Fruit Orchard Program

Powered by DAIRY DOO®

Pome Fruit and Stone Fruit Nutrient Requirements
Nitrogen: 40 - 60 lbs/acre (0.22 – 0.27 lb/tree)
Phosphate: 30-70 lbs/acre (0.15 – 0.32 lb/tree)
Potash: 80-120 lbs/acre (0.4 – 0.5 lb/tree)

Prior to Planting:
The best time to fix soils and make major adjustments to the fertility is before planting while the field is still bare. Compost, or even raw manure, can be applied at heavy amounts at this time, and worked into the top 5 – 6 inches. Be aware of phosphorus loads already present.

Late Fall or Early Spring:

A) Applying compost in the late fall or early spring to established orchards is often the easiest time because it shouldn't conflict with other field chores.

B) Apply according to the phosphorus needs for the year and meet the difference in potash and nitrogen needs with other products.

C) Apply 2 – 5 yards of DAIRY DOO® or Poultry Compost in row under the canopy.

- **i.** If applied before transplanting, shallow till into the top 4 inches of soil.
- **ii.** If applying to mature trees, spread on the surface prior to mulch.

D) If your equipment doesn't allow for the spreading of compost, use All Purpose 8-4-4 or organic Healthy Garden 7-6-5 as a granular fertilizer at a rate of 800 lbs. per acre or 2 - 10 lbs per tree, depending on planting density.

- **i.** If your phosphorus levels are already too high, then use a zero-phosphorus fertilizer like Morgan's 10-0-4.

E) You will likely need additional potash. If using muriate of potash (KCl), limit to 100 lbs./acre to prevent chloride toxicity. If using sulfate of potash or wood ashes, this doesn't need to be a concern. Consider a custom blend to address specific nutrient needs based on the soil test. This is an excellent time to combine application with lime or gypsum. Use lime to raise soil pH and use gypsum for soils that need extra calcium without making pH adjustments.

Liquid Program: Foliar

A) The first application of foliar nutrient should start just prior to bloom and continue for at least two months through bloom and early fruit development.

- **i.** Spray 2 gallons per acre of Fruit Blaster 1-5-13 every five days during bloom, and every ten days after that. If organic, use Morgan's Organic Liquid Fish 3-3-2 at 4 gallons per acre instead.

Liquid Program: Fertigation

A) If you have an irrigation system that can dose fertilizer at the same rates of 2 – 4 gallons per acre per week, Morgan's Soil Blaster 5-0-2 is an excellent choice for both supplying nutrients and feeding the soil biology.

i. Apply fertilizer in the last 30 to 60 minutes of your irrigation run, leaving enough time to flush any residues from lines before shutting off the pump.

ii. Whenever possible, try to fertilize a day or two after a rain or normal irrigation while the soil is still moist to get the best chance of soil adsorption.

Micronutrients:

A liquid application of secondary nutrients (like calcium and magnesium), and trace elements (such as boron, copper, and zinc) are often the best way of knowing that you are getting an adequate amount of these nutrients into the plant. Even if there isn't a deficiency showing in the soil, some of these elements have a difficult time getting to the upper crown of the tree.

A) Morgan's Stress Blaster 0-0-1 contains all the essential micronutrients. Calcium is an important nutrient for high quality fruit.

B) Honeycrisp Apples and Sweet Cherries use an especially high amount of calcium, so use Morgan's Calcium Plus to ensure high quality.

Post-Harvest:

Immediately after harvest is usually the best time for taking soil tests because there are fewer labor demands on the farm, and, typically, a lower workload at the lab; making sample turn-around much more timelie, giving you time to design next year's fertility plan.