To promote optimal growth and production of your citrus tree, use the chart to determine the correct amount of fertilizer to apply.

**Steps To Use This Fertilizer Chart:**

1. On the blue left edge of the chart, find a description of the tree you wish to fertilize. Since commercial citrus fertilizer application recommendations are based either on tree height, trunk diameter or the area of the ground covered by the canopy, ranges of all three measurements are included in the tree descriptions. The total pounds of actual nitrogen recommended by the University of Arizona for a tree for one year are found in the gray column directly to the right. Since no fertilizer is 100% nitrogen, use the chart to determine the amount of a specific type of fertilizer needed by your citrus tree.

2. Look at the red top edge of the chart for the percent nitrogen which your fertilizer contains. Remember that every container of fertilizer has 3 numbers written on it. The first number indicates the % nitrogen, the second the % phosphorus as available phosphate (P2O5), and the third the % potassium as available potash (K2O). For example: 9-6-4 has 9% nitrogen, 6% phosphorus and 4% potassium – see illustration.

3. The intersection of the row describing your tree, and the column indicating % nitrogen of your fertilizer, is the recommended range of fertilizer to apply annually. Grapefruit will require 50% less, and lemons 10% more than this amount.

4. For oranges, tangerines, and grapefruit, apply ⅓ of the total from Step 3 in January-February, ⅓ in March-April and ⅓ in May-June.

5. For lemons and limes, apply ⅓ of the total from Step 3 in January-February, ⅓ in March-April and ⅓ in August-September.

**Example 1:**

You have a small, 2-foot tall lemon tree, and a bag of citrus food (13-10-4) which has 13% nitrogen. Find the row for a small tree. Then, find the column for 13% nitrogen. They meet at the number 1.9 to 3.8. Because the tree is a lemon, add about 10% to the total (2.10 to 4.2 lbs.). Since the tree height is at the low end of the range, apply 2.10 lbs. of the citrus food during the year. Apply ⅓ (about 0.7 lbs.) during January-February, ⅓ in March-April, and ⅓ in August-September.

**Example 2:**

You have a large, 10 foot tall adult grapefruit tree, whose canopy covers about 100 square feet of the ground surface and you have citrus fertilizer with 6 % nitrogen (6 is the first of the three numbers on the bag). The row for this tree and the column for 6% nitrogen join at the numbers 20.80 to 25.00. Mature grapefruit trees require only half of the amounts listed in the table. Therefore, this tree will require about 10.4 to 12.50 lbs. of fertilizer annually. Apply about 3.5 to 4.0 lbs. (⅓ of the total) during January-February, ⅓ in March-April and ⅓ in May-June.

**Adapted from and replaces**


**Steps at a Glance**

1. Select the row from the chart which most closely describes your tree.
2. Select the chart column that matches the first number on your fertilizer product (the percent nitrogen of the fertilizer).
3. The box where the row and column intersect is the recommended range of fertilizer to apply annually. Grapefruit will require 50% less, and lemons 10% more than this amount.
4. For oranges, tangerines, and grapefruit, apply ⅓ of the total fertilizer from Step 3 in January-February, ⅓ in March-April and ⅓ in May-June.
5. For lemons and limes, apply ⅓ of the total from Step 3 in January-February, ⅓ in March-April and ⅓ in August-September.
**Annual Fertilizer Requirements for Citrus Trees**

- For oranges, tangerines, and grapefruit, apply \( \frac{1}{3} \) of the total in January-February, \( \frac{1}{3} \) in March-April and \( \frac{1}{3} \) in May-June.
- For lemons and limes, apply \( \frac{1}{3} \) of the total in January-February, \( \frac{1}{3} \) in March-April and \( \frac{1}{3} \) in August-September.

<table>
<thead>
<tr>
<th>Lbs. of Actual Nitrogen Required for the Year</th>
<th>% Nitrogen in Fertilizer (First number written on fertilizer container – See illustration)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>4%</strong></td>
</tr>
<tr>
<td>Newly Planted Tree</td>
<td>None to 0.13 lb.</td>
</tr>
<tr>
<td>Small Tree</td>
<td>0.25 to 0.50 lb.</td>
</tr>
<tr>
<td>Medium Tree**</td>
<td>0.75 to 1.00 lb.</td>
</tr>
<tr>
<td>Large Tree</td>
<td>1.25 to 1.50 lb.</td>
</tr>
</tbody>
</table>

Note: For grapefruit and pummelo trees small adult or larger: use \( \frac{1}{2} \) of the amounts shown. For lemons and limes, use about 10% more than the amounts shown.

* Application of 21-0-0 or 46-0-0 fertilizer will require additional applications of other nutrients, as these fertilizers only contain nitrogen. Urea (46-0-0) is especially concentrated.
** Trees in containers should be fertilized according to this chart, but usually grow no taller than a medium-sized tree.

- To convert from decimal to ounces, multiply the decimal portion of the number by 16. Example: For 6.25 lbs. fertilizer, multiply \( 0.25 \times 16 = 4 \) ounces, giving 6 lbs. 4 oz.
- Measure accurately before applying and always incorporate fertilizers in the soil and follow with irrigation.
This information has been reviewed by University faculty.  
extension.arizona.edu/pubs/az1671-2015.pdf  
Originally published: 1998  
Other titles from Arizona Cooperative Extension can be found at:  
extension.arizona.edu/pubs  

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