

Home Orchard Fertilization Calendar for North Florida

This month-by-month calendar should be used as a guide for fertilizing fruit and nut trees in home orchards of North Florida. Additional fruit culture information can be found by accessing the resources provided. All fertilizer recommendations are for optimum growth and fruit production. Gardeners may choose to apply less fertilizer than the recommendation but should never apply more. When referring to the age of a plant, we consider year 1 to be at planting, or the first year after planting. A good rule of thumb is to begin fertilizing no sooner than 4 to 6 weeks after planting to promote root establishment and prevent fertilizer burn.

January

- Apples: Fertilize during the dormant season using 10-10-10 with micronutrients, esp. Zinc and Boron; apply ½ pound (1 cup) of fertilizer for each year of age, up 7.5 pounds total during January for a 15+ year old tree.
- Blueberries (Newly Planted): The best time to plant is from mid-December to mid-February. Do not put fertilizer in the planting hole. After planting, when the soil is well settled from irrigation or rainfall, give un-mulched plants 1 ounce (2 TB) per plant of 12-4-8 with 2% magnesium (Mg). Spread fertilizer evenly over a circle 2 feet in diameter with the plant in the center. *See 'Blueberry Notes' on page 7 for more detailed fertilizer requirements and recommendations.
- Peaches & Nectarines (Year 2+): Fertilize late this month using 1 to 1.5 pounds (2-3 cups) per tree of 12-4-8 fertilizer with micronutrients, esp. zinc.
- Pears: Apply ¾ pound (1.5 cups) of 6-6-6 or 8-8-8 per year of age, up to 7.5 pounds (15 cups) total per tree during January. The best fertilizer contains magnesium and other micronutrients. Consider a controlled-release fertilizer to avoid overly vigorous growth that increases the tree's susceptibility to fire blight.



February

- Blackberries (Year 2+): Fertilize this month using 1/4 to 1/2 pound (1/2 to 1 cup) of 10-10-10 with micronutrients per plant or about 10 pounds (20 cups) per 100-foot row. Apply fertilizer in an 18-inch ring surrounding a plant, or parallel to the row 12–18 inches from the row center. *Note: Typically, blackberries do not require much fertilizer; roots are located close to the surface and excess fertilizer can burn leaves or even kill plants.*
- Blueberries (Established): *Year 2*: Fertilize using 2 ounces (4 TB) per plant of 12-4-8 with 2% magnesium (Mg). Spread fertilizer evenly over a circle 3 feet in diameter with the plant in the center. *Year 3+*: Fertilize using 3 ounces (6 TB) per plant of 12-4-8 with 2% magnesium (Mg). Spread fertilizer evenly over a 4-foot diameter circle, or broadcast in a continuous band 3 to 4 feet wide, centered on the plant row. **See 'Blueberry Notes' on page 7 for more detailed fertilizer requirements and recommendations.*
- Citrus: Fertilization may begin this month for all types of citrus trees. Refer to Table 1 on page 7 for fertilizer recommendations.
- Peaches & Nectarines (Year 1): Fertilize this month using 1/8 pound (1/4 cup) per tree of 12-4-8 fertilizer with micronutrients, esp. zinc.
- Pecans (Established): Fertilize this month using 10-10-10 with micronutrients, 2 pounds (4 cups) per inch trunk diameter, measured one foot above the soil (2-4 lbs for bearing trees). Large trees (30 inches or more in diameter) may require 60 to 120 pounds of fertilizer. *Note: Fertilizer should contain Zinc (Zn) to prevent nutrient deficiencies.*

March

- Figs: If the total amount of vegetative growth is less than one foot in length, then it is appropriate to apply fertilizer in 3-5 applications during the growing season (March to August). For young trees, 1/2 pound (1 cup) of 10-10-10 with micronutrients can be applied. For large trees, 2 to 4 pounds (4-8 cups) of 10-10-10 with micronutrients can be applied. Excess fertilization promotes excessive vegetative growth and low yield.
- Muscadine Grapes (Year 2): Fertilize using 1-2 pounds (2-4 cups) of 8-8-8 or 10-10-10; apply the fertilizer in bands about 1 foot to either side of the vine. *Note: It is sometimes beneficial to apply fertilizer that has micronutrients added.*
- Muscadine Grapes (Year 3+): Fertilize using 3-4 pounds (6-8 cups) of 8-8-8 or 10-10-10; apply the fertilizer in bands about 1 foot to either side of the vine. *Note: It is sometimes beneficial to apply fertilizer that has micronutrients added.*
- Pecans (Newly Planted): A soil fertility test should be conducted prior to planting and no fertilizer should be placed in the planting hole during installation. *Year 1*: Fertilize early this month using 10-10-10 with micronutrients, 1 pound (2 cups) per tree. *Year 2*: Fertilize early this month using 10-10-10 with micronutrients, 2 pounds (4 cups) per tree. *Note:*

Fertilizer should contain Zinc (Zn) to prevent nutrient deficiencies. Spread the fertilizer in a circle with a 3- to 5- foot diameter around the trunk of the tree, avoiding the trunk.

- Persimmons: Apply the first of three applications of fertilizer; refer to Table 2 on page 7 for appropriate application rates. A complete fertilizer with micronutrients is recommended. Heavy applications of quick-release nitrogen should be avoided because this can increase fruit drop.
- Plums: Trees should be fertilized every 6 weeks from March 1 through August 31 with 4 oz. (1/2 cup) of 10-10-10 per application for the first year. In the second year, the amount can be increased to 8 oz. (1 cup) per application. In years three and beyond, the amount per application can be increased to 1 lb. (2 cups) for each application.

April

- Blueberries (Newly Planted): Fertilize using 1 ounce (2 TB) per plant of 12-4-8 with 2% magnesium (Mg). If plants are mulched heavily, use 1.5 ounces (3 TB) per plant per application rather than 1 ounce. Spread fertilizer evenly over a circle 2 feet in diameter with the plant in the center. **See 'Blueberry Notes' on page 7 for more detailed fertilizer requirements and recommendations.*
- Blueberries (Established): *Year 2*: Fertilize using 2 ounces (4 TB) per plant of 12-4-8 with 2% magnesium (Mg). Spread fertilizer evenly over a circle 3 feet in diameter with the plant in the center. *Year 3+*: Fertilize using 3 ounces (6 TB) per plant of 12-4-8 with 2% magnesium (Mg). Spread fertilizer evenly over a 4-foot diameter circle, or broadcast in a continuous band 3 to 4 feet wide, centered on the plant row. **See 'Blueberry Notes' on page 7 for more detailed fertilizer requirements and recommendations.*
- Chestnuts: Fertilization programs should be based on a soil test. However, a common application is 1 pound (2 cups) of 10-10-10 or similar analysis per year of tree age up to 15 pounds per tree applied in the spring. A slow-release nitrogen fertilizer or frequent feeding through the drip system can promote growth with less loss of nutrients from leaching.
- Muscadine Grapes (Year 1): Fertilize after growth begins using 1/4 pound (1/2 cup) of 8-8-8 or 10-10-10; apply the fertilizer in bands about 1 foot to either side of the vine. *Note: It is sometimes beneficial to apply fertilizer that has micronutrients added.*

May

- Blackberries (Year 1): During their establishment year, newly planted blackberries can be fertilized late this month using 1/4 pound (1/2 cup) of 10-10-10 with micronutrients per plant or up to 5 pounds (10 cups) per 100 feet of row.
- Peaches & Nectarines (Year 1): Fertilize late this month using 1/4 pound (1/2 cup) per tree of 12-4-8 fertilizer with micronutrients, esp. zinc.

- Peaches & Nectarines (Year 2+): Fertilize this month using 1 to 1.5 pounds (2-3 cups) per tree of 12-4-8 fertilizer with micronutrients, esp. zinc.
- Plums: Trees should be fertilized every 6 weeks from March 1 through August 31 with 4 oz. (1/2 cup) of 10-10-10 per application for the first year. In the second year, the amount can be increased to 8 oz. (1 cup) per application. In years three and beyond, the amount per application can be increased to 1 lb. (2 cups) for each application.

June

- Apples: Fertilize this month using 10-10-10 with micronutrients, esp. Zinc and Boron; apply ½ pound (1 cup) of fertilizer for each year of age, up 7.5 pounds total during June for a 15+ year old tree.
- Blueberries (Newly Planted): Fertilize using 1 ounce (2 TB) per plant of 12-4-8 with 2% magnesium (Mg). If plants are mulched heavily, use 1.5 ounces (3 TB) per plant per application rather than 1 ounce. Spread fertilizer evenly over a circle 2 feet in diameter with the plant in the center. **See 'Blueberry Notes' on page 7 for more detailed fertilizer requirements and recommendations.*
- Blueberries (Established): *Year 2*: Fertilize using 2 ounces (4 TB) per plant of 12-4-8 with 2% magnesium (Mg). Spread fertilizer evenly over a circle 3 feet in diameter with the plant in the center. *Year 3+*: Fertilize using 3 ounces (6 TB) per plant of 12-4-8 with 2% magnesium (Mg). Spread fertilizer evenly over a 4-foot diameter circle, or broadcast in a continuous band 3 to 4 feet wide, centered on the plant row. **See 'Blueberry Notes' on page 7 for more detailed fertilizer requirements and recommendations.*
- Muscadine Grapes (Year 1): Fertilize using 1/4 pound (1/2 cup) of 8-8-8 or 10-10-10; apply the fertilizer in bands about 1 foot to either side of the vine. *Note: It is sometimes beneficial to apply fertilizer that has micronutrients added.*
- Muscadine Grapes (Year 2): Fertilize during June or July using 1-2 pounds (2-4 cups) of 8-8-8 or 10-10-10; apply the fertilizer in bands about 1 foot to either side of the vine. *Note: It is sometimes beneficial to apply fertilizer that has micronutrients added.*
- Muscadine Grapes (Year 3+): Fertilize during June or July using 3-4 pounds (6-8 cups) of 8-8-8 or 10-10-10; apply the fertilizer in bands about 1 foot to either side of the vine. *Note: It is sometimes beneficial to apply fertilizer that has micronutrients added.*
- Pears: Apply ¾ pound (1.5 cups) of 6-6-6 or 8-8-8 per year of age, up to 7.5 pounds (15 cups) total per tree during June. The best fertilizer contains magnesium and other micronutrients. Consider a controlled-release fertilizer to avoid overly vigorous growth that increases the tree's susceptibility to fire blight.
- Pecans (Newly Planted): A soil fertility test should be conducted prior to planting and no fertilizer should be placed in the planting hole during installation. *Year 1*: Fertilize early

this month using 10-10-10 with micronutrients, 1 pound (2 cups) per tree. *Year 2:* Fertilize early this month using 10-10-10 with micronutrients, 2 pounds (4 cups) per tree. *Note: Fertilizer should contain Zinc (Zn) to prevent nutrient deficiencies. Spread the fertilizer in a circle with a 3- to 5- foot diameter around the trunk of the tree, avoiding the trunk.*

- Pecans (Established): Fertilize this month according to nutrient test results. Otherwise, use general recommendations: Apply 10-10-10 with micronutrients, 2 pounds (4 cups) per inch trunk diameter, measured one foot above the soil (2-4 lbs for bearing trees). Large trees (30 inches or more in diameter) may require 60 to 120 pounds of fertilizer. *Note: Fertilizer should contain Zinc (Zn) to prevent nutrient deficiencies.*

- Persimmons: Apply the second of three applications of fertilizer; refer to Table 2 on page 7 for appropriate application rates. A complete fertilizer with micronutrients is recommended. Heavy applications of quick-release nitrogen should be avoided because this can increase fruit drop.



July

- Blackberries (Year 2+): Fertilize after harvest using 1/4 to 1/2 pound (1/2 to 1 cup) of 10-10-10 with micronutrients per plant or about 10 pounds (20 cups) per 100-foot row. Apply fertilizer in an 18-inch ring surrounding a plant, or parallel to the row 12–18 inches from the row center. *Note: Typically, blackberries do not require much fertilizer; roots are located close to the surface and excess fertilizer can burn leaves or even kill plants.*
- Peaches & Nectarines (Year 1): Fertilize this month using 1/2 pound (1 cup) per tree of 12-4-8 fertilizer with micronutrients, esp. zinc.
- Plums: Trees should be fertilized every 6 weeks from March 1 through August 31 with 4 oz. (1/2 cup) of 10-10-10 per application for the first year. In the second year, the amount can be increased to 8 oz. (1 cup) per application. In years three and beyond, the amount per application can be increased to 1 lb. (2 cups) for each application.

August

- Blueberries (Newly Planted): Fertilize using 1 ounce (2 TB) per plant of 12-4-8 with 2% magnesium (Mg). If plants are mulched heavily, use 1.5 ounces (3 TB) per plant per application rather than 1 ounce. Spread fertilizer evenly over a circle 2 feet in diameter with the plant in the center. **See 'Blueberry Notes' on page 7 for more detailed fertilizer requirements and recommendations.*
- Blueberries (Established): *Year 2:* Fertilize using 2 ounces (4 TB) per plant of 12-4-8 with 2% magnesium (Mg). Spread fertilizer evenly over a circle 3 feet in diameter with the plant in the center. *Year 3+:* Fertilize using 3 ounces (6 TB) per plant of 12-4-8 with 2% magnesium (Mg). Spread fertilizer evenly over a 4-foot diameter circle, or broadcast in a

continuous band 3 to 4 feet wide, centered on the plant row. **See 'Blueberry Notes' on page 7 for more detailed fertilizer requirements and recommendations.*

- Muscadine Grapes (Year 1): Fertilize using 1/4 pound (1/2 cup) of 8-8-8 or 10-10-10; apply the fertilizer in bands about 1 foot to either side of the vine. *Note: It is sometimes beneficial to apply fertilizer that has micronutrients added.*

September

- Citrus: Last month to fertilize citrus until February; refer to the Table 1 on page 7 for fertilizer recommendations.
- Persimmons: Apply the last of three applications of fertilizer; refer to Table 2 on page 7 for appropriate application rates. A complete fertilizer with micronutrients is recommended. Heavy applications of quick-release nitrogen should be avoided because this can increase fruit drop.

October

- Blueberries (Newly Planted): Fertilize using 1 ounce (2 TB) per plant of 12-4-8 with 2% magnesium (Mg). If plants are mulched heavily, use 1.5 ounces (3 TB) per plant per application rather than 1 ounce. Spread fertilizer evenly over a circle 2 feet in diameter with the plant in the center. **See 'Blueberry Notes' on page 7 for more detailed fertilizer requirements and recommendations.*
- Blueberries (Established): *Year 2*: Fertilize using 2 ounces (4 TB) per plant of 12-4-8 with 2% magnesium (Mg). Spread fertilizer evenly over a circle 3 feet in diameter with the plant in the center. *Year 3+*: Fertilize using 3 ounces (6 TB) per plant of 12-4-8 with 2% magnesium (Mg). Spread fertilizer evenly over a 4-foot diameter circle, or broadcast in a continuous band 3 to 4 feet wide, centered on the plant row. **See 'Blueberry Notes' on page 7 for more detailed fertilizer requirements and recommendations.*
- Strawberries: Treat as annuals; plant October 1st to November 15th for a spring harvest. Two pounds (4 cups) of a 10-5-10 or similar garden fertilizer with micronutrients (i.e. zinc, copper, iron, manganese and boron) per 10 feet of row should be incorporated into the bed before planting. It is recommended that about one-half of the nitrogen in the fertilizer should be in a slow-release form to increase nutrient absorption. Incorporate one-fourth of the fertilizer evenly across the top of the bed with a rake. Apply the remainder of the fertilizer in a narrow band approximately 1 inch deep down the middle of the bed (above the drip line or soaker hose, if they have been placed in the bed).

November & December – no crops listed previously require fertilization in N. Florida.

Table 1: Citrus Fertilization Table

<i>Tree Age</i>	<i>Cups of Fertilizer per Application</i>			<i>Applications per year</i>
	<i>6-6-6</i>	<i>8-8-8</i>	<i>10-10-10</i>	
<i>1</i>	.5 - 1.5 cups	.5 - 1.25 cups	0.5 - 1 cup	6
<i>2</i>	2 - 4.25 cups	1.5 - 3 cups	1 - 2.5 cups	5
<i>3</i>	4 - 7 cups	2.75 - 5.5 cups	2.25 - 4.5 cups	4
<i>4</i>	8.5-11.25 cups	6.5 - 8.25 cups	5.25 - 6.5 cups	3
<i>5+</i>	12-15.5 cups	9 - 11.5 cups	7.25 - 9.25 cups	3

**Year 1 starts at planting.*

Table 2: Persimmon Fertilization Table

<i>Tree Age</i>	<i>10-10-10 with micronutrients Cups per Application</i>			<i>Total cups applied per year</i>
	<i>March</i>	<i>June</i>	<i>September</i>	
<i>1</i>	1 cup	0.5 cup	0.5 cup	2
<i>2</i>	1.75 cups	0.8 cups	0.8 cups	3.5
<i>3</i>	2.5 cups	1.25 cups	1.25 cups	5
<i>4</i>	3.25 cups	1.6 cups	1.6 cups	6.5
<i>5</i>	4 cups	2 cups	2 cups	8
<i>6</i>	4.75 cups	2.4 cups	2.4 cups	9.5
<i>7</i>	5.5 cups	2.75 cups	2.75 cups	11
<i>8</i>	6.25 cups	3.1 cups	3.1 cups	12.5
<i>9</i>	7 cups	3.5 cups	3.5 cups	14
<i>10+</i>	7.75 cups	3.9 cups	3.9 cups	15.5

**Year 1 starts at planting.*

****Blueberry Notes:***

These are general guidelines and should be adjusted based on plant performance. Slightly more fertilizer may be required if plants are heavily mulched. However, cultivated blueberries often suffer more from over-fertilization than from lack of fertilization. Use ammoniacal nitrogen or nitrogen from urea or organic sources, rather than from nitrate sources. Chlorine levels should be low, preferably below 2%. Special formulations such as "blueberry special" and "camellia-azalea" fertilizers are available in Florida and meet these requirements.

Resources

- Apples:** Sarkhosh, A., Crocker, T.E., Sherman, W.B., Williamson, J.G., and Popenoe, J. 2019. The Apple (*Malus domestica*, Rosaceae). University of Florida Institute of Food and Agricultural Sciences. <https://edis.ifas.ufl.edu/publication/MG073>
- Blackberries:** Anderson, P.C. 2020. The Blackberry. University of Florida Institute of Food and Agricultural Sciences. <https://edis.ifas.ufl.edu/publication/HS104>
- Blueberries:** Williamson, J.G., Lyrene, P.M., and Olmstead, J.W. 2018. Blueberry Gardener's Guide. University of Florida Institute of Food and Agricultural Sciences. <https://edis.ifas.ufl.edu/publication/MG359>
- Chestnut:** Hochmuth, R.C., Wallace, R.D., Van Blokland, P.J., and Williamson, J.G. 2018. Production and Marketing of Chestnuts in the Southeastern United States. University of Florida Institute of Food and Agricultural Sciences. <https://edis.ifas.ufl.edu/publication/HS1155>
- Citrus:** Rouse, R.E. and Zekri, M. 2015. Citrus Culture in the Home Landscape. University of Florida Institute of Food and Agricultural Sciences. <https://edis.ifas.ufl.edu/publication/HS132>
- Figs:** Sarkhosh, A. and Anderson, P.C. 2019. The Fig. University of Florida Institute of Food and Agricultural Sciences. <https://edis.ifas.ufl.edu/publication/MG214>
- Peaches:** Ferguson, J. et al. 2007. Florida Subtropical Peaches: Production Practices. University of Florida Institute of Food and Agricultural Sciences. <http://edis.ifas.ufl.edu/hs348>
- Plums:** Sarkhosh, A., Olmstead, M., Miller, E.P., Andersen, P.C., and Williamson, J.G. 2018. Growing Plums in Florida. University of Florida Institute of Food and Agricultural Sciences. <https://edis.ifas.ufl.edu/publication/HS250>
- Pears:** Popenoe, J., Sarkhosh, A., and Huff, D. 2020. The Pear (*Pyrus spp.*) in Florida Home Gardens. University of Florida Institute of Food and Agricultural Sciences. <https://edis.ifas.ufl.edu/publication/HS1393>
- Pecans:** Andersen, P.C. 2019. The Pecan Tree. University of Florida Institute of Food and Agricultural Sciences. <https://edis.ifas.ufl.edu/publication/HS229>
- Persimmons:** Sarkhosh, A., Huff, D.M., and Andersen, P.C. 2020. Japanese Persimmon Cultural Practices in Florida. University of Florida Institute of Food and Agricultural Sciences. <https://edis.ifas.ufl.edu/publication/HS1389>
- Grapes:** Anderson, P.C., Sarkhosh, A., Huff, D., and Breman, J. 2020. The Muscadine Grape (*Vitis rotundifolia* Michx). University of Florida Institute of Food and Agricultural Sciences. <https://edis.ifas.ufl.edu/publication/HS100>
- Strawberries:** Whitaker, V.M., Peres, N.A., Lahiri, S., Brown, S.P., and Chandler, C.K. 2021. Growing Strawberries in the Florida Home Garden. University of Florida Institute of Food and Agricultural Sciences. <https://edis.ifas.ufl.edu/publication/HS403>

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