: _____ Signature: _____

QC Insecticides, Fungicides, Nutriboosters, PGRs and Antibiotics				QC Wedgle Direct-Inject Equipment, Tools and Parts			
Product	Price	No.	TOTAL	Product	Price	No.	TOTAL
QC Pointer Insecticide 120/ml btl. (\$2.13 per ml)	\$255.00			QC Wedgle Direct Inject "Deluxe Combo Kit"	\$845.00		
QC Pointer Insecticide 1000/ml box (\$1.66 per ml)	\$1,660.00			QC Wedgle Direct Inject "Standard Combo Kit"	\$595.00		
QC Greyhound Insecticide 120/ml btl. (\$2.13 per ml)	\$255.00			QC SW300 Wedgle Direct Inject *Unit Only*	\$394.00		
QC Greyhound Insecticide 1000/ml box (\$1.66 per ml)	\$1,660.00			QC Portle Kit (includes 12 portle needles)	\$299.00		
QC Shepherd Fungicide 120/ml btl. (\$1.33 per ml)	\$160.00			QC High Volume Kit	\$130.00		
QC Shepherd Fungicide 1000 ml box (\$1.14 per ml)	\$1,135.00			QC High Volume Connection Hose	\$80.00		
QC Whippet Fungicide 120/ml btl. (\$1.54 per ml)	\$175.00			QC Wedgle Direct Inject .75" Needles 4/pak	\$27.00		
QC Manganese Nutribooster 120/ml btl. (\$0.71 per ml)	\$90.00			QC Wedgle Direct Inject 1.5" Needles 4/pak	\$35.00		
QC Iron Nutribooster 120/ml btl. (\$0.71 per ml)	\$90.00			QC Portle Evergreen .50" Needle (each)	\$17.00		
QC Iron/Manganese Nutribooster 120/ml btl. (\$1.13 per ml)	\$140.00			QC Portle Evergreen .75" Needle (each)	\$19.00		
QC PK Pro Nutribooster 120/ml btl. (\$1.13 per ml)	\$135.00			QC Portle Evergreen 1.5" Needle (each)	\$20.00		
QC PK Pro Nutribooster 1000/ml box (\$0.98 per ml)	\$975.00			QC Wedgle Rugged All-In-One Equipment Case	\$90.00		
QC Green Tree Pro Nutribooster 120/ml btl. (\$1.13 per ml)	\$140.00			WedgeChek Punch Tip #71	\$6.00		
QC Pinscher PGR 120/ml btl. (\$2.08 per ml)	\$250.00			WedgeChek Punch Tool	\$60.00		
QC Mastiff PGR 120/ml btl. (\$2.04 per ml)	\$245.00			QC Annual Maintenance Kit	\$24.00		
QC Terrier Antibiotic 60/ml btl. (\$2.51 per ml)	\$151.00			Wedge Unit Cleaning Brush	\$5.00		
QC Terrier Antibiotic 120/ml btl. (\$2.34 per ml)	\$281.00			QC Cleaning Solution (95% Ethyl Alcohol) 120/ml btl.	\$12.00		
QC Boxer Insecticide-Miticide 120/ml btl. (\$2.33 per ml)	\$280.00			QC Training Water 120/ml btl.	\$10.00		

Quick-Connect™ Injection Tips

Treat more types of trees, more effectively



Wedgle® Injection Tips
Ideal for most hardwoods, features a wedge-shaped end which deposits chemical where it can most easily be absorbed by the tree—in the cambial zone between the bark and outer ring of sapwood (the xylem).

Portle® Injection Tips for Conifers
The Portle Tip has multiple ports (openings) along the end of the tip, delivering chemical to numerous points in the inner active layers.

Palm Injection Tip
The longer, heavier Palm Tip is designed to penetrate a palm's outer husk and deliver

WedglePlus™ Injection Tips Ideal for early and late season injections

Combines the patented wedge-shaped end of the original Wedgle Tip with the innovative check-valve hub of the Portle Tip.

Designed for injecting larger quantity of chemical. Same Wedgle Tip design with check valve in hub. Used with WedgeChecks. Check valve lets you remove the injection unit from the tip so you can make other injections while letting the tree absorb chemical.

When tree pressure is high, such as when making early or late season injections, chemical may be pushed out of the WedgeCheck if the tip is withdrawn too quickly. With the WedglePlus Tip, you can disconnect the injection unit from the tip and allow more time for the tree to absorb the chemical before removing the tip. This virtually eliminates chemical leakage.



Tip Setter
The Tip Setter is used to set and remove Portle and Portle Palm Tips deeper into trees and palms with a sliding, tapping action.

The High-Volume Kit

Treat hundreds of trees nonstop

Make up to 1,000 injections without reloading chemical. Simply attach the transfer line to the 1000 ml chemical pack and the Direct-Inject unit. Heavy-duty nylon backpack* has padded shoulder straps and carrying handle.

*Product picture may differ from actual product.

Chemical pack cage, with snap pin lock, holds and protects 1000 ml chemical pack. Cage fits inside backpack and keeps transfer line firmly attached. ▼

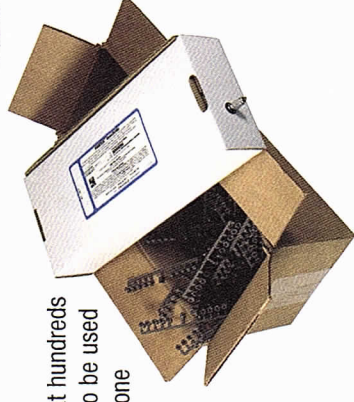


Quick-Connect™ Chemical Packs

120 ml chemical packs attach in a flash—simply slide back the top QC coupler on the Direct-Inject QC™ injector, insert the chemical pack, then release the coupler to lock the chemical pack in place. Air-free packs are easy to prime, empty completely, and work at any angle.

1000 ml chemical packs allow you to treat hundreds of trees without changing chemical packs. Designed to be used with our High-Volume Kit (see page 4). Simply attach one end of the transfer line to the top QC coupler on the injector, the other end to a 1000 ml chemical pack, and you are ready to go. Transfer line is part of the High-Volume Kit (sold separately).

Purchase a transfer line for each chemical in 1,000 mL containers.



Control webworm, caterpillars, mites, and more

Greyhound™

Insecticide

Chemical: Abamectin

Application rate

For most insects: Inject 1 ml every 4" to 6" around the base (flare) of the tree.

For Pine Wilt (Pinewood Nematodes): Inject 5 ml every 4" around the base of the tree.

Insects controlled

A single application provides effective season-long control of many problematic pests.

- Lepidoptera insects such as Gypsy Moth, Bagworm, Mimosa Webworm, Tent Caterpillars, etc.
- Elm Leaf Beetles
- Leafminers
- Lace Bugs
- Nematodes
- Mites



Pine Wilt, caused by Pinewood Nematodes, is a condition found primarily in Scots pine trees, (also called Scotch pine (Pinus sylvestris)).

Once symptoms appear, Pine Wilt typically kills trees quickly—within a few weeks to a few months. There is no cure for Pine Wilt, although a preventative treatment has emerged; Greyhound™ Insecticide.



Gypsy moth photo courtesy of USDA/ForestImages.org

Protect Scots Pine against Pine Wilt

Research Report

One application reduces Pine Wilt risk for up to 3 years

A test was conducted in a large block planting of Scots pine at Horning State Farm near Plattsmouth, Nebraska, from 2003 to 2005. Many trees within the planting and surrounding areas had died from Pine Wilt in the previous three years. Symptomless trees were selected for the test; some received one application of Greyhound Insecticide, others were left untreated. At the end of three years, the survival rate of treated trees exceeded that of untreated trees by nearly 300%.

Research conducted by the Nebraska Forest Service, University of Nebraska, Lincoln. See the full report at ArborSystems.com



Portle® Injection Tips improve conifer treatments

Multiple ports along the end of the tip deposit chemical at numerous points in the inner active layers of the tree, improving chemical retention and absorption.

Portle Tips are inserted with the new Tip Setter, which easily drives tips deep into the tree, optimizing treatment effectiveness.

Pointer® Insecticide

Chemical: Imidacloprid

Application rate

Inject 1 ml every 4" to 6" around the base (flare) of the tree.

Insects controlled

- Adelgids (including Hemlock Woolly Adelgids)
- Flatheaded Borers (including Alder-Birch, Bronze Birch, and Emerald Ash Borers)
- Aphids
- Elm Leaf Beetles
- Black Vine Weevil Larvae
- Eucalyptus Longhorned Borer
- Japanese Beetles
- Lacebugs
- Leafhoppers
- Leafminers
- Mealybugs
- Sawfly Larvae
- Pine Bark Beetles
- Pine Tip Moth Larvae
- Psyllids
- Royal Palm Bugs
- Soft Scale Insects
- Whiteflies

Pointer also provides suppression of Thrips and Armored Scales.

Timing of Pointer and Greyhound injections

As a preventative, apply in the early spring, prior to insect activity in the tree. As a curative, apply as needed spring through fall, as long as bark is pliable enough to accept the chemical injections. Combine with PK Pro® Nutriboosters™ injections to speed tree recovery. One application provides season-long control.



Emerald Ash Borer Control: Others claim it. Only Pointer proves it!

Pointer delivers proven control of Emerald Ash Borer

Over the last nine years, Direct-Inject applications of Pointer Insecticide have saved thousands of ash trees, providing proven control of EAB, preventively and curatively even in heavily infested areas.

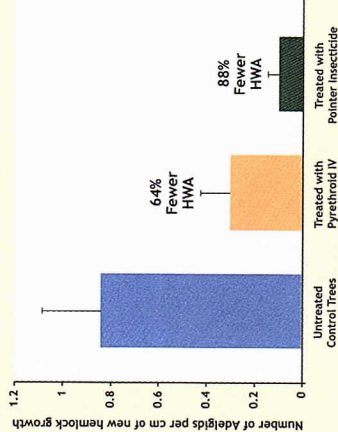
Research Reports

Control Hemlock Woolly Adelgids and other pests

Untreated tree with HWA damage.



Pointer-treated tree is protected from damage.



"This two trunked limber pine had a heavy infestation of pine needle scale. The left side was treated with Pointer. The right side was untreated. As you can see, the treated side is thriving, the other is dead."

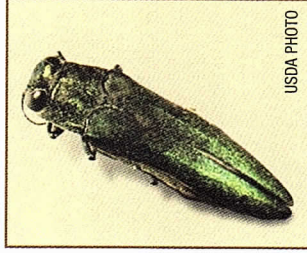
Bureau of Forestry Assistance,
Idaho Department of Lands
Coeur d'Alene, ID

See the full report at ArborSystems.com



Banner "EAB" Tips

- Look for notched leaves from adult EAB feeding activity as the first sign of infestation - Treat Now! "D" shaped exit holes appear after extensive damage.
- Fertilize trees with the Banner "Tree Recovery Formulation" to give the tree energy needed to repair insect damage (page 7).
- Do not drill infested trees for treatment because the energy expended to compartmentalize and calouse over the drill wounds may deplete the trees energy reserves causing death.



USDA PHOTO

Case study: Survival rate of Pointer-treated ash

In Southeastern Michigan, an island of ash thrives amid a sea of dead trees. Ash Trees have been treated in the city with the Direct-Inject applications of Pointer insecticide. Since 2002, only 3% of the 640 ash trees being treated have been lost to Emerald Ash Borer.

This is only one of hundreds of Pointer success stories. Visit arborsystems.com for research details, field reports and user testimonials. Also visit treeresearch.org to see Dr. Dave Roberts, MSU, Discoverer of EAB, discuss "The Michigan Experience."

Shepherd® Fungicide

Chemical: Propiconazole

Indications

Shepherd provides suppression of the diseases listed below. See label for detailed application instructions and recommendations.

Disease

Oak Wilt
5-10 ml every 4" of trunk circumference.

Anthraxnose
2 ml every 4" of trunk circumference.

Dutch Elm Disease
5-10 ml every 4" of trunk circumference.

Leaf diseases in Crabapple
1 ml every 4" of trunk circumference.

Diplodia Tip Blight
2-4 ml every 4" of trunk circumference.

Terrier™ Systemic Antibiotic

An ArborSystems™ Direct-Inject™ Chemical

For suppression of certain diseases including bacterial leaf scorch, fire blight, yellows diseases and phloem necrosis on ornamental trees.

ACTIVE INGREDIENT:

Oxytetracycline hydrochloride..... 4.3%

OTHER INGREDIENTS

..... 95.7%
Total 100.0%

PRODUCT INFORMATION

TERRIER™ Systemic Antibiotic is a ready-to-use antibiotic for non-crop bearing ornamental trees and large woody shrubs. TERRIER™ Systemic Antibiotic provides seasonal suppression of a variety of diseases including bacterial leaf scorch, fire blight, yellows diseases, phloem necrosis, mycoplasmas, xylem-limited bacteria (*Xylella fastidiosa*, BLS) and some bacterial blight diseases. Late summer or early fall applications provide disease suppression the following season. Some diseases may require repeated yearly application.

Application rate

1-2 ml every 4" around trunk circumference at flare

Prevent a variety of devastating tree diseases

A single application of Shepherd Fungicide provides season-long protection against the devastation of Oak Wilt as well as Dutch Elm disease, leaf disease in Crabapple, and Anthracnose in Sycamores. Application in late summer/early fall provides protection for the following year.

Each Shepherd Direct-Inject application delivers proven results with far less chemical, so you'll save time, money, and delight your customers with this effective, no-mess approach.

Whippet® Fungicide

Chemical: Mono- and di-potassium salts of Phosphorous Acid

Indications

Whippet provides effective control of *Phytophthora* spp. and Pythium diseases associated with Stem and Canker Blight (Sudden Oak Death *Phytophthora ramorum*), Beech Decline, and Fireblight.

Application rate

Inject 2-4 ml every 4" around the base (flare) of the tree. Injections may be made any time during the growing season, but are more effective when made early in the season.

* Use in California limited to oaks (Coastal, Live, Shreve, Black Canyon)



Photo courtesy of USDA/ForestyImages.org

Tree species*

Use on trees such as Almond, Apple, Avocado, Beech, Cedar, Chestnut, Conifers, Crabapple, Dogwood, Elm, Fir, Hawthorne, Juniper, Linden, Macadamia Nut, Monterey Pine, Oaks (Coastal, Live, Shreve, Black Canyon), Oriental Pear, Ornamental Pear, Ornamentals, Pineapple, Pyracantha, Stone Fruit, Sweet Birch, Sweet Gum, Tan Oaks, White Pine, White Cedar and Willow.

Boost your tree recovery program

Compatible with most products!

Timing of PK Pro injections

Injections can be any time during the growing season, preferably in the spring or early summer. Do not apply more than once a year. Can be applied at the same time as other ArborSystems curative treatments.



PK Pro® Nutriboosters™ 0-36-26

Contains: 36% Phosphorus and 26% Potassium

Indications

PK PRO is used to counter the effects of stress due to drought, transplanting, or construction damage.

- Phosphorus encourages stem elongation and is essential for root growth, vegetative growth, and fruit set.
- Potassium promotes overall tree health.

Application rate

Inject 1 ml every 4" around the base (flare) of the tree.

Green up fast
with Nutriboosters™

Trees suffering from slow or incomplete leaf-out? Trees looking yellow or tired? Nutriboosters promote leaf growth and help trees overcome chlorosis. Watch your trees change from sickly to darker-green healthy in days. Choose from six formulations.

Iron
Nutriboosters™

Contains: 12.5% Iron

Application rate

Inject 1 ml every 4" around the base (flare) of the tree.

Indications

Relieves symptoms of iron chlorosis, the general yellowing of foliage. Helps leaves turn green which improves tree health.

Symptoms of iron chlorosis and manganese deficiency

- Iron deficiency in conifers is indicated when the needles turn yellow.
- In deciduous trees, the leaves yellow while the veins remain green. When fine veins become chlorotic (yellow), and/or if leaf edges are wavy, crinkled, or curled, tree may also have manganese deficiency.
- The degree of yellowing indicates the severity of the deficiency.
- Ornamental trees sensitive to iron deficiencies include American Elm, Cottonwood, Jack Pine, London Plane, Magnolia, Maples, Mountain Ash, Oaks, Walnut, White Pine, and Yellow Birch.
- Ornamental trees susceptible to manganese deficiencies include Birch, Dogwood, Maples (especially Red and Sugar) Flowering Cherry, Sweetgum, and Sergeant Crab.

Boost health, leaf-out, and green-up

Application rate

Inject 1 ml every 4" around the base (flare) of the tree.

Indications

GreenTree Pro Nutriboosters® helps stressed, weak, and yellowing trees regain health and vitality. One application will help trees quickly green up, leaf out, and recover from drought, construction, or transplant stress. Results are often seen within two weeks, especially when treatments are made in the late spring or early summer.

GreenTree Pro
Nutriboosters 0-15-10
with IRON

Contains: 15% Phosphorus, 10% Potassium, and 8% Iron



Before treatment



Two weeks after treatment

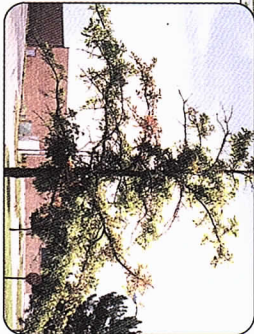
- GreenTree Pro is a unique formulation of three compounds which boost tree vigor.
- Phosphorus encourages stem elongation, root growth, and vegetative growth.
- Potassium promotes overall tree health.
- Iron promotes the development of darker green, healthy leaves, relieving the symptoms of chlorosis.

Iron/Manganese
Nutriboosters™

Contains: 12.5% Iron and 3.5% Manganese



Pin Oak before treatment



(top) and 10 days after treatment (right).

Application rate

Inject 1 ml every 4" around the base (flare) of the tree.

Indications

Relieves symptoms of iron chlorosis and manganese deficiencies in trees.

Manganese
Nutriboosters™

Contains: 5% Manganese

Application rate

Inject 1 ml every 4" around the base (flare) of the tree.

Indications

Relieves symptoms of manganese deficiency in trees.

Mastiff®
PGR

Chemical: Fluprimeridol

Indications

Mastiff PGR is a plant growth regulator (PGR) which produces desirable growth reduction in a wide variety of ornamental trees. With a single Mastiff PGR application, vegetative and wood growth generally is reduced by up to 70% over a three-year period.

Mastiff condenses shoot elongation and stimulates root development, limiting growth while boosting drought and stress tolerance.



Reduce tree growth up to 70%

Mastiff is ideal for trees:

- Planted too close together
- Too close to homes, decks, sidewalks
- Along scenic or retail lines of sight
- Near utility and power lines
- In containers or tree wells

Mastiff reduces growth damage to side-walks, patios, and decks; and helps you extend trimming cycles and protect views.

Application rate

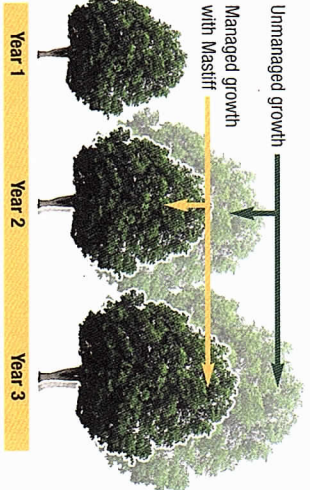
1 ml per 4" of trunk circumference. Increase dosage to 2 ml per injection site for trees with diameters over 12" .

See timing and dosage chart on our website.

Timing of
Mastiff
injections



Shoot growth is most common between April and June. Mastiff PGR applications made prior to shoot growth, either in early spring or the preceding fall, provide more first-year growth control than applications made at other times. Applications in late spring, summer, or fall will provide growth reduction the following year. Regardless of application timing, growth reduction within the first year after treatment may not be as noticeable as in subsequent years. A single Mastiff PGR application provides tree growth regulation for three to five years. Mastiff treatments should not be made more than once every three years.



End messy fruit and seed cleanup

Recommended Timing
of Pinscher Injections

Green = Recommended time to inject
Tan = Not recommended time to inject

Tree	Early Spring	Late Spring	Late Summer	Early Fall
Crab Apple	Green	Green	Green	Green
Catalpa	Green	Green	Green	Green
Coffee Tree	Green	Green	Green	Green
Cottonwood	Green	Green	Green	Green
Ginkgo	Green	Green	Green	Green
Locust	Green	Green	Green	Green
Malberry	Green	Green	Green	Green
Sweetgum	Green	Green	Green	Green
Walnut	Green	Green	Green	Green

Timing of
Pinscher
injections



The best results on most deciduous trees are obtained when trees are injected with Pinscher PGR in the late summer (one month prior to the typical first frost). First year treatments will be more effective if injections are made in the early spring and again in late summer. In following years make injections in the late summer for control the following year. Some exceptions to this rule are late fruiting trees such as Locust, Walnut, and Ginkgo trees, in which fruiting/seeding is better controlled by injecting in early spring.



This mature Ginkgo tree used to produce nearly 100 gallons of seed pods each year, requiring extensive cleanup. Now, with annual Pinscher PGR applications, seed production has been reduced to less than one quart.