A complete product line for tree and landscape maintenance and pest control.
THE ARBORJET DIFFERENCE

Initially developed by arborists, for arborists, Arborjet products have changed the trajectory of arboriculture for hundreds of cities and thousands of service providers. We continue to create and introduce the latest technology to manage our urban forest canopies.

- Injections are sealed in the tree, limiting exposure to homeowners, pets, passers by, the environment, and applicators.
- Applications are made with few restrictions or homeowner notifications.

DRILL, PLUG, AND INJECT METHOD

The Drill, Plug, and Inject method injects or infuses treatments directly into the tree’s vascular system assuring the dose is rapidly carried to the target area.

ARBORJET SUCCESS

We take pride in using equipment and chemistry that have the backing of published research behind it. Delivering these products with Arborjet equipment has proven to be a value for our business and our customers.

Philip Samson, Samson Tree Service
Plymouth, MN
INJECTABLE INSECT CONTROL

TREE-ÄGE®
The original, most widely tested, two-year control of Emerald Ash Borer and many listed pests. Very effective on chewing insects and borers in conifers, deciduous trees, and palms. For use by commercially licensed applicators.

**Effective For:** Emerald Ash Borer, Invasive Shot Hole Borer; Western, Southern, and Mountain Pine Beetles; Leaf Feeding Caterpillars, Bagworms, Webworms, Leafminers, Conifer Mites, and more

1 quart treats 33 trees (10” DBH)

TREE-ÄGE® G4
General use, provides two-year control for listed insect and mite pests in deciduous and coniferous trees and palms.

**Effective For:** Emerald Ash Borer, Invasive Shot Hole Borer; Western, Southern, and Mountain Pine Beetles; Leaf Feeding Caterpillars, Bagworms, Webworms, Leafminers, Conifer Mites, and more

1 quart treats 27 trees (10” DBH) at the medium rate

TREE-ÄGE® R10
Newest addition to the highly effective line of TREE-äge products, with the lowest dose guidance, and quickest injection times. Provides two-year control of most pests. For use by commercially licensed applicators.

**Effective For:** Emerald Ash Borer, Invasive Shot Hole Borer; Western, Southern, and Mountain Pine Beetles; Leaf Feeding Caterpillars, Bagworms, Webworms, Leafminers, Conifer Mites, and more

1 pint treats 24 trees (10” DBH) at the medium rate

IMA-JET® & IMA-JET 10®
Particularly effective on piercing/sucking insects for deciduous and coniferous trees and palms. Provides season long control. Available in a 5% and 10% formulations.

**Effective For:** Adelgids, Aphids, Scale Insects, Whiteflies, Borers (including Emerald Ash Borer, Asian Longhorned Beetle and Bronze Birch Borer), Leaf Beetles, and Psyllids

1 liter of IMA-jet treats 25 trees (10” DBH)

ACE-JET™
Water soluble granular provides a fast knockdown of a broad spectrum of pests with a shorter residual.

**Effective For:** Leaf feeding Caterpillars, Armored and Soft Scales, Adelgids, Leafminers, Spider Mites, and more

One 15 gram packet treats 2 trees (10” DBH)

Cities and service providers have saved millions of trees across the country from Emerald Ash Borer using the TREE-äge line of products and Arborjet injection technology.

The 3-step Plant Health Care (PHC) Program is an all purpose approach designed to help protect palms and trees from the most common insects, diseases, and nutrient deficiencies during a single visit.

Arborjet formulations and equipment are available in multiple sizes and kits. Not all products are available in all states. Please visit arborjet.com

©2019 Arborjet, Inc. Important: Always read and follow label instructions. Some crop protection products may not be registered for sale or use in all states or counties. Please check with your state or local extension service to ensure registration status. TREE-äge Insecticide is a Restricted Use Pesticide and must only be sold to and used by a state certified applicator or by persons under their direct supervision. TREE-äge® is a registered trademark of Arborjet, Inc.
**INJECTABLE INSECT CONTROL (CONTINUED)**

**AZASOL®**
Broad Spectrum, botanical, systemic insect growth regulator, derived from Neem. A non-oil based water soluble powder that can be used as a spray, soil drench, trunk injection, or through chemigation.

**Effective For:** Whiteflies, Leafminers, Scale, Mealybugs, Thrips, Aphids, Psyllids, Caterpillars, and more

6 oz. treats approximately 43 trees (10” DBH) as a trunk injection

---

**INJECTABLE DISEASE CONTROL**

**PHOSPHO-JET™**
A plant resistance activator for the suppression of various diseases. May enhance the tree’s own natural defense capabilities. Can be used as trunk injection, spray, or soil drench.

**Effective For:** Sudden Oak Death, Anthracnose, Phytophthora, Black Spot, Scab, Fire Blight in Apple, Root Rot and more

One liter treats 20 trees (10” DBH)

**PROPIZOL®**
For suppression and control of various diseases. Can be used as trunk injection or spray on trees, shrubs, grasses, and flowers.

**Effective For:** Oak Wilt, Sycamore Anthracnose, Diplodia Tip Blight, Fusarium Dieback, Pitch Canker, Bur Oak Blight, and more

1 liter treats 10 trees (10” DBH), up to 1.5 acres for turfgrass applications, and makes up to 1,700 gallons for ornamental spray applications

**ARBOR-OTC®**
Water soluble, systemic antibiotic for the treatment and suppression of bacterial infections of trees and palms.

**Effective For:** Ash Yellows, Bacterial Leaf Scorch, Fire Blight, Leaf Spot, Lethal Bronzing (Texas Phoenix Palm Decline), and more

1 oz. (28 g.) container treats 10 trees (10” DBH)

---

Some diseases are best addressed with a programmed approach. Reference our 2-Step program on page 16.

---

Arborjet formulations and equipment are available in multiple sizes and kits. Not all products are available in all states. Please visit arborjet.com
**INJECTABLE NUTRIENTS**

**MN-JET FE™**
Balanced source of micronutrients for injection or foliar spray; works for chlorosis caused by micronutrient deficiency or as a good choice for general tree nutrition.

*Effective For: Micronutrient deficiencies in hardwoods, conifers, palms, and ground covers*

1 liter treats 20 trees (10” DBH)

**Palm-Jet MG™**
Specially formulated to alleviate iron and manganese deficiencies in palms and hardwoods.

*Effective For: Iron & Manganese Deficiencies, Nutrient Deficiencies, Leaf Yellowing, Intervernal Chlorosis, Alkaline Soils, Sandy Soils, and Arid Soils*

1 liter treats approximately 66 medium sized palms or 25 hardwoods

---

**PLANT GROWTH REGULATOR**

**SHORTSTOP® 2SC**
Systemic, soil applied, plant growth regulator that slows above ground vegetative growth in trees.

*Effective For: Slowing tree growth, reducing pruning frequency, drought stress, and construction damage, and enhancing fine root hair growth*

1 gallon treats approximately 52 trees (10” DBH) at the medium rate

---

**ARBORJET SUCCESS**

“Arborjet is truly the future in tree and palm care. It is easy to use and the customer support is fantastic.”

**Mark Bodin, Corey Enterprises Lawn & Landscape**
Palm Coast, FL
TREE & ORNAMENTAL CARE

NUTRIROOT® (2-2-3)
Unique blend of micro and macronutrients, seaweed extract, humic acid, surfactants, and humectants designed to increase root development and reduce water stress in trees, shrubs, bedding plants, installs, and transplants.
32 fl. oz. makes up 25 gallons

ARBORPLEX™ (14-4-5) 50% SRN
Blend of slow-release nitrogen with macro and micronutrients to provide consistent, extended feeding for trees and shrubs.
1 gallon contains 1.48 lb. N. May be applied through root injection, soil drench, or foliar spray

BLOOMPLEX™ (8-16-5)
Specially formulated with high quality sources of phosphorus and chelated micronutrients to promote flowering and fruiting.
1 gallon contains 1.69 lbs P₂O₅ and 0.85 lbs N. May be applied through fertigation, soil drench, or foliar spray

Use the AccuFlo for precise applications.

I treated with NutriRoot last summer. It’s unbelievable and doesn’t look like the same tree anymore.
– David Anderson, Shadywood Tree Experts and Landscaping
ORGANIC INSECT & DISEASE CONTROL

Arborjet’s organic certified insect and disease control products provide environmentally sound and effective solutions to treat the entire landscape. Formulated with botanical active ingredients, they are ideal for organic growing, even on edibles that will be harvested the same day. Safe to use around pets, people, and on food crops, these products allow for expanded business opportunities and growth.

ECO-1® GARDEN SPRAY
Broad spectrum, contact insecticide, miticide, and fungicide, made from Linseed, Thyme, and Peppermint oils for use on edible to ornamental plants.

Effective For: Aphids, Mites, Mealybugs, Whiteflies, Thrips, Powdery Mildew, Black Spot, Early and Late Blight, and more

1 quart of concentrate treats up to 8,000 square feet and makes up to 8 gallons

AZASOL®
Broad spectrum, botanical, systemic insect growth regulator, derived from Neem. A non-oil based water soluble powder that can be used as a spray, soil drench, tree injection, or through chemigation.

Effective For: Whiteflies, Leafminers, Scale, Mealybugs, Thrips, Aphids, Psyllids, Caterpillars, and more

6 oz. makes up to 168 gallons

AzaSol works by inhibiting feeding, preventing molting, and reducing viable eggs.

Arborplex and Bloomplex are available in multiple sizes. Please visit www.ecologel.com.

Arborjet formulations and equipment are available in multiple sizes and kits. Not all products are available in all states. Please visit arborjet.com

ARBORJET SUCCESS

“...I used AzaSol on a very persistent thrip problem on my orchids, 3 times at the recommended rate and interval. I’m amazed at the results! No odor, no petal burn and best of all...NO THRIPS. I’m a believer.”

Keith F. Denver, CO
INJECTION EQUIPMENT

Arborjet is the world leader in tree injection technology, an environmentally friendly method that protects trees from insects and diseases. These patented delivery systems are widely known for their ease of use and ability to deliver a broad range of insect and disease control and nutritional products.

QUIK-JET®
A cost-effective injection tool designed for lower dose applications. It can also be used as a diagnostic tool to assess tree health and vascular activity.

QUIK-JET AIR®
Lightweight, air-powered injection system, featuring a one-thumb switch operation, precise dose measuring in a rugged aluminum body, weighing less than 2 pounds. A favorite of municipal treatment programs.

TREE I.V.
The tried and true micro-infusion system for coniferous and hardwood trees. Designed for high volume and low pressure treatments. A perfect starter kit.

FSERIES® TREE I.V.
The first-ever 120 psi micro-infusion system, designed for injecting trees with maximum speed, accuracy, and ease. Comes with two bottle sizes and an easy fill cap, for safety on the job, and the broadest flexibility to treat with higher volume chemistries like fungicides, while also providing lower volume insecticides equal opportunity.

SPECIALTY EQUIPMENT

ACCUFLO®
Durable and lightweight flow rate meter, attaches to the user’s wrist, offering consistent and repeatable bark and soil applications of plant growth regulators, liquid nutrients, insecticides, and fungicides.

👍 Saves time and money by eliminating waste and guesswork. You can quickly and easily make multiple treatments on different types and sizes of plants.
Arborjet offers several kits to suit the user’s needs. Arborjet equipment is designed for use with their exclusive formulations to provide the most effective and efficient injection solutions.

Arborjet formulations and equipment are available in multiple sizes and kits. Please visit arborjet.com.

*Available as a Pro Kit with a QUIK-jet Device
WHICH SYSTEM IS RIGHT FOR YOU?

<table>
<thead>
<tr>
<th>TYPE OF FORMULATION</th>
<th>TREE SIZE</th>
<th>TREE TYPE</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>&lt; 14</td>
<td>15-18</td>
</tr>
<tr>
<td>Insecticide</td>
<td>●●●</td>
<td>●</td>
</tr>
<tr>
<td>Fungicide</td>
<td>●</td>
<td>●●●</td>
</tr>
<tr>
<td>Nutrient</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

QUIK-JET AIR
- Powerful and productive
- Best option for diffuse porous or low - to moderate -resistant trees like ash, maple, white oak, plus those listed for QUIK-jet
- Low-to moderate- volumes of 40 mL or less per injection site, like insecticides and undiluted fungicides or nutrients
- Treat any size trees and up to 200 16” DBH trees per air tank refill
- Can connect directly to product bottle for undiluted applications

FSERIES TREE I.V.
- Great all-around system
- Best option for slower uptake trees such as conifers, but also good for hardwoods and palms
- Higher volumes of over 100 mL per tree, like fungicide or nutrient applications
- Quantity of larger trees in the same location

QUIK-JET
- Fast and easy to use
- Best option for ring porous or low-resistant trees like red oak, sycamore, elm, poplar, tulip poplar, sweetgum, or palm
- Lower volumes of under 20 mL per injection site, like insecticide applications
- Smaller trees and projects
- Can connect directly to product bottle for undiluted applications
**ARBORPLUG® TECHNOLOGY**

**ARBORPLUGS**
The Arborplug is a technological advancement in trunk injection and a key component of the Arborjet injection methodology.

**ARBORPLUG ADVANTAGE**
- Tight seal for fast, consistent, and complete injection
- Protects the surrounding environment and the applicator from unintended product contact
- Minimizes the number of injection sites and helps to inhibit infection
- Seals injection sites against insect or disease entrance while speeding site close-over

 creates the perfect injection interface; internal septum “seals” injection site.

Enables rapid, high volume product delivery directly into the xylem tissue.

Minimizes risk of infection or insect access and speeds site closure and healing.

**SETTING ARBORPLUGS**
- Use DBH/3 with the FSeries/TREE I.V.
- Use DBH/2 with the QUIK-jet AIR/QUIK-jet
- Choose healthy tissue, avoid damaged bark and/or compression wood or flat spots if possible
- Optimal plug locations are within 18” of soil line
- Set plugs below the cambium layer

**BEST ARBORPLUG INJECTION ZONE**

**ARBORJET SUCCESS**

The QUIK-jet AIR, is not only faster and more efficient, it allows for more trees to be done per hour thus increasing productivity. When working with Arborjet in public areas, people see us as the “professional tree doctors” which goes a long way in helping us build a solid reputation.”

**Ricardo Aguilar, Aguilar Plant Care Inc.**
Escondido, CA
THE HYDRETAINE DIFFERENCE

Hydretain is designed to reduce watering frequency by helping plants utilize soil moisture that would otherwise be lost to evaporation. A proprietary blend of hygroscopic humectant compounds, Hydretain attracts water molecules in the soil to create plant usable water droplets in the root zone.

- Converts soil humidity into plant usable water droplets
- Not a wetting agent or superabsorbent polymer
- Lasts for up to 3 months

FOR SOIL MOISTURE MANAGEMENT, HYDRETAINE IS YOUR PERFECT PARTNER

By converting soil humidity into microscopic droplets that plant roots can use, Hydretain protects turf from drying out for longer periods between irrigation cycles. A single Hydretain treatment increases watering efficiency by managing root zone moisture throughout the day. In independent tests Hydretain has reduced watering by up to 50%.
HYDRETAIN PRODUCTS

**HYDRETAIN ES PLUS**
Combines the Hydretain technology with an advanced non-ionic surfactant for improved soil penetration.

**HYDRETAIN ES PLUS II**
Combines the Hydretain technology with an advanced non-ionic surfactant for improved soil penetration and potassium humate for enhanced performance.

**Turf:** Apply 9 oz. / 1,000 sq. ft. (3 gallons per acre)
**Ornamentals:** Dilute 2 oz. per gallon of water and drench

---

**HYDRETAIN GRANULAR QC**
Puts the power of Hydretain ES Plus in a free-flowing organic compost carrier that can be applied through any traditional dry spreader equipment.

**HYDRETAIN GRANULAR QD**
Puts the power of Hydretain ES Plus in a quickly dissolving, free-flowing carrier for dry spreader applications.

**Turf:** Apply 2.7 lbs per 1,000 sq. ft. (120 lbs per acre)
**Ornamentals:** Apply 1 lb per 100 sq. ft.

---

HYDRETAIN WORKS

**REDUCE WATERING**
Maximize soil water availability to reduce irrigation frequency and hand watering.

**SEEDING/OVERSEEDING**
Accelerate seed hydration for improved germination rates and faster establishment.

**CONTAINER PLANTS**
Increase moisture availability and uptake to reduce wilt and extend flower life.

**DRY SPOTS**
Maximize soil moisture efficiency to reduce and repair localized dry spots.

**LANDSCAPE INSTALLATIONS**
Reduce moisture stress to increase transplant survival and accelerate establishment.

**DROUGHT**
Manage soil moisture to help plants withstand periods of drought and watering restrictions.

---

Hydretain products are available in a multiple sizes. Hydretain products are also available under the brand H3O Plus. Not all products are available in all states. Please visit www.hydretain.com.

---

HYDRETAIN SUCCESS

“"The 50% reduction in watering is a reality here. We’ve been able to save people a ton of money on their water bill and still get great results on the turf.”

**Erik Seaman, Co-Owner & Manager of the Fertilization Division**
Seaman’s Lawn & Landscape
THE BIOPRO DIFFERENCE

The BioPro line originated as an early leader in liquid fertilization solutions. Today, that legacy of agronomic excellence has expanded and evolved into a complete line of superior quality, yet affordable plant management products.

- Foliar and soil applied solutions to address soil health and nutritional deficiencies
- Chelated nutrients for increased availability and plant uptake
- Individual nutrient solutions and combination products provide flexibility for any agronomic program or budget

BIOSTIMULANTS

CYTOGRO®

EPA registered hormone biostimulant designed to increase root mass, speed grow-in, and improve stress tolerance.
- Promotes deeper, denser root systems
- Increases stress tolerance
- Speeds turf recovery and establishment
- Effective for all turf and plants

Apply 0.8 fl. oz. per 1,000 sq. ft. (2 pints per acre) initial application. Follow-up monthly at 0.4 oz. per 1,000 sq. ft. (1 pint per acre)

Sod transplant 6 days after treatment

CYTOGRO® SUCCESS

CytoGro is so impressive with root growth, supporting the plant’s immune system and establishing new plants, we have made a permanent home for it in almost all of our turf and landscape programs.”

Gary L. Terrell II, General Manager
Georgia Turf Management (GTM)
**SEAWeed Extracts**

**Seaxtra™ Nutritional Supplement (1-0-3)**
Superior seaweed extract derived from Ascophyllum nodosum.

**Seaxtra™ Water Penetrating Pellet**
Non-ionic surfactant blend enhanced with seaweed extracts for improved sod establishment. Safe for all types of turf.

---

**Soil Enhancement**

**Bio MP™ (5-3-2)**
High carbohydrate, molasses-based soil builder designed to stimulate soil biological activity by providing a food source for soil microbes.

**Na-X™ (5-0-0) With 12% Calcium**
Soluble calcium solution to allow for the rapid flush of excess sodium from soils to restore soil structure and increase water infiltration.

**Nutralyz™ (12-0-0) With 26% Sulfur**
Premium ammonium thiosulfate solution designed to breakdown excessive bicarbonate buildup in the soil and reduce the pH of alkaline soils.

---

**Specialty NPK Blends**

**Enviro N™ (28-0-0) 70% SRN**
High quality, controlled release nitrogen designed to provide uniform growth without surges or declines, while maintaining consistently good color.

**Enviro P™ (7-21-0)**
Highly stable phosphorus source for turf and ornamentals.

Enviro P is an exceptional product for seeding, sodding and transplant establishment.

**Greens Plus™ (14-4-10) 65% SRN**
Soil applied NPK blend consisting of nitrogen from controlled release urea-triazine, a stable and highly available phosphorus source and a less caustic source of potassium for superior turf management. 
*Phosphorus Free Alternative:*
**Greens Plus™ (12-0-12) 70% SRN**

**Turf Starter™ (8-16-5) With Seaxtra**
Excellent NPK blend for the rapid establishment of new turf, for fall fertility programs on cool season turf and for overseeding.

---

**Micronutrients**

**Nutrisolve™ With Seaxtra**
Foliar micronutrient blend of boron, copper, iron, manganese, molybdenum, and zinc designed to correct or prevent a wide range of micronutrient deficiencies without additional nitrogen.

**Spectrum™ (8-0-0) With Seaxtra**
Blend of iron, manganese, magnesium, and sulfur with nitrogen designed to provide fast, deep, and extended color without causing a surge in top growth.

**Iron Plus Mn™ (12-0-0) 6% Iron and 2% Manganese With Seaxtra**
Foliar application to prevent or correct iron and manganese deficiencies in turfgrasses, trees, shrubs and woody ornamentals.

Additional Micronutrients:

**Boron Plus™ 5% Boron**
**Calcium Plus™ (8-0-0) 10% Calcium**
**Iron Plus™ (15-0-0) 6% Iron With Seaxtra**
**Manganese Plus™ 5% Manganese With Seaxtra**
**Magnesium Plus™ (7-0-0) 6% Magnesium**
**Silica (0-0-2) 5% Silica**
**Tuff Greens™ (0-0-13)**

---

BioPro products are available in multiple sizes. Not all products are available in all states. Please visit www.ecologel.com.
**POND CLARIFIER**

**AQUA-T™**
Special blend of naturally-occurring bacteria that digests organic waste and excess nutrients to clarify the water, reduce sludge, and eliminate pond odors.
*Apply 6 bags per acre foot of water as the initial application and maintain with 1 bag per acre foot every two weeks*

---

**DUST SUPPRESSANT**

**GELTRAK®**
Environmentally responsible solution designed to reduce dust by keeping soils nominally damp for extended periods between watering or rainfall.
*Dilute with water at rate of 25:1, apply diluted material at a rate of 55 gallons per 1,000 sq. ft.*

---

**PROTECTIVE BARRIER TREATMENT**

**FUNGISHIELD®**
Clear barrier treatment that provides long term protection against the unsightly adhesion of mold, mildew, fungus, and algae.
*SPF 5+ - 1 gallon covers 200-300 sq. ft., last up to 5+ years*

---

Ecologel products are available in multiple sizes. Not all products are available in all states. Please visit www.ecologel.com.

---

**GELTRAK SUCCESS**

“We were faced with numerous complaints associated with dust from construction traffic while using a temporary roadway from the nearby residential community. This product reduced the amount of dust created to virtually zero, and greatly reduced the number of complaints received.”

*Andy Jorgensen, Director of Golf Maintenance Operation*

On Top of the World Communities & Related Entities
## 2-STEP PLANT HEALTHCARE PROGRAM

### COLDER CLIMATES

<table>
<thead>
<tr>
<th>Tree</th>
<th>Issue</th>
<th>Step 1</th>
<th>Step 2</th>
<th>Comments*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maple</td>
<td>Galls, Gypsy Moth, Winter Moth, Caterpillars, Bacterial Leaf Scorch, Anthracnose</td>
<td>TREE-äge®</td>
<td>Propizol®</td>
<td>Substitute Arbor-OTC in Step 2 for Bacterial leaf scorch</td>
</tr>
<tr>
<td>Pear</td>
<td>Aphid, Bacterial Leaf Scorch, Gypsy Moth Winter Moth, Fire Blight, Apple Scab</td>
<td>IMA-jet®</td>
<td>PHOSPHO-jet</td>
<td>Substitute Arbor-OTC in Step 2 for Fire Blight and Bacterial Leaf Scorch</td>
</tr>
<tr>
<td>Crab Apple</td>
<td>Aphids, Fire Blight, Apple Scab</td>
<td>IMA-jet®</td>
<td>Propizol®</td>
<td>Substitute Arbor-OTC in Step 2 for Fire Blight</td>
</tr>
<tr>
<td>Elm</td>
<td>Scale, Dutch Elm Disease, Elm Leaf Beetle</td>
<td>IMA-jet®</td>
<td>Propizol®</td>
<td></td>
</tr>
</tbody>
</table>

### COMMON TO MOST CLIMATES

<table>
<thead>
<tr>
<th>Tree</th>
<th>Issue</th>
<th>Step 1</th>
<th>Step 2</th>
<th>Comments*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Various Oaks</td>
<td>Galls, Gypsy Moth, Winter Moth, Oak Wilt, Caterpillars, Bur Oak Blight, Bacterial Leaf Scorch</td>
<td>TREE-äge®</td>
<td>Propizol®</td>
<td>Substitute Arbor-OTC in Step 2 for Bacterial leaf scorch</td>
</tr>
<tr>
<td>Sycamore</td>
<td>Invasive Shot Hole Borer, Anthracnose</td>
<td>TREE-äge®</td>
<td>Propizol®</td>
<td></td>
</tr>
<tr>
<td>Pine/Spruce</td>
<td>Pine Bark Beetles, Mites, Diplodia, Hemlock Wooly Adelgid</td>
<td>TREE-äge®</td>
<td>Propizol®</td>
<td></td>
</tr>
<tr>
<td>Eucalyptus</td>
<td>Red Gum Lerp Psyllid, Tortoise Beetle, Eucalyptus Beetle, Phytophthora</td>
<td>IMA-jet®</td>
<td>PHOSPHO-jet</td>
<td></td>
</tr>
<tr>
<td>Magnolia</td>
<td>Scale, Mealybug</td>
<td>IMA-jet®</td>
<td>PHOSPHO-jet</td>
<td></td>
</tr>
</tbody>
</table>

### HOT TO TROPICAL CLIMATES

<table>
<thead>
<tr>
<th>Tree</th>
<th>Issue</th>
<th>Step 1</th>
<th>Step 2</th>
<th>Comments*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Palm</td>
<td>Whitefly, Scale, Skeletonizer, Palm Weevils, Bud Rot, Lethal Bronzing, Lethal Yellowning</td>
<td>IMA-jet®</td>
<td>PHOSPHO-jet</td>
<td>Substitute Arbor-OTC in Step 2 for Lethal Bronzing and Lethal Yellowning</td>
</tr>
<tr>
<td>Ficus/Banyan</td>
<td>Whitefly, Scale, Twig Gall, Leaf Gall, Root Rot</td>
<td>IMA-jet®</td>
<td>PHOSPHO-jet</td>
<td></td>
</tr>
<tr>
<td>Crape Myrtle</td>
<td>Scale, Aphid, Mealybug</td>
<td>IMA-jet®</td>
<td>PHOSPHO-jet</td>
<td></td>
</tr>
<tr>
<td>Monkey Pod</td>
<td>Monkey Pod Caterpillar, Root Rot</td>
<td>TREE-äge®</td>
<td>PHOSPHO-jet</td>
<td></td>
</tr>
<tr>
<td>Plumeria</td>
<td>Whitefly, Mealybug</td>
<td>IMA-jet®</td>
<td>PHOSPHO-jet</td>
<td></td>
</tr>
</tbody>
</table>

©2019 Arborjet, Inc. 99 Blueberry Hill Rd. Woburn MA 01801. Important: Always read and follow label instructions. Some crop protection products may not be registered for sale or use in all states or counties. Please check with your state or local extension service to ensure registration status. TREE-äge® Insecticide is a Restricted Use Pesticide and must only be sold to and used by a state certified applicator or by persons under their direct supervision. TREE-äge® is a registered trademark of Arborjet, Inc.

*Bark beetles listed on the TREE-äge® label include: Scolytids (bark beetles), Ips Engraver Beetles, Mountain Pine Beetle, Southern Pine Beetle, Spruce Beetle and Western Pine Beetle.
## BIOPRO APPLICATION GUIDE

Values expressed are for general turf application - refer to product labeling for complete application instructions.

<table>
<thead>
<tr>
<th>PRODUCTS</th>
<th>POUNDS / GALLON</th>
<th>OZ PRODUCT / 1,000 SQ. FT.</th>
<th>Gallons H2O / 1,000 SQ. FT.</th>
<th>Gallons Product / ACRE</th>
<th>Gallons H2O / ACRE</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Seaweed Supplements</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SeaXtra™ Nutritional Supplement (1-0-3)</td>
<td>9.0</td>
<td>0.8 / 0.4</td>
<td>1</td>
<td>32 oz. / 16 oz.</td>
<td>40</td>
</tr>
<tr>
<td>SeaXtra™ Water Penetrating Pellets</td>
<td>N/A</td>
<td>1 Pellet per 12,000 sq. ft.</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td><strong>Soil Conditioners</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EnviroPlex™</td>
<td>8.96</td>
<td>3-6</td>
<td>1-2</td>
<td>1-2</td>
<td>40-80</td>
</tr>
<tr>
<td>Bio MP™ (5-3-2)</td>
<td>9.65</td>
<td>6-15</td>
<td>2-2.5</td>
<td>2-5</td>
<td>80-100</td>
</tr>
<tr>
<td><strong>Soil Remediation</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Na-X™ (5-0-0)</td>
<td>11.68</td>
<td>32-64</td>
<td>2</td>
<td>10-22</td>
<td>80</td>
</tr>
<tr>
<td>Nutralyz™ (12-0-0)</td>
<td>11.0</td>
<td>13</td>
<td>2</td>
<td>4.3</td>
<td>80</td>
</tr>
<tr>
<td><strong>Specialty NPK Blends</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Enviro N™ (28-0-0)</td>
<td>10.56</td>
<td>4.3</td>
<td>(0.1 lbs. N / 1,000 sq. ft.)</td>
<td>2</td>
<td>(0.1 lbs. N / 1,000 sq. ft.)</td>
</tr>
<tr>
<td>Enviro P™ (7-21-0)</td>
<td>10.58</td>
<td>14.4</td>
<td>(0.25 lbs. P₂O₅ / 1,000 sq. ft.)</td>
<td>2</td>
<td>(0.25 lbs. P₂O₅ / 1,000 sq. ft.)</td>
</tr>
<tr>
<td>Enviro K™ (0-0-25)</td>
<td>12.26</td>
<td>8.6</td>
<td>(0.25 lbs. K₂O / 1,000 sq. ft.)</td>
<td>2</td>
<td>(0.25 lbs. K₂O / 1,000 sq. ft.)</td>
</tr>
<tr>
<td>All K (0-0-25-17S)</td>
<td>12.21</td>
<td>10.5</td>
<td>(0.25 lbs. K₂O / 1,000 sq. ft.)</td>
<td>2</td>
<td>(0.25 lbs. K₂O / 1,000 sq. ft.)</td>
</tr>
<tr>
<td>Greens Plus™ (14-4-10)</td>
<td>10.88</td>
<td>8.4</td>
<td>(0.1 lbs. N / 1,000 sq. ft.)</td>
<td>2</td>
<td>(0.1 lbs. N / 1,000 sq. ft.)</td>
</tr>
<tr>
<td>Greens Plus™ (12-0-12)</td>
<td>10.80</td>
<td>9.8</td>
<td>(0.1 lbs. N / 1,000 sq. ft.)</td>
<td>2</td>
<td>(0.1 lbs. N / 1,000 sq. ft.)</td>
</tr>
<tr>
<td>TurfPlex™ (20-2-3)</td>
<td>10.61</td>
<td>6.0</td>
<td>(0.1 lbs. N / 1,000 sq. ft.)</td>
<td>1</td>
<td>(0.1 lbs. N / 1,000 sq. ft.)</td>
</tr>
<tr>
<td>TurfPlex™ NoPhos (20-0-3)</td>
<td>10.54</td>
<td>6.0</td>
<td>(0.1 lbs. N / 1,000 sq. ft.)</td>
<td>1</td>
<td>(0.1 lbs. N / 1,000 sq. ft.)</td>
</tr>
<tr>
<td>Turf Starter™ (9-16-5)</td>
<td>10.94</td>
<td>18.2</td>
<td>(0.25 lbs. P₂O₅ / 1,000 sq. ft.)</td>
<td>2</td>
<td>(0.25 lbs. P₂O₅ / 1,000 sq. ft.)</td>
</tr>
<tr>
<td><strong>Micronutrients</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Boron Plus™</td>
<td>8.55</td>
<td>0.5-1</td>
<td>1</td>
<td>22.44 oz.</td>
<td>40</td>
</tr>
<tr>
<td>Calcium Plus™ (8-0-0)</td>
<td>11.85</td>
<td>12</td>
<td>2</td>
<td>4</td>
<td>80</td>
</tr>
<tr>
<td>Iron Plus™ (15-0-0)</td>
<td>10.78</td>
<td>3-6* / 6-12**</td>
<td>1</td>
<td>2</td>
<td>40</td>
</tr>
<tr>
<td>Iron Plus Mn™ (12-0-0)</td>
<td>11.46</td>
<td>3-6* / 6-12**</td>
<td>1</td>
<td>2</td>
<td>40</td>
</tr>
<tr>
<td>Magnesium Plus™ (7-0-0)</td>
<td>11.06</td>
<td>6</td>
<td>2</td>
<td>2</td>
<td>80</td>
</tr>
<tr>
<td>Manganese Plus™</td>
<td>10.47</td>
<td>3</td>
<td>1</td>
<td>1</td>
<td>40</td>
</tr>
<tr>
<td>Silica (0-2-0)</td>
<td>8.96</td>
<td>0.1</td>
<td>1</td>
<td>4.4 oz.</td>
<td>40</td>
</tr>
<tr>
<td>NutriSolve™</td>
<td>10.21</td>
<td>3-6* / 6-12**</td>
<td>1</td>
<td>2</td>
<td>40</td>
</tr>
<tr>
<td>Spectrum™ (8-0-0)</td>
<td>10.78</td>
<td>3-6* / 6-12**</td>
<td>1</td>
<td>2</td>
<td>40</td>
</tr>
<tr>
<td>Tuff Greens™ (0-0-13)</td>
<td>10.23</td>
<td>3-6</td>
<td>1</td>
<td>1-2</td>
<td>40</td>
</tr>
</tbody>
</table>

*Greens and Tees  **Fairways, Lawns, Athletic Fields and Other Turf

### SAMPLE CALCULATION FOR NITROGEN RATES FROM LIQUID FERTILIZERS

1) Calculate pounds of N in 1 gallon of product by multiplying the product weight in lbs./gal. by the % N in the guaranteed analysis.
2) For ounces of product per 1,000 sq. ft.: Divide the desired application rate in pounds of N/1,000 sq. ft. by the pounds of N/gal. calculated in Step 1. Multiply the resulting fraction by 128 (fl. oz./gal.) to get the number of ounces of product to be applied to 1,000 sq. ft. of turf for the desired rate of N.
3) For gallons of product per acre: Multiply the same fraction in Step 2 by 43.56 (1,000s of sq. ft./acre) to get the number of gallons of product to be applied to one acre of turf for the desired rate of N.

**Example:** Enviro N (28-0-0) weighs 10.6 lbs./gal. and contains 28% N. Therefore, it contains 10.6 X 0.28 = 2.97 lbs. of N per gallon of product.

For 0.1 lbs. N/1,000 sq. ft.:

\[
\frac{0.1}{2.97} = 0.033; \quad 0.033 \times 128 = 4.3 \text{ oz. of product per 1,000 sq. ft.}
\]

For the amount of product for one acre at 0.1 lbs. N/1,000 sq. ft. rate:

\[
\frac{0.1}{2.97} = 0.033; \quad 0.033 \times 43.56 = 1.5 \text{ gal. of product per acre}
\]

### FERTILIZER & HELPFUL CONVERSIONS

**Fertilizers:**

- P to P₂O₅: multiply by 2.30
- P₂O₅ to P: multiply by 0.44
- K to K₂O: multiply by 1.20
- K₂O to K: multiply by 0.83

**Weight:**

- lbs. per acre X 1.12 = kg per ha
- lbs. per 1,000 sq.ft. X 0.49 = kg per 100 m²
- 1 metric ton = 1,000 kg = 2205 lbs.
- 1 gallon of water = 8.34 lbs. = 3.78 kg

**Fluid Volume:**

- 1 teaspoon = 1/2 tablespoon = 0.17 oz. = 5 milliliter
- 1 tablespoon = 1/16 cup = 1/2 fl. oz. = 15 milliliter
- 1 ounce = 1/8 cup = 30 milliliter
- 1 cup = 1/2 pint = 8 fluid ounces = 237 milliliter
- 1 pint = 1/2 quart = 16 fluid ounces = 473 milliliter
- 1 quart = 1/4 gallon = 32 fluid ounces = 946 milliliter
- 1 gallon = 128 fluid ounces = 3.8 Liter

**Area:**

- 10.76 square feet = 1 square meter
- 1 square foot = 0.09 square meters
- 2.47 acres = 1 hectare
- 1 acre = 0.40 hectares

**Temperature:**

- °F = (°C x 1.8) + 32
- °C = (°F – 32) / 1.8
ABOUT US

OUR HISTORY - Arborjet technology was developed in 2000 by arborists, for arborists, in order to effectively manage and control exotic and native insects and diseases threatening our natural and urban forests. Today, as the leading developer of tree care solutions, Arborjet has partnered with Ecologel Solutions to offer an expanded lineup of environmentally responsible plant healthcare products which broaden our expert resources.

Ecologel Solutions LLC. is a long-standing, premier developer and manufacturer of innovative products for water conservation, dust mitigation, plant nutrition, pond and lake management, and protective barrier treatments.

Together, both companies are backed by years of research and provide the most effective and environmentally responsible treatment options available anywhere. As premier solutions providers, we are committed to advancing the industries we serve through thought leadership, product and technology development, scientific research, and exceptional customer service.

OUR RESEARCH - Our unique method of developing formulations includes a pairing process which matches the active ingredient and application method with the physiology of the plant. Our products are backed by university research, field trials, and years of use by industry professionals. Whether treating ash trees in Chicago, palms in Miami, tomatoes in Fresno, or turf in Atlanta, this holistic approach delivers significantly longer residual control and superior overall product performance. Our ability to improve plant quality occurs with maximized uptake efficiency while utilizing sustainable methods and formulations.

OUR TEAM - At Arborjet and Ecologel, we care about you and your success. Many of our staff are Certified Arborists, Agronomists, Pest Control Advisors, and hold board positions in major industry associations. Our decades of technical experience in this industry mean that you benefit from sound advice, environmental responsibility, and creative solutions. Your successful plant health care program helps us realize our mission.
CONTACT US

Eastern Area Technical Manager
Mid-Atlantic
Trent Dicks
C: 309-287-0173
tdicks@arborjet.com

Great Lakes
Joe Aiken
C: 586-431-7282
joeaiken@arborjet.com

Midwest
Kevin Lewis
C: 216-337-4248
klewis@arborjet.com

Northeast
Kevin Brewer
C: 401-222-9341
kbrewer@arborjet.com

Southeast
JB Toorish
C: 781-983-2613
jbtloorish@arborjet.com

Western Area Technical Manager
Upper Midwest
Jeff Palmer
C: 651-955-3319
jeffpalmer@arborjet.com

Northwest
Dawn Fluharty
C: 650-996-8291
dfluharty@arborjet.com

South Central
Emmett Muennink
C: 214-799-6115
emuennink@arborjet.com

Western Division
Golf, Sport Turf and Nursery Markets
Rebecca Knapp
C: 914-489-7754
rknapp@arborjet.com

Hawaii
Golf, Sport Turf, and Nursery Markets
Carin Prechtl
C: 302-438-4385
cprechtl@arborjet.com

Eastern Division
Golf, Sport Turf, and Nursery Markets
Eric Steffensen
C: 704-441-2509
esteffensen@arborjet.com

Director of Urban Forestry and Business Development
Rob Gorden
C: 401-487-3354
robgorden@arborjet.com

Director of Commercial Sales
Mark Andrews
C: 603-321-1733
markandrews@arborjet.com

Product Support
Marianne Waindle
C: 916-205-7928
mwaindle@arborjet.com

Located in California

Zachary Purinton
O: 781-935-9070 x207
zpurinton@arborjet.com

Jim Spindler, C.P.Ag, C.C.A., C.P.S.S.
O: 863-619-9822
jim@ecologel.com

Arborjet Headquarters
O: 781-935-9070
info@arborjet.com

Ecologel Headquarters
O: 352-620-2020
info@ecologel.com

To speak with a customer service representative, call 781-935-9070 or visit us online at www.arborjet.com

Part No. 020-020-2017 Rev. 04/19