

BEES Info #100

Lime and Fertilizer Recommendations  
for the Various Crops of Tennessee

*Chapter VI*  
*Home Garden Fruit and Nuts*

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Apple/Pear (Home Garden)  
Soil Test Recommendations for N, P<sub>2</sub>O<sub>5</sub> and K<sub>2</sub>O at Various Soil Test Levels\*

Practice	Phosphate (P <sub>2</sub> O <sub>5</sub> )	Potash (K <sub>2</sub> O)	Notes
1. Establishment and Maintenance	L	L	1,4,5
	L	M	1,4,5
	L	H	2,4,5
	L	V	2,4,5
	M	L	1,4,5
	M	M	1,4,5
	M	H	2,4,5
	M	V	2,4,5
	H	L	1,4,5
	H	M	2,4,5
	H	H	3,4,5
	H	V	3,4,5
	V	L	1,4,5
	V	M	2,4,5
V	H	3,4,5	
V	V	3,4,5	

\*NT = Not Tested L = Low M = Medium H = High V = Very High

**Notes:** Lime recommendations from Lime Chart 5

- In March, evenly spread 3 pounds (about 8 cups) of 6-12-12 or 5-10-10 or 1.5 pounds (about 4 cups) of 15-15-15 or 10-10-10 per 100 square feet (10 ft. by 10 ft. area around the tree). Soil test every 3<sup>rd</sup> season.
- In March, evenly spread 1.5 pounds (about 4 cups) of 6-12-12 or 5-10-10 or 0.75 pounds (about 2 cups) of 15-15-15 or 10-10-10 per 100 square feet (10 ft. by 10 ft. area around the tree). Soil test every 3<sup>rd</sup> season.
- Evenly spread 0.25 pound (about one-half cup) of ammonium nitrate (34-0-0) or similar per 100 square feet (10 ft. by 10 ft. area around the tree) in March on non-bearing trees. Use only one-half this amount for bearing trees. Soil test every 3<sup>rd</sup> season.
- Non-bearing trees should make 15-30 inches of terminal growth. Mature, non-spur trees should make 12-14 inches of terminal growth. Nitrogen rate may be adjusted accordingly when growth is not as indicated above.
- At establishment and every 3 years after that, apply one ounce of borax per inch of trunk diameter as measured one foot above the ground. Topdress this evenly beneath the spread of the branches.

Cherry/Plum (Home Garden)  
Soil Test Recommendations for N, P<sub>2</sub>O<sub>5</sub> and K<sub>2</sub>O at Various Soil Test Levels\*

Practice	Phosphate (P <sub>2</sub> O <sub>5</sub> )	Potash (K <sub>2</sub> O)	Notes
1. Establishment and Maintenance	L	L	1,4
	L	M	1,4
	L	H	2,4
	L	V	2,4
	M	L	1,4
	M	M	1,4
	M	H	2,4
	M	V	2,4
	H	L	1,4
	H	M	2,4
	H	H	3,4
	H	V	3,4
	V	L	1,4
	V	M	2,4
	V	H	3,4
V	V	3,4	

\*NT = Not Tested L = Low M = Medium H = High V = Very High

**Notes:** Lime recommendations from Lime Chart 5

1. In March, evenly spread 3 pounds (about 8 cups) of 6-12-12 or 5-10-10 or 1.5 pounds (about 4 cups) of 15-15-15 or 10-10-10 per 100 square feet (10 ft. by 10 ft. area around the tree). Soil test every 3<sup>rd</sup> fall season.
2. In March, evenly spread 1.5 pounds (about 4 cups) of 6-12-12 or 5-10-10 or 0.75 pounds (about 2 cups) of 15-15-15 or 10-10-10 per 100 square feet (10 ft. by 10 ft. area around the tree). Soil test every 3<sup>rd</sup> fall season.
3. Evenly spread one-half pound (about one cup) of ammonium nitrate (34-0-0) or similar per 100 square feet (10 ft. by 10 ft. area around the tree) in early March. Soil test every 3<sup>rd</sup> fall season.
4. Non-bearing trees should make 16-18 inches of terminal growth and have good leaf color. Bearing trees should make 10 to 15 inches of terminal growth annually.

**Blueberries (Home Garden)**  
**Soil Test Recommendations for N, P<sub>2</sub>O<sub>5</sub> and K<sub>2</sub>O at Various Soil Test Levels\***

Practice	Phosphate (P <sub>2</sub> O <sub>5</sub> )	Potash (K <sub>2</sub> O)	Note
1. Establishment and Maintenance	L	L	1,2,3
	L	M	1,2,3
	L	H	1,2,3
	L	V	1,2,3
	M	L	1,2,3
	M	M	1,2,4
	M	H	1,2,4
	M	V	1,2,4
	H	L	1,2,3
	H	M	1,2,4
	H	H	1,2
	H	V	1,2
	V	L	1,2,3
	V	M	1,2,4
	V	H	1,2
V	V	1,2	

\*NT = Not Tested    L = Low    M = Medium    H = High    V = Very High

**Notes:** Lime recommendations from Lime Chart 9 (home garden).

1. Soil pH should be within the range of 4.8 to 5.5. If the pH is above this range, apply two (2.0) pounds of elemental sulfur per 1000 square feet for each one-tenth (0.1) unit the pH is above 5.5 (for medium-textured, silt-loam soils). Use 1/3 more sulfur for fine-textured (clay) soils or 1/3 less sulfur for coarse-textured (sandy) soils than the amount required for medium-textured soils. Apply sulfur at least three months before planting and work into the top three inches of soil. When more than thirty (30.0) pounds of sulfur per 1000 square feet is required, it would be advisable to split the application. Apply two-thirds of the recommended amount and after about three months re-test the soil. If the pH has not been sufficiently reduced, apply the remainder of the material.
2. For maintenance apply the following (per 1,000 square ft.):
  - First spring after planting: two pounds of 15-15-15 or equivalent.
  - Second spring after planting: three pounds of 15-15-15 or equivalent.
  - Third spring after planting: four pounds of 15-15-15 or equivalent.
  - Remaining springs after planting: five pounds of 15-15-15 or equivalent.
 At least six and twelve weeks after the above maintenance fertilizer applications, apply three pounds of 34-0-0 or similar per 1000 square feet. Maintain the soil pH near 5.0.
3. At establishment apply 6 pounds 15-15-15 or equivalent per 1000 square feet.
4. At establishment apply 3 pounds 15-15-15 or equivalent per 1000 square feet.

Computer Codes

1. HR

2. HBD

Home Garden BRAMBLES (Raspberry:HR ;or Blackberries and Dewberries:

HBD)

Soil Test Recommendations for N, P<sub>2</sub>O<sub>5</sub> and K<sub>2</sub>O at Various Soil Test Levels\*

Practice	Phosphate (P <sub>2</sub> O <sub>5</sub> )	Potash (K <sub>2</sub> O)	Notes
1. Establishment and Maintenance	L	L	1
	L	M	1
	L	H	2
	L	V	2
	M	L	1
	M	M	1
	M	H	2
	M	V	2
	H	L	1
	H	M	2
	H	H	3
	H	V	3
	V	L	1
	V	M	2
V	H	3	
V	V	3	

\*NT = Not Tested L = Low M = Medium H = High V = Very High

**Notes:** Lime recommendations from Lime Chart 6

1. At establishment in the fall, and then each year when first blooms appear, evenly spread 1.5 pounds (about 4 cups) of 6-12-12 or 5-10-10 or 0.75 pounds (about 2 cups) of 15-15-15 or 10-10-10 per 10 feet of row (4 ft. in width). Soil test every 3<sup>rd</sup> fall season.
2. At establishment in the fall, and then each year when first blooms appear, evenly spread 0.75 pounds (about 2 cups) of 6-12-12 or 5-10-10 or 0.40 pounds (about 1 cup) of 15-15-15 or 10-10-10 per 10 feet of row (4 ft. in width). Soil test every 3<sup>rd</sup> fall season.
3. Each year when first blooms appear, evenly spread 0.1 pound (about 1/4 cup) of ammonium nitrate (34-0-0) or similar per 10 ft. of row (4 ft. in width).

Grape/Muscadine (Home Garden)  
Soil Test Recommendations for N, P<sub>2</sub>O<sub>5</sub> and K<sub>2</sub>O at Various Soil Test Levels\*

Practice	Phosphate (P <sub>2</sub> O <sub>5</sub> )	Potash (K <sub>2</sub> O)	Notes
1. Establishment and Maintenance	L	L	1,4
	L	M	1,4
	L	H	2,4
	L	V	2,4
	M	L	1,4
	M	M	1,4
	M	H	2,4
	M	V	2,4
	H	L	1,4
	H	M	2,4
	H	H	3,4
	H	V	3,4
	V	L	1,4
	V	M	2,4
	V	H	3,4
V	V	3,4	

\*NT = Not Tested L = Low M = Medium H = High V = Very High

**Notes:** Lime recommendations from Lime Chart 5

- In March, evenly spread 3 pounds (about 8 cups) of 6-12-12 or 5-10-10 or 1.5 pounds (about 4 cups) of 15-15-15 or 10-10-10 per 100 square feet (10 ft. by 10 ft. area around the vines). Soil test every 3<sup>rd</sup> fall season.
- In March, evenly spread 1.5 pounds (about 4 cups) of 6-12-12 or 5-10-10 or 0.75 pounds (about 2 cups) of 15-15-15 or 10-10-10 per 100 square feet (10 ft. by 10 ft. area around the vines). Soil test every 3<sup>rd</sup> fall season.
- Evenly spread 0.25 pound (about one-half cup) of ammonium nitrate (34-0-0) or similar per 100 square feet (10 ft. by 10 ft. area around the tree) in March on non-bearing vines. Use only one-half this amount for bearing vines. Soil test every 3<sup>rd</sup> fall season.
- When lime is needed, use dolomitic limestone to supply magnesium. If lime is not needed but the soil test shows less than 40 pounds of magnesium per acre or visual magnesium deficiency symptoms persist, apply 0.25 cup of epsom salts per 100 sq. feet (10 ft. by 10 ft.) area around the vine.

Nuts (Home Garden)  
Soil Test Recommendations for N, P<sub>2</sub>O<sub>5</sub> and K<sub>2</sub>O at Various Soil Test Levels\*

Practice	Phosphate (P <sub>2</sub> O <sub>5</sub> )	Potash (K <sub>2</sub> O)	Notes
1. Establishment and Maintenance	L	L	1,4
	L	M	1,4
	L	H	2,4
	L	V	2,4
	M	L	1,4
	M	M	1,4
	M	H	2,4
	M	V	2,4
	H	L	1,4
	H	M	2,4
	H	H	3,4
	H	V	3,4
	V	L	1,4
	V	M	2,4
V	H	3,4	
V	V	3,4	

\*NT = Not Tested L = Low M = Medium H = High V = Very High

**Notes:** Lime recommendations from Lime Chart 5

1. In March, evenly spread 3 pounds (about 8 cups) of 6-12-12 or 5-10-10 or 1.5 pounds (about 4 cups) of 15-15-15 or 10-10-10 per 100 square feet (10 ft. by 10 ft. area around the tree). Do not apply fertilizer within 12 inches of the trunk. Soil test every 3<sup>rd</sup> fall season.
2. In March, evenly spread 1.5 pounds (about 4 cups) of 6-12-12 or 5-10-10 or 0.75 pounds (about 2 cups) of 15-15-15 or 10-10-10 per 100 square feet (10 ft. by 10 ft. area around the tree). Do not apply fertilizer within 12 inches of the trunk. Soil test every 3<sup>rd</sup> fall season.
3. In March, evenly spread one-half pound (about one cup) of ammonium nitrate (34-0-0) or similar per 100 square feet (10 ft. by 10 ft. area around the tree). Do not apply fertilizer within 12 inches of the trunk. Soil test every 3<sup>rd</sup> fall season.
4. For pecan trees, apply 0.25 pounds of Zinc Sulfate per 100 square feet (10 ft. by 10 ft. area around the tree) in the year of establishment or if zinc deficiency symptoms are evident. If zinc deficiency symptoms persist, consult with your local County Extension office.



Peach/Nectarine (Home Garden)  
Soil Test Recommendations for N, P<sub>2</sub>O<sub>5</sub> and K<sub>2</sub>O at Various Soil Test Levels\*

Practice	Phosphate (P <sub>2</sub> O <sub>5</sub> )	Potash (K <sub>2</sub> O)	Notes
1. Establishment and Maintenance	L	L	1,4
	L	M	1,4
	L	H	2,4
	L	V	2,4
	M	L	1,4
	M	M	1,4
	M	H	2,4
	M	V	2,4
	H	L	1,4
	H	M	2,4
	H	H	3,4
	H	V	3,4
	V	L	1,4
	V	M	2,4
V	H	3,4	
V	V	3,4	

\*NT = Not Tested L = Low M = Medium H = High V = Very High

**Notes:** Lime recommendations from Lime Chart 5

1. In March, evenly spread 3 pounds (about 8 cups) of 6-12-12 or 5-10-10 or 1.5 pounds (about 4 cups) of 15-15-15 or 10-10-10 per 100 square feet (10 ft. by 10 ft. area around the tree). Soil test every 3<sup>rd</sup> fall season.
2. In March, evenly spread 1.5 pounds (about 4 cups) of 6-12-12 or 5-10-10 or 0.75 pounds (about 2 cups) of 15-15-15 or 10-10-10 per 100 square feet (10 ft. by 10 ft. area around the tree). Soil test every 3<sup>rd</sup> fall season.
3. Evenly spread one-half pound (about one cup) of ammonium nitrate (34-0-0) or similar per 100 square feet (10 ft. by 10 ft. area around the tree) in early March. Soil test every 3<sup>rd</sup> fall season.
4. Non-bearing trees should make 16-18 inches of terminal growth and have good leaf color. Bearing trees should make 10 to 15 inches of terminal growth annually.

**Strawberry (Home Garden)**  
**Soil Test Recommendations for N, P<sub>2</sub>O<sub>5</sub> and K<sub>2</sub>O at Various Soil Test Levels\***

Practice	Phosphate (P <sub>2</sub> O <sub>5</sub> )	Potash (K <sub>2</sub> O)	Notes
1. Establishment and Maintenance	L	L	1
	L	M	1
	L	H	2
	L	V	2
	M	L	1
	M	M	1
	M	H	2
	M	V	2
	H	L	1
	H	M	2
	H	H	3
	H	V	3
	V	L	1
	V	M	2
V	H	3	
V	V	3	

\*NT = Not Tested    L = Low    M = Medium    H = High    V = Very High

**Notes:** Lime recommendations from Lime Chart 6

1. In March and again in August, evenly apply 1.5 pounds (about 4 cups) of 6-12-12 or 5-10-10 or 0.75 pounds (about 2 cups) of 15-15-15 or 10-10-10 per 100 square feet of bed. Soil test every 3<sup>rd</sup> fall season.
2. In March and again in August, evenly apply 0.75 pounds (about 2 cups) of 6-12-12 or 5-10-10 or 0.4 pounds (about 1 cup) of 15-15-15 or 10-10-10 per 100 square feet of bed. In August, also apply 0.25 pounds (about 0.25 cup) of ammonium nitrate (34-0-0) or similar per 100 square feet of bed. Soil test every 3<sup>rd</sup> fall season.
3. In March and again in August, apply 0.25 pounds (about 0.25 cup) of ammonium nitrate (34-0-0) or similar per 100 square feet of bed. Soil test every 3<sup>rd</sup> fall season.