

NutriRoot[®] GRADE: 2 - 2 - 3

LIQUID SOIL APPLIED FERTILIZER

NutriRoot® is a unique blend of essential minerals, seaweed extract, humic acid, surfactants, and humectants designed to increase root development and to reduce water stress in trees, palms, shrubs, landscape, and containerized plants.

Treatment Uses:

- Root Development
- Transplant Success
- Water Stress Management
- Nutrient Deficiencies

• Sandy Soils • Dry Soil Conditions Summer Stress

Winter Stress

KEEP OUT OF REACH OF CHILDREN

Guaranteed Analysis:

Total Nitrogen (N)	ò
0.50% Urea Nitrogen	
1.50% Other Water Soluble Nitrogen	
Available Phosphate (P ₂ O ₅)2.0%	ò
Soluble Potash (K ₂ O)	ò
Iron (Fe)	ò
0.75% Water Soluble Iron (Fe)	
Manganese (Mn)	ò
0.50% Water Soluble Manganese (Mn)	
Zinc (Zn)	ò
0.25% Water Soluble Zinc (Zn)	
Derived from: Urea, Mono-potassium phosphate, Ferrous Sulfate,	
Manganese Sulfate, Zinc sulfate, Seaweed Extract, Potassium hydroxic	le
ALSO CONTAINS NON-PLANT FOOD INGREDIENTS	
SOIL AMENDING GUARANTEED ANALYSIS	
Active Ingredients	

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22.0%	Humectants
4.0%	Non-ionic Surfactant
4.0%	Seaweed Extract (Microbe Food)
2.0%	Humic Acid (Derived from Leonardite)
68.0%	Total Other (Inert) Ingredients (Carriers
	as non-plant food ingredients

F1813

NET CONTENTS: see individual container **NET WEIGHT: see individual container**

SHAKE WELL

Information regarding the content and levels of metals in this product is available on the internet at: www.aapfco.org/metals.html

APPLICATION & USES

Apply at planting or to mature landscapes to increase water absorption into roots and to enhance root growth. May be applied monthly throughout the growing season, particularly in hot, dry months to alleviate water stress in trees and landscape plants. In northern regions, also apply in fall before the onset of winter.

GENERAL DIRECTIONS

NutriRoot is designed for use in watering cans, hose-end or hydraulic/pump sprayers, soil injectors and similar equipment. Make applications to soil at transplant or in fall after leaf senescence, early spring before bud break or leaf emergence, or in the growing season after leaves on plants have matured. Water trees and plants thoroughly if treating during dry conditions. May repeat applications once a month throughout the growing season, particularly during hot, dry months. May make additional application in fall in northern areas before the ground temperatures drop below 40°F to decrease plant stress

during winter cold. Fall applications may reduce winter desiccation in new plantings or existing landscapes.

BASIC DILUTION

Dilute 1.25 - 1.5 fl. oz. NutriRoot in 1-gallon of water or 1-gallon of NutriRoot in 70-100 gallons of water. Add NutriRoot to tank with water to reduce foaming. 1-gallon of NutriRoot in 70-100 gallons of water will treat up to 3,000 sq. ft. of landscape. Use higher rate for newly transplanted trees or for trees with root loss. Use higher rate for routine maintenance and to alleviate drought stress. Use lower rate on newly installed herbaceous and containerized plants. For use in existing landscapes, new installations, see instructions below.

New Tree and Shrub Installation

Apply NutriRoot directly to the soil in containerized plants or spray the base of balled/ burlapped trees and shrubs to ensure your watering is more efficient. Applications made to the root ball prior to planting may help with root establishment. Apply 1/2 to 1-gallon of solution per inch DBH for trees and 1/2 to 1-gallon solution for each diameter foot of shrub canopy. For new plantings, soak the soil and root ball with NutriRoot solution. Water-in after planting.

Existing Landscapes

Applications to existing landscapes can be made before bud break, monthly during the growing season (particularly during hot, dry months), and after leaves have dropped in the fall. To reduce winter stress, treat before the ground temperature drops below 40° F. Use to loosen compacted soils and help alleviate abiotic stress. Apply at a rate of 1/2 to 1-gallon of solution per inch DBH for trees or 1/2 to 1-gallon of solution per diameter foot of canopy for shrubs. For trees, shrubs, palms, perennials, annuals, containerized, garden, and vegetable plants, apply once every 14 to 28 days through the growing season. Water-in after application.

New Tree Installations Using Gator Bag®

Drench soil with NutriRoot before and after transplanting to help with root establishment. When using a Treegator® Bag (or similar product), add NutriRoot at a rate of 1.5 fluid ounces per fifteen (15) gallons of water until established.

SOIL INJECTION

NutriRoot may be applied via soil injection to existing trees, shrubs, and herbaceous plants. For soil injection applications using the AccuFlo Soil Injector ISD or similar equipment, fill tank to ¾ volume with water, then add 16 fl. oz. of NutriRoot per gallon of water. Slowly add remaining water to volume to reduce foaming. For soil injection using the Accuflo Soil Injector ISD (or similar equipment), start injections a minimum of 18 - 36" away from the trunk. Apply NutriRoot solution around the tree and out to the drip edge following a grid pattern. Inject 6 - 8" deep into the soil, working around the tree, making applications once every 18" on-center in sequential rows extending to the drip edge. Be sure to target the active growing root area around the base of trees. For woody plants, including trees and shrubs, apply in spring and fall months, at a minimum of twice per year.

When tank mixing with other compatible products for soil injection, mix 8 fl. oz. NutriRoot in 1-gallon of water. For soil injection use rates in trees and shrubs, see the Soil Injection Use Rates in the table below.

Soil Injection Use Rates:								
Tree Size (DBH″)	Shrub Size (Diameter ft. Canopy)	Dose (mL)	No. of Injection Sites					
1 - 2	1 - 2	100	4					
3	3	150	4					
4+	4+	Trees: 150 - 300 mLs/DBH" Shrubs: 150 - 300 mLs/ Diameter ft. of canopy	Trees: 1 per DBH" ¹ Shrubs: 1 per Diameter ft. of canopy ¹					

¹For soil injection using a 300 mL dose, divide DBH by 2 for trees. For shrubs, divide the diameter foot of canopy by 2. For odd numbered injection sites in trees and shrubs, round up to the nearest whole number (Example: 5" DBH / 2 = 2.5, or 3 injection sites).

SOIL INJECTION IN PALMS

Make applications in spring and fall (February to May and October to November). Applicators should check with their local extension service agent for information on black-out periods. To soil inject, start a minimum of 18 - 36'' away from the trunk. Apply NutriRoot solution around the tree and out to the drip edge following a grid pattern. Inject 6 - 8'' deep into the soil, working around the tree, making applications once every 18'' on-center in sequential rows extending to the drip edge. Be sure to target active growing root area. To mix, fill tank to 3/4 volume with water, then add 8 - 20 fl. oz. of NutriRoot® per gallon of water. Slowly add remaining water to volume to reduce foaming. For palm class size and use rates, see Palm Class Size and Soil Injection Use Rates in the table below.

Palm Class Size and Soil Injection Use Rates:								
Palm Class Size	Canopy Spread (ft.)	Trunk Height (ft.)	Fl. oz. Per Gal of NutriRoot	Fl. oz. (mL) or Gal (L) Solution to Apply	Milliliters /Injection Point	No. of Injection Points		
Small	6 - 12	5 - 19	8 fl. oz.	50 fl. oz. (1500 mL)	300	3 - 6		
Med	12 - 24	20 - 39	16 fl. oz.	1 gal (3.75 L)	300	6 - 12		
Large	≥ 24	≥ 40	20 fl. oz.	1.5 gal (5.5 L)	300	12 - 24		

TANK MIXING

NutriRoot is compatible with other fertilizer products and may be mixed with acidic fertilizers and soil conditioners. NutriRoot works synergistically in combination with slow-release fertilizers.

PHYSICAL COMPATIBILITY/MIXING

NutriRoot is incompatible with liquid hydroxides and alkaline products (pH >7.5). The physical compatibility of NutriRoot should be tested before use with other products. Perform a standard "jar test" to check compatibility with other products before mixing. Contact Arborjet with any questions regarding testing and to determine the physical compatibility of NutriRoot with other products.

RESTRICTIONS

- Do not treat trees that are damaged by herbicides
- In areas with alkaline water, an acidifier may be added
- Do not treat trees when soil temperature is <35°F
- Keep away from heat and open flame

CLEAN-UP & COMPATIBILITY, STORAGE, DISPOSAL AND WARRANTY

IMPORTANT! Rinse equipment thoroughly after use. Use warm soap and water. The physical compatibility of NutriRoot should be tested before use with other products. Contact Arborjet with any questions regarding testing and to determine the physical compatibility of NutriRoot with other products.

- Do not contaminate water, food, or feed by storage or disposal.
- Keep from freezing.
- Store in a cool, dry place.

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

Triple rinse container with clean water and dispose of empty bottles as required by State and Local authorities.

IMPORTANT: Best land management practices must be used at all times with any fertilizer; this material must be prevented from entering public or private water supplies (including wells) an any lake, stream or river.

NOTICE OF WARRANTY

Arborjet, Inc. warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated in the General Directions.

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