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# GENERAL FERTILIZER RECOMMENDATIONS



*for the Rolling Plains*

THE AGRICULTURAL AND MECHANICAL COLLEGE OF TEXAS  
 TEXAS AGRICULTURAL EXTENSION SERVICE  
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RECOMMENDATIONS for fertilizers in this leaflet are those found best by experiments, soil test summaries and practical experience in the field. The recommendations are general in scope. Since soils vary so much in nutrient levels, *soil tests should be made in order to obtain more definite and economical fertilizer recommendations.*

For best results with fertilizers, other factors should be favorable, such as a well-prepared seedbed, good stand, absence of disease, adequate moisture, aeration and good cultural practices. Good cropping systems with legumes in rotation aid in a favorable response of crops to fertilizers. When crops follow legumes turned under, the amount of nitrogen needed may be reduced. Where soil and crop management practices are favorable, even higher rates of fertilization than those shown may be economically advantageous.

The letters NR mean that the crop is not recommended for this class of soils.

### LAND RESOURCE AREAS

- A East Texas Timberlands
- B Coast Marsh
- C Coast Prairie
- D Blackland Prairies
- E East Cross Timbers
- F Grand Prairie
- G West Cross Timbers
- H North Central Prairies
- I Central Basin
- J Rio Grande Plain
- K Edwards Plateau
- L Rolling Plains
- M High Plains
- N Trans-Pecos

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## Rolling Plains

**POUNDS OF NUTRIENTS TO BE APPLIED PER ACRE AT OR BEFORE PLANTING  
RECOMMENDATIONS ARE LISTED IN LB. N, LB. P<sub>2</sub>O<sub>5</sub> and LB. K<sub>2</sub>O**

	Bottomland		Upland			Additional treatment
	Clays and clay loams	Loams and sandy loams	Clays and clay loams	Loams and sandy loams	Sands	
<b>Nonirrigated Areas</b>						
<b>FIELD CROPS</b>						
Alfalfa and biennial sweetclovers	NR	20-40-0	NR	0-40-0	15-60-60	
Corn Grain sorghum	20-20-0	20-40-0	20-20-0	20-40-0	20-40-20	Sidedress with 30-0-0 within 35 days after planting if soil moisture is adequate.
Sudan Sorghum for hay Johnsongrass	20-20-0	20-40-0	20-20-0	20-40-0	20-40-20	Topdress with 20-0-0 about twice during season if soil moisture is adequate.
Cotton, sesame	20-20-0	20-40-0	20-20-0	20-40-0	20-40-20	
Annual legumes	0-20-0	10-40-0	0-20-0	10-40-0	20-60-20	
Wheat, oats and other small grain for grain only	0-0-0	20-40-0	0-0-0	20-40-0	20-40-20	Topdress with 30-0-0 in February if soil moisture is adequate.
Peanuts	NR	15-30-0	NR	15-30-0	15-30-15	
Wheat and oats for grazing	20-0-0	20-20-0	20-20-0	20-20-0	30-30-0	Topdress with 20-0-0 about twice during season if soil moisture is adequate.
<b>FRUIT</b>						
	Pounds of fertilizer per inch of tree diameter					For young trees, one-half amount for bearing tree.
Apple, pear bearing trees	NR	1 lb. 10-10-0	NR	1 lb. 10-20-0	1 lb. 10-20-10	
	Pounds of fertilizer per inch of tree diameter					For young trees, one-half amount for bearing tree.
Peach, plum bearing trees	NR	1 lb. 10-10-0	NR	1 lb. 10-20-0	1 lb. 10-20-10	
Grapes	NR	NR	NR	30-60-0	30-60-30	

To insure good yields, the recommendations given above are based on normal moisture conditions for the area. In years when subsoil moisture is very low and surface soil moisture is below normal, fertilizers probably will not pay.

	Bottomland		Upland			Additional treatment
	Clays and clay loams	Loams and sandy loams	Clays and clay loams	Loams and sandy loams	Sands	
<b>Irrigated Areas</b>						
<b>FIELD CROPS</b>						
Alfalfa and biennial sweetclovers	15-60-0	15-60-0	15-60-0	15-60-0	15-60-60	Topdress 0-40-0 after second cutting. Topdress 0-60-0 annually for maintenance.
Corn Grain sorghum	30-30-0	30-60-0	30-30-0	30-60-0	30-60-30	Sidedress with 40-0-0 within 35 days after planting.
Cotton	30-30-0	30-60-0	30-60-0	30-60-0	40-80-40	Sidedress with 40-0-0 at first bloom.
Wheat and oats for grain only	30-0-0	30-40-0	30-0-0	30-40-0	30-40-0	Topdress with 40-0-0 in January or February if irrigation water is adequate.
Wheat and oats for grazing	40-0-0	40-40-0	40-0-0	40-40-0	40-40-0	Topdress with 30-0-0 twice during season.
Peanuts	NR	20-40-0	NR	20-40-0	30-60-30	Topdress 200 to 300 lb. gypsum over peg zone just prior to blooming.
Coastal Bermuda	60-30-0	60-60-0	60-30-0	60-60-0	60-60-30	Apply in spring. Topdress 60-0-0 each time cut or grazed down.
<b>TRUCK CROPS</b>						
Irish potatoes	30-0-0	30-30-0	60-0-0	60-60-30	80-80-80	
Cantaloupes	30-0-0	30-30-0	30-30-0	40-80-0	40-80-40	
Carrots	0-0-0	30-30-0	0-30-0	30-60-0	30-60-30	

### GRADES OF FERTILIZER

The fertilizer recommendations are expressed in pounds of nutrients per acre and do not represent fertilizer grades. For example, a 30-30-0 means 30 pounds nitrogen, 30 pounds  $P_2O_5$  and no  $K_2O$  per acre. The nutrients must be obtained from materials or fertilizer mixtures sold on the market.

For example, a recommendation calling for 15-30-0, which is a 1:2:0 ratio, can be obtained by applying 185 pounds of 8-16-0 or 150 pounds of 10-20-0. Again, if a recommendation calls for 15-60-0, this may be obtained by applying

about 400 pounds of a 4-16-0 or 125 pounds of 11-48-0.

### METHOD OF APPLICATION

**Row Crops:** Fertilizer can be applied prior to or at the time of planting. Fertilizers are more efficiently used by most crops when applied in a bank 2 to 3 inches to the side and 2 to 3 inches below the seed. Fertilizer can be applied while planting or cultivating if equipment is available.

It can also be applied in the furrow prior to last rebedding in heavy textured soil. Avoid

putting the seed too close to the fertilizer because germination may be impaired.

If large quantities of nitrogen fertilizer are to be applied, part of the nitrogen can be applied with the phosphorus and potassium and the remainder applied 35 to 45 days later as a side or topdressing.

**Small Grains:** Fertilizers for small grains may be broadcast, drilled in or plowed in. Fertilizers containing more than 40# nitrogen and potassium should not be allowed to touch the seed.

Phosphorus, potassium and part of the nitrogen should be applied at or before seeding.

The rest of the nitrogen should be applied in the spring before plants begin to joint.

**Pastures:** For establishing improved pastures, fertilizer should be applied in bands when possible. Otherwise, it should be broadcast, drilled or plowed in. For maintenance of grass pasture, topdress with 30-0-0 as needed. Repeat basic fertilizer treatment annually as suggested or according to a soil test.

**Fruit Trees:** Fertilizers for fruit trees may be applied over the entire area covered by the orchard when the trees are mature. In non-bearing orchards, the fertilizer should be applied over the area covered by the spread of the limbs. Keep fertilizer 1 foot away from tree trunks. Cultivate fertilizer applications into the soil.