

FERTILIZER RECOMMENDATIONS FOR TREE FRUITS IN THE HOME GARDEN



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DEPARTMENT OF HORTICULTURE

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Age of tree from planting	Time to Apply	Method of Application	Kind of Fertilizer	Amount of Fertilizer (pounds/tree)	Desired average length of terminal growth per season	
					Apple, Pear, Quince, Plum, Sour Cherry	Peach, Nectarine, Sweet Cherry
At planting	none	none	none	none	--	--
1st growing season	when growth begins	Scatter evenly in a circular area on the soil surface from just beyond limb tips to no closer than 8" from tree trunk	Sodium nitrate (16% actual nitrogen) OR equivalent in nitrogen supplied	1/4 lb. (1/2 cup)	16" to 20"	20" to 30"
Each succeeding year until fruit production begins	3 or 4 weeks before growth begins	Same as above	As above with other nutrients added as indicated by soil tests, etc.	1/4 lb. per year of tree age from planting OR enough to give 0.8 oz. actual nitrogen per year of tree age	8" to 10"	10" to 15"

1. The response of a fruit tree to fertilization is influenced by many factors, including: pruning severity, fruit load, weed competition, insect and disease injury, length of growing season, soil fertility, genetic characteristics of the variety, and physiological condition of the individual tree. It is essential that good cultural practices be followed, in addition to fertilizer applications.

2. A weed-free 4' strip down the tree row (or 4' diameter circle around individual trees) should be maintained at least until fruit production has begun. This area may be kept weed-free by shallow cultivation, hand-hoeing, or by applying a 4 to 6" layer of natural mulching materials such as bark, woodchips, or sawdust. Synthetic materials such as black polyethylene plastic or tarpaper have given good results; although they do not decompose and add humus to the soil, neither do they cause a temporary nitrogen shortage.

3. Temporary nitrogen deficiency may occur when mulch material low in nitrogen begins to decay. This can be overcome by the addition of nitrogen fertilizer. Usually about 4 ounces of ammonium nitrate or 8 ounces of sodium nitrate to each 100 square feet of mulched area will be enough. This is in addition to the normal application for the tree.

4. It may be necessary to substitute other kinds of fertilizers when the recommended kind is not available or when soil tests, tissue analyses, or leaf symptoms indicate the deficiency of other nutrients in the soil. When substitutions are made, be sure to adjust the amount of material to supply the quantity of actual nitrogen recommended.

5. To determine the amount of a substitute fertilizer needed to give the recommended amount of actual nitrogen provided by sodium nitrate:

- a. Multiply the amount of sodium nitrate recommended by the percent nitrogen in sodium nitrate (16% or 0.16). This gives the amount of actual nitrogen recommended.
- b. Divide the amount of actual nitrogen recommended (step "a") by the percent nitrogen in the new source. This gives the amount of the new source needed.
- c. EXAMPLE: (substitute 33% ammonium nitrate for 8 oz. of 16% sodium nitrate)
 - i. $(8 \text{ oz.}) \times (0.16) = 1.28 \text{ oz. actual N in sodium nitrate}$
 - ii. $(1.28 \text{ oz.}) \div (0.33) = 3.9 \text{ oz. (approx 4 oz.)}$

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