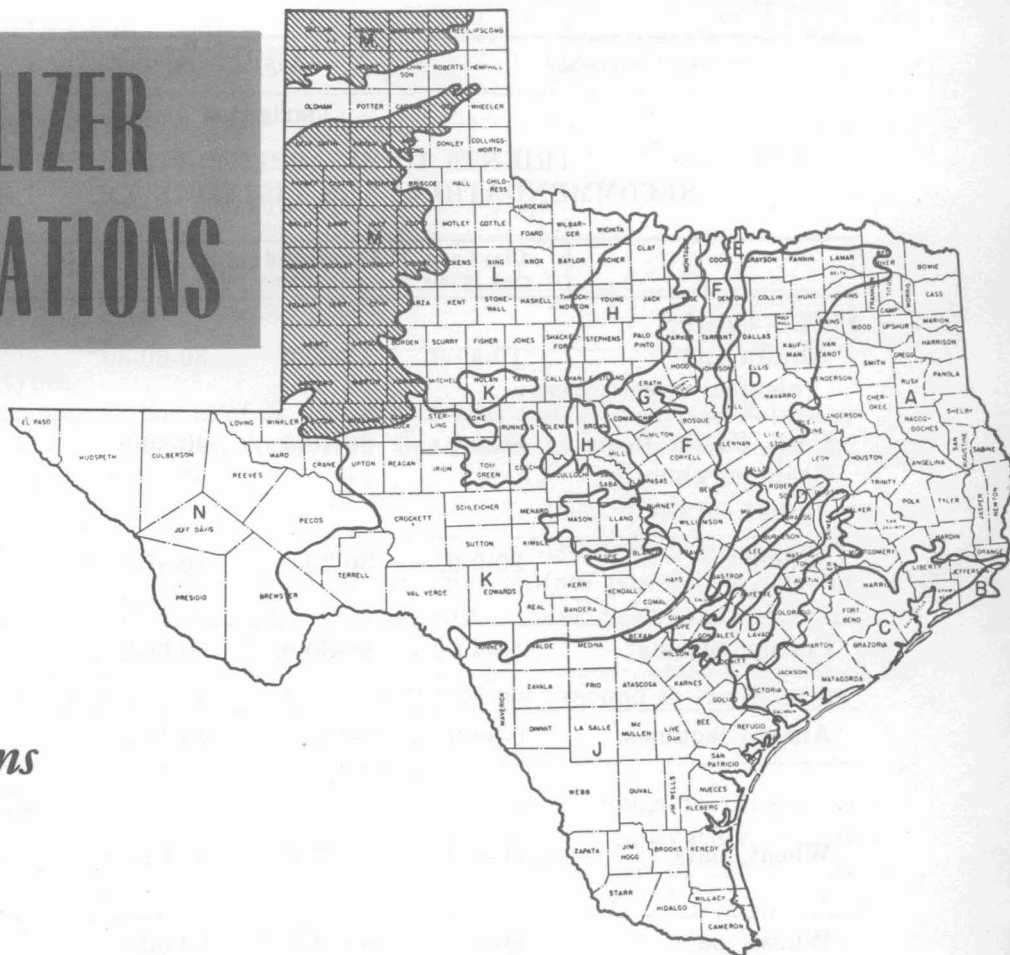


GENERAL FERTILIZER RECOMMENDATIONS

for the High Plains



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

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.

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High Plains

(Irrigated Land)

POUNDS OF NUTRIENTS TO BE APPLIED PER ACRE AT OR BEFORE PLANTING
RECOMMENDATIONS ARE LISTED IN LB. N, LB. P₂O₅ and LB. K₂O

	Clays and clay loams	Loams and sandy loams	Sands	Additional treatment
FIELD CROPS				
Alfalfa and biennial sweetclovers	10-40-0	15-60-0	30-60-30	Topdress 0-40-0 annually for maintenance on very low phos- phorus soils.
Corn, Castor Beans Grain sorghum Forage sorghum	80-0-0	80-40-0	40-40-0	Sidedress sands with 40-0-0 in 35 days after planting if suffi- cient water is applied.
Sudan	30-0-0	30-30-0	40-40-0	Sidedress with 30-0-0 after each cutting.
Cotton, sesame	40-40-0	60-60-0	60-60-0	Following high residue crops, in- crease N by 30#N.
Annual legumes	0-30-0	0-40-0	15-60-30	
Wheat, oats	60-0-0	60-30-0	30-60-30	Topdress sands and loamy sands with 40-0-0 in January or early February if irrigation is ade- quate.
Wheat, oats to be grazed	90-0-0	90-40-0	60-60-0	Topdress with 40-0-0 in Janu- ary or early February.
Pastures (cultivated) Grasses only	20-0-0	20-60-0	30-60-30	Topdress with 30-0-0 each time grazed down or cut.
Sugar beets, stock beets	30-0-0	30-60-0	30-60-30	Sidedress with 60-0-0.
TRUCK CROPS				
Peas, blackeye, etc.	20-40-0	20-60-0	30-60-30	
Beans	20-40-0	40-80-0	40-80-40	
Cabbage, lettuce, mustard, turnip greens, etc.	100-80-0	100-80-0	100-80-40	Sidedress with 60-0-0 when plants begin to bud.
Cucumbers, Squash (summer)	40-80-0	40-80-40	40-80-40	Sidedress with 30-0-0 when vines begin to bloom.
Cantaloupes, Squash (winter)	30-30-0	40-80-0	40-80-40	
Carrots, beets, turnip roots	20-40-0	40-40-0	40-40-0	
Irish potatoes	100-100-0	100-120-40	120-120-120	

	Clays and clay loams	Loams and sandy loams	Sands	Additional treatment
Onions	100-100-0	100-100-0	100-100-60	Place fertilizer 3-4 inches under the row.
Sweet potatoes	NR	40-80-40	60-100-100	
Tomatoes, peppers	40-80-40	60-80-40	80-120-60	
Watermelons	40-60-0	40-80-40	60-80-60	

Pecans *Nitrogen*—All soil types

For bearing trees, apply $\frac{1}{3}$ 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.

Fertilizers not recommended on dryland. Irrigated land probably will not respond to fertilizer for the first 2 years it is irrigated.

GRADES OF FERTILIZER

The fertilizer recommendations are expressed in pounds of nutrients per acre and do not represent fertilizer grades. For example, 30-60-30 means 30 pounds nitrogen, 60 pounds P_2O_5 and 30 pounds K_2O per acre. The nutrients must be obtained from materials or fertilizer mixtures sold on the market.

For example, a recommendation calling for 60-60-0, which is a 1:1:0 ratio, can be obtained by applying 400 pounds of 15-15-0, or 60-60-0 could be applied by using 300 pounds 10-20-0, plus an application of 30 pounds of actual nitrogen as a straight nitrogen fertilizer. 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 at the time of planting or just before. Fertilizers are more efficiently used by row crops when applied with chisels in a band. A practical spacing and depth of application is 10 inches to the side and 4 to 5 inches below the seed. It is important that the fertilizer be deep enough to be in moist soil through the growing season.

If equipment for applying fertilizers in bands while planting or cultivating is not available, apply the fertilizer in the furrow and bed on it when the land is prepared for planting. Avoid putting the seed too close to the fertilizer because germination may be impaired.

Fertilizer for cotton generally should be applied prior to or at planting; however, cotton may be sidedressed before first bloom where no preplant fertilizer applications were made and if the plants are making rapid, early growth. If cotton was planted late and is slow growing, it should not be sidedressed.

Fertilizer for grain sorghum should be applied prior to or at planting. If not applied before planting, it should be sidedressed before the first irrigation.

Foliar fertilization with nitrogen, phosphorus and potassium has not significantly increased yields.

Small Grains: 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 grass pastures, fertilizer should be applied in bands

when possible. Otherwise, it should be broadcast, drilled in or plowed in. For maintenance, topdress with 30-0-0 as needed. Repeat basic fertilizer treatment annually as suggested or according to a soil test.