

---

## Strawberries

---

### Management Highlights

- Target pH: 6.0
- Fertilize new beds at planting and again in late August or early September.
- Fertilize established beds in March and again in July during renovation.

### Soil pH and Liming

The target pH for strawberry beds on Delaware soils is **6.0**. When at all possible, soil pH problems should be corrected prior to planting the bed since incorporation of lime which increases the effectiveness of the application will be more difficult once the plants are established. The lime recommendation for a particular site is calculated from the soil pH and buffer pH measurements using the steps outlined in *Calculating the Lime Requirement -- Chapter 4, Section 4.4*. Avoid overliming in order to encourage good plant growth and prevent deficiency of micronutrients such as iron.

In most cases, the lime requirement can be met by either calcitic or dolomitic limestone. *Dolomitic limestone* is recommended if:

- soil test Mg is less than 50 FIVs, or
- soil test Mg is between 50 and 100 FIVs *and less than soil test Ca*.

*Calcitic limestone* is recommended if:

- soil test Mg is greater than 100 FIVs, or
- soil test Mg is between 50 and 100 FIVs *and greater than soil test Ca*.

Lime is best applied in the fall. Do not spread more than 50 lbs lime/1000 square feet at a time. If more than 50 lbs/1000 square feet has been recommended, make two or more treatments of 40-50 lbs each several months apart until the full rate has been applied.

### Nutrient Recommendations

Nutrient recommendations for strawberries are based on the nutrient requirements of the plants and the soil test values for P and K. Application timing is dependent upon the status of the bed (e.g., new versus established planting). New beds should be fertilized at planting and again in late August or early September. Established beds should be fertilized in March and again in July during renovation of the planting.

## Lawn and Garden Plants

---

To determine the nutrient recommendation for a specific site, select the **P-K Index Value** from Table 1 using the soil test P and soil test K values shown on the Soil Test Report Form. Next, using that index value, select the appropriate nutrient recommendation from Table 2 for new beds, or from Table 3 for established plantings.

**Table 1. P-K Index value as a function of soil test P and soil test K.**

Soil Test K ( FIVs)	Soil Test P (FIV)s			
	1 - 25	26 - 50	51 - 100	101 - 150
1 - 25	1	2	3	4
26 - 50	5	6	7	8
51 - 100	9	10	11	12
101 - 150	13	14	15	16

Table 2. Nutrient recommendations for strawberries as a function of the P-K index value - new beds.

P-K Index Value	Nutrient Recommendation
1,2	At planting: Broadcast and work in by spading or rototilling 4 lbs 5-10-10 or equivalent water-soluble fertilizer per 100 square feet. In Aug. or Sept.: Broadcast 1 cup of urea (46-0-0) or 1½ cups of ammonium nitrate (34-0-0) per 25 feet of row.
3,4	At planting: Broadcast and work in by spading or rototilling 2 lbs 10-6-4 or equivalent water-soluble fertilizer <i>and</i> ½ lb muriate of potash (0-60-60) per 100 square feet. In Aug. or Sept.: Broadcast 1 cup of urea (46-0-0) or 1½ cups of ammonium nitrate (34-0-0) per 25 feet of row.
5,9,13,14	At planting: Broadcast and work in by spading or rototilling 4 lbs 5-10-5 or equivalent water-soluble fertilizer per 100 square feet. In Aug. or Sept.: Broadcast 1 cup of urea (46-0-0) or 1½ cups of ammonium nitrate (34-0-0) per 25 feet of row.
6,10	At planting: Broadcast and work in by spading or rototilling 2½ lbs 10-10-10 or equivalent water-soluble fertilizer per 100 square feet. In Aug. or Sept.: Broadcast 1 cup of urea (46-0-0) or 1½ cups of ammonium nitrate (34-0-0) per 25 feet of row.
7,8	At planting: Broadcast and work in by spading or rototilling 2 lbs 12-4-8 or equivalent water-soluble fertilizer per 100 square feet. In Aug. or Sept.: Broadcast 1 cup of urea (46-0-0) or 1½ cups of ammonium nitrate (34-0-0) per 25 feet of row.
11,12	At planting: Broadcast and work in by spading or rototilling 2½ lbs 10-6-4 or equivalent water-soluble fertilizer per 100 square feet. In Aug. or Sept.: Broadcast 1 cup of urea (46-0-0) or 1½ cups of ammonium nitrate (34-0-0) per 25 feet of row.
15,16	At planting: Broadcast and work in by spading or rototilling 1 lbs 23-7-7 or equivalent water-soluble fertilizer per 100 square feet. In Aug. or Sept.: Broadcast 1 cup of urea (46-0-0) or 1½ cups of ammonium nitrate (34-0-0) per 25 feet of row.

*NOTE: 1 cup is approximately equal to 8 oz. or ½ lb of fertilizer.*

## Lawn and Garden Plants

Table 3. Nutrient recommendations for strawberries as a function of the P-K index value - established beds.

P-K Index Value	Nutrient Recommendation	
1,2, 5,6	In March:	Broadcast $\frac{1}{3}$ cup (3 oz.) urea (46-0-0) or $\frac{1}{2}$ cup ammonium nitrate (34-0-0) per 25 feet of row.
	During renovation in July:	Broadcast 6 cups (3 lbs) 5-10-10 or equivalent water-soluble fertilizer per 25 feet of row.
3,4, 7,8	In March:	Broadcast $\frac{1}{3}$ cup (3 oz.) urea (46-0-0) or $\frac{1}{2}$ cup ammonium nitrate (34-0-0) per 25 feet of row.
	During renovation in July:	Broadcast 4 cups (2 lbs) 5-10-10 or equivalent water-soluble fertilizer <i>and</i> 1 cup ( $\frac{1}{2}$ lb) muriate of potash (0-0-60) per 25 feet of row.
9,10, 13,14	In March:	Broadcast $\frac{1}{3}$ cup (3 oz.) urea (46-0-0) or $\frac{1}{2}$ cup ammonium nitrate (34-0-0) per 25 feet of row.
	During renovation in July:	Broadcast 5 cups (2½ lbs) 5-10-5 or equivalent water-soluble fertilizer per 25 feet of row.
11,12, 15,16	In March:	Broadcast $\frac{1}{3}$ cup (3 oz.) urea (46-0-0) or $\frac{1}{2}$ cup ammonium nitrate (34-0-0) per 25 feet of row.
	During renovation in July:	Broadcast 4 cups (2 lbs) 10-6-4 or equivalent water-soluble fertilizer per 25 feet of row.

### Additional Information

See Soil Test Notes 1 and 11 (Appendix APP-7) for additional information about the nutrient management of strawberries. Fact sheets about strawberries in the home garden are also available at your local Cooperative Extension office.