



Fertilizer Application Guide

Arbor Green PRO 30-10-7

Arbor Green PRO Non-Phosphorus 30-0-10

Product Characteristics & Configuration

- Indefinite shelf life – doesn't separate during handling or storage
- Carries a non-hazardous label, not subject to combustion
- Non-corrosive; won't pit metals or application equipment
- Odorless
- Pathogen free
- Weight: 30 lb. bags, 40 bags per pallet



Equipment

Davey Arbor Green PRO is a suspendable formulation and is easily injectable with conventional spray equipment.

- Use paddle or advanced jet agitation with venturi nozzles to maintain suspension
- Use standard soil injection probe with 4 lateral ports on tip. Attach injection probe to FMSC 785 or other standard spray guns
- Maintain pressure at 150 to 200 psi to force the nutrients laterally through the soil

Suspendable Concentrate

Arbor Green PRO is a suspendable (not soluble) product. Tiny granules are carried into the root zone by water under high pressure (sub-surface granular application). *Sufficient agitation with advanced by-pass jet agitation or paddle agitation is necessary.* When paddle agitation is not present, the use of high pressure, brass or poly Venturi nozzle agitators are necessary. Venturi action triples the amount of liquid produced by the agitator and will maintain adequate suspension.

Davey Arbor Green PRO can be applied at either a one year rate or a two year rate.

1 Year Rate 15 lbs -1/2 bag treats 2,000 sq. ft. - 100 gals of water

2 Year Rate 30 lbs - 1 full bag treats 2,000 sq. ft. - 100 gals of water

Davey Arbor Green PRO Application Recommendations:

Product Usage & Mix Rate – Trees

	Trees		Shrubs	
	1 Year	2 Year	1 Year	2 Year
Pounds of Davey Arbor Green PRO (per 100 gallons of water)	15	30	15	30
Pounds of Nitrogen per 1,000 sq. ft.	2.25	4.5	1.12	2.25
Gallons per 1,000 sq. ft.	50	50	25	25
Feet Between Injection Holes	3	3	0.5	0.5
Gallons per Injection Hole	0.5	0.5	1/8	1/8
Seconds per Injection Hole (approximate)	4	4	1	1
Injection Depth (Inches)	4-12	4-12	4-6	4-6

Davey Arbor Green PRO Root Zone Area Fertilization Rate Chart for Trees

	5' Radius	10' Radius	15' Radius	20' Radius
Root Zone Area (Approx. Sq. Feet)	79	314	707	1,257
Total Lbs. to Apply - One Year	0.59	2.36	5.30	9.42
Total Lbs. to Apply - Two Year	1.17	4.71	10.60	18.85
Gallons	3.93	15.71	35.35	62.83

Root Zone
 Radius in Feet (Area = πr^2)
 Note: $\pi = 3.14159$

The Application Technique Matters

Arbor Green PRO 30-10-7 & Arbor Green Pro Non-Phosphorus 30-0-10

Urban Landscape Conditions

Many urban landscapes are in poor condition and a responsible fertilization program is an important component in promoting plant health care. Soils are often heavily compacted and low in organic matter, which limits the trees ability to absorb water and nutrients. In addition to water and nutrients, tree roots and those of other woody plants require oxygen for respiration and will die without a constant supply. Compaction and poor drainage limit oxygen movement in the soil and, as a result, tree roots can form near the surface and succumb to heat, cold, and drought without the protection of leaf litter or mulch. The resultant stress can cause a tree to further decline and become more susceptible to other problems such as insects and diseases. Without proper management, the urban soil is a hostile environment and can shorten the effective life of a woody plant by a factor of 10.

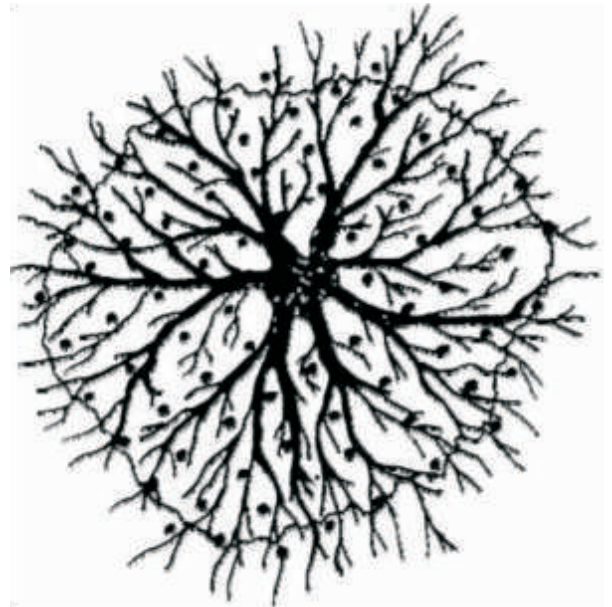
Pressurized Injection

Pressurized, liquid soil injection is the most effective method of distributing nutrients throughout the root zone of woody plants. A soil injection probe with lateral ports results in a distribution pattern that radiates from the probe much like the spokes of a wheel as the probe is pushed into the soil. The ideal injection depth is from 4 – 12 inches, which distributes the nutrients below the majority of turfgrass roots that compete with tree roots for the growth factors in the soil. This depth is also below the harsh surface conditions that can kill the roots of woody plants. In addition to nutrient distribution, pressurized water creates horizontal capillaries that allow oxygen to diffuse lower in the soil, supporting a deeper, healthier root system. Therefore, this process is fertilization and aeration.



Fertilizer Placement - Trees

Although roots may extend beyond the dripline, fertilizer is generally distributed throughout the area covered by the branch spread. The greatest concentrations of nutrient absorbing roots occur in this area.



Depth & Spacing - Trees

Davey Arbor Green PRO is injected into the root zone to a depth of 4 to 12 inches, starting at 4" deep - moving to 12" deep and then back to 4" deep. Injections are spaced 3 feet apart throughout the branch spread area. Pressure at 150 to 200 psi (using an injection probe with four lateral ports) forces the soluble and suspended nutrients through the soil, providing better nutrient to root contact.

