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# GENERAL FERTILIZER RECOMMENDATIONS



*for the Coast Prairie  
and Coast Marsh*

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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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## Coast Prairie

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
	Calcareous clays and clay loams	Calcareous loams and sandy loams	Non- calcareous loams and sandy loams	Clays and clay loams	Loams and sandy loams	Sands	
NAMES OF IMPORTANT SOIL TYPES							
	Miller Pledger	Norwood Yahola	Kaufman Navasota	Lake Charles Beaumont Bernard	Katy Edna Hockley	Galveston Kinny	

Lime is needed on many Coast Prairie soils. Determine need with a soil test.

### FIELD CROPS

Alfalfa	0-40-0	15-60-0	20-80-80	15-60-0*	NR	NR	Apply 0-60-0 annually for maintenance.
		*In those areas with good subsurface drainage.					
Corn	110-40-0	110-40-0	80-40-40	90-30-0	80-40-40	80-40-80	
Grain sorghum	80-30-0	80-30-0	80-40-40	90-30-0	80-40-40	80-40-80	
Cotton	60-40-0	60-40-0	30-60-30	60-30-0	60-60-30	60-60-60	
Pastures Grass and legumes	15-30-0	15-30-0	15-60-30	15-60-0	15-60-30	15-60-60	Apply in fall. Omit N on established legume stands.
Pastures	60-30-0	60-30-0	60-60-30	60-40-0	60-60-30	60-60-60	Topdress with 40-0-0 after each cutting or 30-0-0 each time grazed down.
	Includes grasses, small grains, sweet sorghum and sudan.						
Coastal Bermuda†	100-60-0	100-60-0	100-60-30	100-60-0	100-60-30	100-60-60	Topdress 50-0-0 every 2 or 3 months if grazed and 70-0-0 each time cut for hay if soil moisture is adequate.
Flax	30-30-0	30-30-0	30-60-30	30-30-0	30-30-30	30-60-60	Topdress in January with 30-0-0.
Legumes	0-40-0	0-40-0	0-60-30	0-60-0	0-60-30	15-60-60	
Peanuts	NR	NR	NR	20-40-0	20-40-20	20-40-40	Apply 300 lb. gypsum at bloom over peg zone.
Rice	NR	NR	80-40-0	80-40-0	40-40-20	40-40-20	

†Apply fertilizer in early spring as plants begin to grow.

	Bottomland			Upland			Additional Treatment
	Calcareous clays and clay loams	Calcareous loams and sandy loams	Non-calcareous loams and sandy loams	Clays and clay loams	Loams and sandy loams	Sands	

NAMES OF IMPORTANT SOIL TYPES

	Miller Pledger	Norwood Yahola	Kaufman Navasota	Lake Charles Beaumont Bernard	Katy Edna Hockley	Galveston Kinny	
<b>TRUCK CROPS††</b>							Sidedress with 60-0-0 when heads begin to form. For mustard, 10 days from emergence.
Lettuce							
Cabbage	40-40-0	40-80-0	40-80-40	40-80-0	40-80-40	40-80-80	
Mustard							
Collards							
Carrots							
Beets	40-40-0	40-80-0	40-80-40	40-80-0	40-80-80	30-120-120	
Turnips							
Sweet potatoes	NR	40-80-0	40-80-40	NR	40-80-40	40-80-80	
Irish potatoes	NR	80-80-0	80-80-40	NR	80-80-40	80-80-80	
Tomatoes							Sidedress with 30-0-0 if soil moisture is adequate.
Peppers	40-40-0	40-80-0	40-80-40	40-80-0	40-80-40	40-80-80	
Eggplants							
Cantaloupes	30-30-0	30-60-0	30-60-30	30-60-0	30-60-30	30-60-60	
Squash	30-30-0	30-60-0	30-60-30	30-60-0	30-60-30	30-60-60	Sidedress with 30-0-0 when vines start to bloom.
Cucumbers							
Watermelons	NR	20-40-80	20-40-120	NR	20-80-160	20-80-160	Sidedress with 20-0-0 when vines start to bloom.
Onions	NR	40-80-0	40-80-40	NR	40-80-40	40-80-80	
General garden	40-80-0	40-80-40	40-40-40	40-80-0	40-80-40	40-80-80	Sidedress in 40 days with 40-0-0

††The use of a starter fertilizer solution on all transplants at the time of transplanting has been shown to result in better stands and increased yields.

<b>FRUIT TREES</b>							
Figs	30-30-0	30-60-0	30-60-30	30-60-0	30-60-30	30-60-60	Sidedress in May or June with 30-0-0.

Pecans *Nitrogen*—All soil types  
 For bearing trees, apply 1/3 pound of N per inch of tree diameter in late February or early March. For young trees apply from one-fourth to one-half as much N, depending on the size of the tree.

*Zinc*—All soil types  
 If there are any signs of rosette or if the orchard has any history of zinc deficiency, spray pecan leaves with 3 pounds of 36 percent zinc sulfate per 100 gallons of water when leaves are one-third grown or mix with regular casebearer spray in late April or early May.

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, use one-third to one-fourth less at planting time, using the remainder as a sidedressing if rains come within 30 days from planting. When supplementary irrigation is available for field crops, double the nitrogen recommended and increase phosphorus and potassium by one-half.



## GRADES OF FERTILIZER

These fertilizer recommendations are expressed in pounds of nutrients per acre and do not represent fertilizer grades. For example, 30-60-0 means 30 pounds nitrogen (N), 60 pounds  $P_2O_5$ , and no  $K_2O$ . The nutrients must be obtained from materials or fertilizer mixtures sold on the market.

For example, a recommendation calling for 30-60-30, which is a 1:2:1 ratio, can be obtained by applying 500 pounds of 6-12-6 or 250 pounds of 12-24-12 or 300 pounds of 10-20-10. Again, if a recommendation calls for 30-60-0, this may be obtained by applying about 300 pounds of a 10-20-0 or 375 pounds of 8-16-0.

## METHOD OF APPLICATION

**Row Crops:** Fertilizer can be applied prior to or at planting. Fertilizers are more efficiently used by most crops when applied in a band 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 (except rice):** Fertilizers for small grains may be broadcast, drilled in or plowed in. Fertilizers containing 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 broadcast, drilled or plowed in. For maintenance of grass pasture, topdress with 30-0-0 as needed. Repeat annually the basic fertilizer treatment as suggested or according to a soil test.

**Fruit Trees:** Fertilizer 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.

## GENERAL LIMESTONE RECOMMENDATIONS

Many soils in the eastern half of the Coast Prairie are slightly to strongly acid. Many soils also are low to very low in calcium. Crop quality and yields are lowered when soils become too acid or deficient in calcium.

The application of limestone or other liming materials will correct soil acidity and supply calcium.

*Many Coast Prairie upland soils, particularly lighter textured soils, will respond to the application of 1 ton of limestone per acre. Loams, clay loams and clays that are acid usually will require a larger application.*

Use a soil test to determine exact soil needs.