

JUST FRUITS AND EXOTICS

FERTILIZER & SOIL PH CHART

	Species	Ph Range of Soil	Suggested Fertilizer*	Time to Fertilize*
Fruit Trees	Apple, Fig, Jujube, Mayhaw, Mulberry, Nectarine, Olive, Peach, Pear, Persimmon	6.0-7.0	Tree-tone® (6-3-2) or 10-10-10 w/ minerals	March, May, & July (Use Garden-tone® on fruiting persimmons to limit fruit-drop May/July)
	Loquat, Pawpaw, Papaya, Pineapple Guava, Plum, Pomegranate, Quince	5.5-6.5	Tree-tone® (6-3-2) or 10-10-10 w/ minerals	March, May, & July
	Citrus, Banana, & Avocado	5.5-6.5	Citrus-tone® (5-2-6) or 10-10-10 w/ minerals	March, May, & July
	Citrus (Trifoliate Rootstock)	4.2-5.5	Holly-tone® (4-3-4) or 10-8-8 w/minerals	March, May, & July
	Citrus (Container), Pineapple	5.0-5.5	Citrus-tone® or Dynamite/Osmacote	Every Two Months
Berry Bushes & Vines	Blackberry, Elderberry, Goji, Goumi, Grape, Kiwi, Passion Fruit, Raspberry, Sherbet	5.5-7.0	Tree-tone® (6-3-2) or 10-10-10 w/ minerals	March, May, & July
	Blueberries, Miracle Fruit	4.2-5.5	Holly-tone® (4-3-4) or 10-8-8 w/minerals	March, May, & July
Nut Trees	Black Walnut	6.8-7.2	Tree-tone® (6-3-2) or 10-10-10 w/ minerals	March, May, & July
	Chestnut, Pecan, Ginkgo	5.5-6.5	Holly-tone® (4-3-4) or 10-8-8 w/minerals	March, May, & July
Flowering Shrubs	Azalea, Camellia, Gardenia, Loropetalum, Tea Olive	4.2-6.0	Azalea-tone® (4-3-4) or 10-8-8 w/ minerals	March, May, & July
	Abelia, Banana Shrub, Hawthorn, Oleander, Roses, Spirea, Vitex	6.0-6.5	Tree-tone® (6-3-2) or 10-10-10 w/ minerals	March, May, & July
	Red Anise, Florida Anise	5.5-6.0	Holly-tone® (4-3-4) or 10-8-8 w/minerals	March, May, & July
Flowering Trees	Flowering Cherry, Crabapple, Plum, Pear, Quince, Crepe Myrtle	6.0-6.5	Tree-tone® (6-3-2) or 10-10-10 w/ minerals	March, May, & July
	Dogwood, Redbud, Tulip Popular	5.5-6.0	Holly-tone® (4-3-4) or 10-8-8 w/minerals	March, May, & July
	Native and Japanese Magnolia	4.5-5.5	Azalea-Tone® (4-3-4) or Holly-tone® (4-3-4)	March, May, & July

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	Species	Ph Range of Soil	Suggested Fertilizer*	Time to Fertilize*
Evergreen Shrubs	Cedars, Italian Cypress, Juniper Holly (Ilex spp.)-Burford, Chinese, Carissa, Dahoon, Yaupon	4.5-6.0	Holly-tone® (4-3-4) or 10-8-8 w/minerals	March, May, & July
	Boxwood, Ligustrum, Ocala Anise, Pittosporum, Podocarpus, Silverthorn, Viburnum	6.0-6.5	Tree-tone® (6-3-2) or 10-10-10 w/ minerals	March, May, & July
Palms, Hibiscus, & Tropical Plants	All Palms, Hibiscus, & Tropical Plants	5.0-6.5	Palm-tone® (4-1-5) or other Palm Fertilizer	March, May, & July
Trees	Chinese Pistache, Drake Elm, Sycamore, Willow	6.0-6.5	Tree-tone® (6-3-2) or 10-10-10 w/ minerals	March, May, & July
	Oak, Japanese Maple, Florida Maple, Pines	3.5-6.5	Holly-tone® (4-3-4) or 10-8-8 w/minerals	March, May, & July
Ferns	Maidenhair	6.0-6.5	Tree-tone® (6-3-2) or 10-10-10 w/ minerals	March, May, & July
	All Other Ferns	4.5-5.5	Holly-tone® (4-3-4) or 10-8-8 w/minerals	March, May, & July
Herb	All Herbs and Vegetables	5.0-7.0	Garden-tone® (3-4-4) or 10-10-10 w/ minerals	Monthly
Perennial & Annual Flowers	All Annuals, Perennials, & Hanging Baskets	6.0-7.0	Flower-tone® (3-4-5) or 10-10-10 w/ minerals	March, May, & July
Spring & Fall Bulbs	Tulips, Daffodils, Iris, & Gladioli	6.0-7.0	Bulb-tone® (3-5-3) or 10-10-10 w/ minerals	March, May, & July

Servings for Fruit Trees:

If using Espoma organic fertilizers, follow servings as indicated on the bag.

If mixing your own 10-10-10 or 10-8-8 on Fruit Trees use 1 cup for each year of tree's life (Max out at 9 cups for Mature tree).

Servings for Berry Bushes/Plants:

If using Espoma organic fertilizers, follow servings as indicated on the bag.

If mixing your own 10-10-10 or 10-8-8 Year 1 use 1/2 Cup per plant, year 2 use 1 cup per plant, year 3 use 2 cups per plant, year 4+ uses 4 cups every 4ft of row.

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OTHER STARTERS & SOIL SUPPLEMENTS

Espoma Organic Bio-tone® Starter Plus - The Ultimate Starter Fertilizer with both Endo & Ecto Mycorrhizae

Use At Planting: For EVERYTHING you plant! All Edibles, Flowers, Herbs, Vegetables, Trees, & Shrubs. You place this starter in-the-hole with your soil mixture when planting. It will help grow larger root mass, decrease transplant risk, and promote greater blooms/fruits.

Lower Your Soil PH with Espoma Organic Soil Acidifier (Turns Hydrangeas Blue!)

Use On Acid Loving Plants: Some examples would be: Azalea, Bayberry, Blueberry, Camellia, Dogwood, Evergreens, Ferns, Fir, Gardenia, Holly, Huckleberry, Hydrangea, Inkberry, Juniper, Leucothoe, Lily-of-the-Valley, Lupine, Magnolia, Marigold, Mountain Ash, Mountain Laurel, Oak, Pachysandra, Phlox, Pieris, Pine, Raspberry, Rhododendron, Spruce, Strawberries.

Loosen Clay Soils with Espoma Organic Garden Gypsum Soil Conditioner

Espoma Garden Gypsum is an all natural mineral that can help loosen clay soils, minimize salt damage to plants, and help promote root growth.

*Why we recommend organic fertilizers only:

- Encourages healthier & improved soil conditions
- Better for the Environment
- Safe around Pets & Kids
- Longer lasting & Slower Release
- Won't leach out of the soil
- Won't burn plants because they are low in salt

*Time to fertilize is based on USDA Zone 8b

Other zones may vary in month to start. Ideally, you want to begin right after the last freeze of the winter season. It is normally March for us in zone 8b, in colder zones it may be April, and in warmer zones it may be February.

If you are unsure of your zone, you may find it on our website at justfruitsandexotics.com.

You may also contact us if you have questions about your zone or any other questions by email at info@justfruitsandexotics.com or [facebook.com/justfruit](https://www.facebook.com/justfruit)

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SOIL ACIDITY & HOW TO ADJUST IT

Soils vary in acidity. Technically, soil acidity is measured by pH. The pH scale ranges from 0 to 14. In terms of soils, a pH of 6.0 is neutral, a pH less than 6.0 is termed Acid, and pH of more than 6.0 is termed Alkaline. You may also have heard the terms Sweet for Alkaline soils and Sour for Acid soils. The growing range for most plants is 4.2 - 6.7. The best way to determine your soil acidity is to have it tested. Here in Florida we are fortunate that the Agricultural Extension Service in each county will test soils for pH and/or major nutrients (check online for contacts and cost). For best results collect several small samples of soil from where you are planning to garden and mix them thoroughly. We highly recommend soil testing as the best way to determine what your soil needs to give you the best results. Soil should be retested every few years and pH adjusted as needed. Based on the soil test, soil pH may need to be adjusted. Generally, pH is raised using agricultural lime and lowered with sulfur or iron sulfate. The amount added depends on the amount that pH needs to be lowered or raised for the plants you wish to grow. Read and follow label directions. Sometimes aluminum sulfate is used, but we strongly recommend against it. Aluminum sulfate is toxic to blueberries and some other plants. See our Fertilization & Soil pH table for the optimal pH ranges.

SOIL AMENDMENTS

We add a brief discussion of soil amendments here, because some readily available amendments may affect soil acidity. Most plants will need additions of organic matter when they are put in the ground. Organic matter increases the water holding capacity of the soil and releases nutrients as it decays. Adding organic matter is one of the best things you can do for your soil. On sandy soils, water runs right through the soil without organic matter. On clay soils, organic matter opens up the soil and increases drainage. All soils are improved by adding organic matter!! However, some types of organic matter affect soil acidity. In general, pine bark, oak leaves and peat moss are acid and so will tend to lower soil pH. Mushroom compost and most rotted animal manures will do marvelous things for a garden, but these are alkaline and will tend to raise soil pH. At the Nursery we're sometimes asked why blueberries and gardenias turn yellow and drop their leaves. After questioning, we've often learned that the well-intentioned gardener has added mushroom compost to these plants that require strongly acid soils. This will injure and possibly kill the plants. So, if we plant an acid lover with alkaline soil amendments, it won't grow well, and vice versa. Choose acidic soil amendments for acid lovers and alkaline to neutral soil amendments for alkaline lovers. But, by all means, add organic matter when you plant your vegetables, fruits and flowers.

CHOOSING THE RIGHT FERTILIZER

Fertilizers come in many forms. We recommend slow-release fertilizers with micronutrients. Organic fertilizers are composed of natural ingredients like dehydrated manures, crab meal and kelp meal. These products are better solutions for feeding our plants because they are first digested by soil bacteria which your plant then eats. This helps build healthier soils, improves root growth and feeds roots gently while also producing less soluble nitrates and other unhealthy chemicals that leach into our aquifers, streams and estuaries. If you feel the need to give your plants a boost during the growing season with a quicker release type fertilizer, use fish emulsion or a tea made from mushroom compost or your own home made compost. Make sure that the fertilizer contains iron, zinc, manganese, magnesium, molybdenum, copper and boron. These minor elements are very important to plants and most soils are low in these elements. Fertilizer labels usually have 3 numbers (e.g. 10-10-10). The first number is the amount of Nitrogen in the mix, the second Phosphorus and the third Potassium (often abbreviated by the symbols N-P-K). Lime lovers are plants that grow in the pH range of approximately 5.5-7.0. Acid lovers are plants that grow in the pH range of approximately 4.2-5.5. Vegetable gardens and flowering perennials generally are on the 6.0-7.0 pH range. Some plants like palms and bananas require special mixes. Application rates vary according to type and age of plant, so read the instructions on the bag and fertilize accordingly. You can also go to our individual plant growing guides for more information on fertilizer application. Be sure to spread the fertilizer evenly under the entire canopy of the plant avoiding a 5-inch area around the stem or trunk. Water or rake in. See our Fertilization & Soil pH table for the optimal Espoma fertilizer to use. Stand back and watch them grow!