

Arborjet Palm Plant Injection Methodology



Measure to Determine Dosage



First, Measure DBH (Diameter at Breast Height) to determine the dose of PALM-jet to apply.

Example: 12 inches

Drill Pilot Hole into Vascular Bundle



To determine pilot drill depth, use the formula:
 $DBH/3$

In this example $DBH=12''$;
 $12/3=4''$

Drill 4" into the palm using a 1/8" diameter drill bit.
Injection site should be drilled close to breast height.

Only one injection site is required since the product is delivered into the vascular bundle of the palm plant.

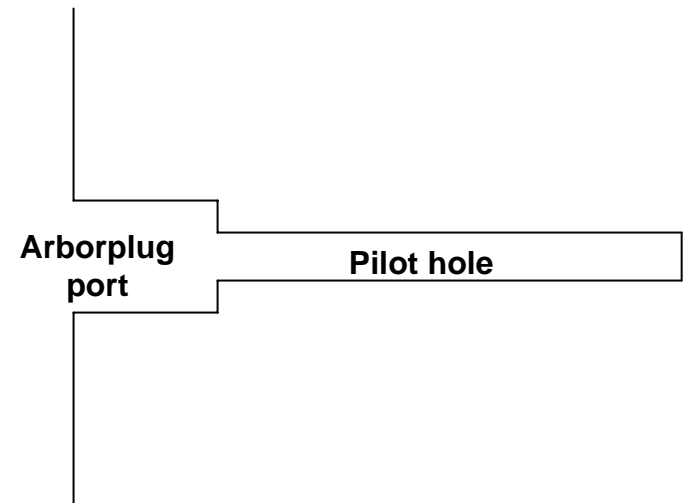
*Always divide DBH by 3 to find the depth of pilot hole.

Drill Arborplug Port

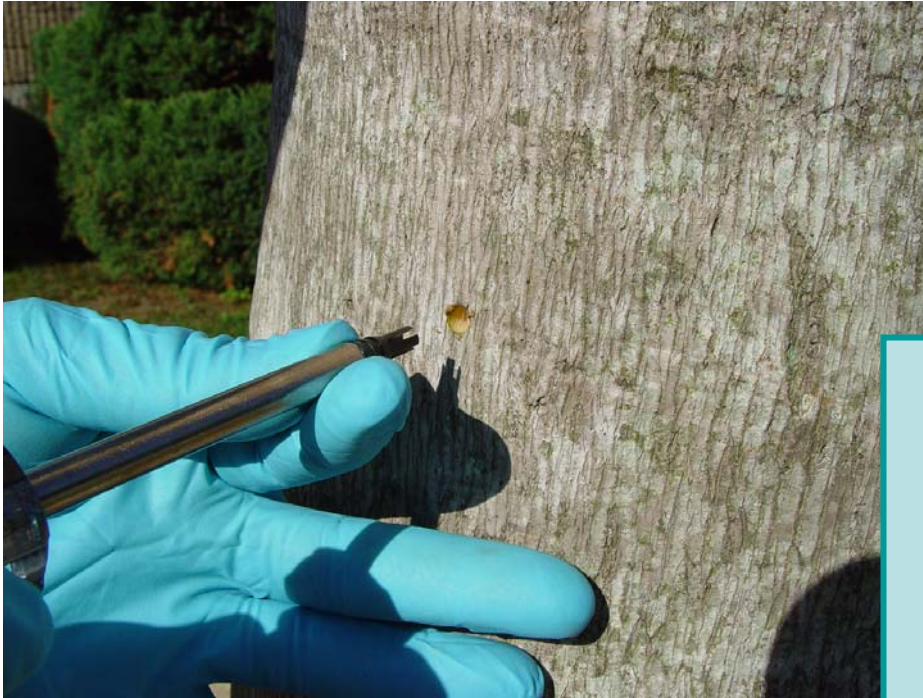
Drill 5/8" deep using the appropriate drill diameter for the plug size being used:

Plug #2 = 7/32" diam.

Plug #3 = 9/32" diam.



Set Arborplug into 5/8" Port



Use Arborjet's PALM-jet at the Recommended Application Rate

PALM-jet injectable Fertilizer

1.25%N – 1.25% P – 0.25% K plant derived minerals plus micro-elements
A balanced source of organic macro- and micro-elements specially formulated for palms and other monocots.

GUARANTEED ANALYSIS

Total Nitrogen (N).....	0.75%
Available Phosphoric Acid (P2O5).....	7.75%
Soluble Potash (K2O).....	5.25%
Manganese (Mn).....	0.5%
Zinc (Zn).....	0.25%
Iron (Fe).....	0.5%
Magnesium (Mg).....	0.5%
Boron (B) & Copper (Cu).....	0.1%

DESCRIPTION

PALM-jet injectable fertilizer is formulated for palm and other monocots. This product supplements highly essential macro/microelements to alleviate mineral disorders of palms. PALM-jet is highly water-soluble and compatible with plant sap. The minerals in PALM-jet are derived from OMRI listed organic chelates, contain the highest quality of plant-derived minerals, and are readily assimilated by the plant. These minerals are immediately available for use by the plant for metabolism, growth and development. In particular, PALM-jet helps to promote development and function of roots, stem and foliage.

PALM-jet supplies balanced microelements, particularly Mn (5,000 ppm) for immediate use where Manganese deficiency (Frizzle top) is predominant.

GENERAL DIRECTIONS

PALM-jet is for use ONLY with Arborjet Tree Injection Systems, including VIPER and STINGER technologies. Measure the tree diameter at chest height (54" from ground) in inches to find the Diameter at Breast Height (DBH). If measuring circumference, divide this number by three to determine Diameter at Breast Height (DBH).

Make applications to actively growing trees in full leaf. Conditions that favor transpiration (i.e., sunny, breezy, low humidity) are optimal for injection uptake.

STORAGE AND DISPOSAL

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

STORAGE: Store bottles in a cool, dry place, above 45 F.

CONTAINER DISPOSAL: Dispose of empty bottles in a sanitary landfill or by incineration if approved by State and Local authorities.

RESTRICTIONS

- Do not microinject trees more than once annually.
 - Not recommended for newly planted (non-established) trees.
 - DO NOT microinject trees stressed by drought.
- Note:** This product is not a pesticide.

APPLICATION & USES

Arborjet plant mineral supplements are scientifically formulated and laboratory-tested for quality and efficacy. PALM-jet is formulated to be used alone or with other Arborjet fertilizers. PALM-jet cannot be mixed with IMA-jet. Use the MICRO-jet series fertilizers for IMA-jet compatibility.

PALM-jet is formulated for plants growing in poor soils (coarse, sandy soils with low mineral holding capacity). PALM-jet is for use on landscape ornamentals and interior plantscapes including plantations. PALM-jet is an injectable and infusible fertilizer formulated to translocate in the plant vascular system from the microinjection site(s). To assure optimum effectiveness, this product must be placed into the active xylem tissue.

Monocots: Drill a pilot hole into the vascular bundle using a 1/8" diameter bit one third the stem diameter (for example, if the palm has a 12"DBH, then drill the pilot hole 4" deep), then drill a second, shallow hole to set a #2 ArborplugTM, use the VIPER needle to complete the application. Apply only one site in the stem. Make applications into the stem, below the primary meristem. Avoid wounding the meristematic tissue located within the crown of the plant. In general, make applications to the lower trunk region, typically within 12" of the soil.

Basic Arborjet VIPER Procedure: Drill into the vascular bundle using a 1/8" diameter pilot drill bit. Next use a 7/32" bit, drill 1/2" deep to set a #2 Arborplug. Brad point bits are recommended, and all drill bits should be clean and sharp. Then set the ArborplugTM into place with the set tool and mallet.

Using the VIPER needle, pierce the internal septum to start the injection or infusion process. Remove VIPER needle upon the completion of the infusion process.

ARBORJET SYSTEMS: Refer to the Arborjet Training Manual for set-up of the device used.

Air/Hydraulic Injection Application: To inject, set the primary regulator between 50 and 75 psi, charge the 10mL Dose-Sizer by pulling back on Dose-Sizer knob, and apply the specified dose equally into the preset ArborplugTM ports. For example, when injecting PALM-jet injectable fertilizer to a 12"DBH plant at a 5mL/DBH" rate, then:

a. Total volume equals 60mL, which may be applied in one site.

CLEAN-UP

IMPORTANT! It is critical to rinse the Arborjet Injection System thoroughly after use. Use CLEAN-jet or Isopropyl alcohol. Residues left in the device may gum the internal components.

COMPATIBILITY

PALM-jet is formulated to be used alone or with other Arborjet fertilizers. PALM-jet cannot be mixed with IMA-jet. Use the MICRO-jet series fertilizers for IMA-jet compatibility. However the physical compatibility of PALM-jet should be tested before use with other products.

To determine the physical compatibility of PALM-jet with other products, use a jar test as described below.

TABLE 1. PALM-JET APPLICATION RATES

TREE SIZE CLASS (DBH")	RATE (mL/DBH")
<12"	2.5
12-23"	5.0
24-35"	7.5
36"+	10.0

- Keep away from children
- Keep away from heat and open flame.
- Do not treat trees that are moisture stressed or suffering from herbicide damage.
- Do not inject trees within two weeks of any other spray or soil chemical treatment.

NOTICE OF WARRANTY

ARBORJET, Inc makes no warranty of fitness of this product for any other purpose, beyond its uses under normal conditions in keeping with the statements made on this label.

Contents: ☐ 500 ml bottle ☐ 1000 ml bottle

Arborjet's PALM-jet

Stressed Palm Trees Attract Insects and Disease Problems,
so Fight Seasonal Deficiencies with PALM-jet.



Begin Injection



Apply the Recommended Dose

Example: 12" DBH =
60mL total volume of
injection



Other Recommendations



The same injection site can be revisited up to 3 times in the same year. This works for monocots (palms) since the physiology of wound response is different.

NOTE: This monocot (palm) microinjection methodology is different from a dicot (ex. Hardwood) microinjection methodology.

