

## PALM AND LANDSCAPE FERTILIZATION RECOMMENDATIONS FOR SOUTH FLORIDA

- Elemental ratio for maintenance fertilizers should be approximately 4N1P2O5-6K2O-2Mg
- Typical analysis would be 8-2-12+4Mg
- 100% of N, K, and Mg should be in controlled release form
- Should contain about 1 to 1.5% Mn and Fe (0.1 to 0.2% Fe if chelates are used), plus trace amounts (0.05 to 0.14%) of B, Zn, and Cu
- All micronutrients should be in water soluble form. Insoluble forms such as oxides and sucrates are extremely ineffective on neutral to alkaline pH soils.

### Recommended elemental sources:

- N-Any controlled release N source with 2 to 3 month (or longer) release.
- Ammonia cal N is generally preferred over nitrate, although a mixture of the two forms is also good.
- P-Any water soluble P source, such as ammonium phosphates, potassium phosphates, or superphosphates. Coated P sources are OK, but do not appear to be necessary.
- K-Sulfur-coated potassium sulfate is best. Resin-coated K sources tend to release too slowly to be effective.
- Mg-Uncoated or coated prilled kieserite, or ideally, a 1:1 mixture of the two.
- Fe-Chelated forms such as Trachelene, Hampshire Fe, or Sequestrene or Sprint 138 (FeEDDHA). The first two products are granules and are best for blending in mixed fertilizers. The last product is best applied as a stand-alone Fe treatment, since it is fine-textured and tends to stain everything dark red.
- Ferrous sulfate is quite ineffective on neutral to alkaline pH soils and is not recommended.
- Mn-Manganese sulfate (TechMangam is a trade name for this) is most effective.
- Zn-Zinc Sulfate.
- Cu-Copper sulfate
- B-Any borate or boric acid will work, but never apply more than 2 oz of B fertilizer per tree when treating individually and that should be dissolved in about 5 gallons of water and drenched into the soil under the palm canopy. Do not reapply more than once every 6 months, since B toxicity can be as devastating as the deficiency.
- Recommended application rates for maintenance fertilizers: Up to 15# of product (not NI) per 1000 sq. ft. of landscape area (or tree canopy area) 4 times per year. If less is desired, it is preferable to reduce the application rate, rather than decrease the number of applications per year.
- Recommended application method: broadcasting using a calibrated rotary spreader.
- Recommendations for mixed landscapes: Any turf to be fertilized within 30 ft. of a palm should be given the above landscape fertilizer, not a high N turf fertilizer.

