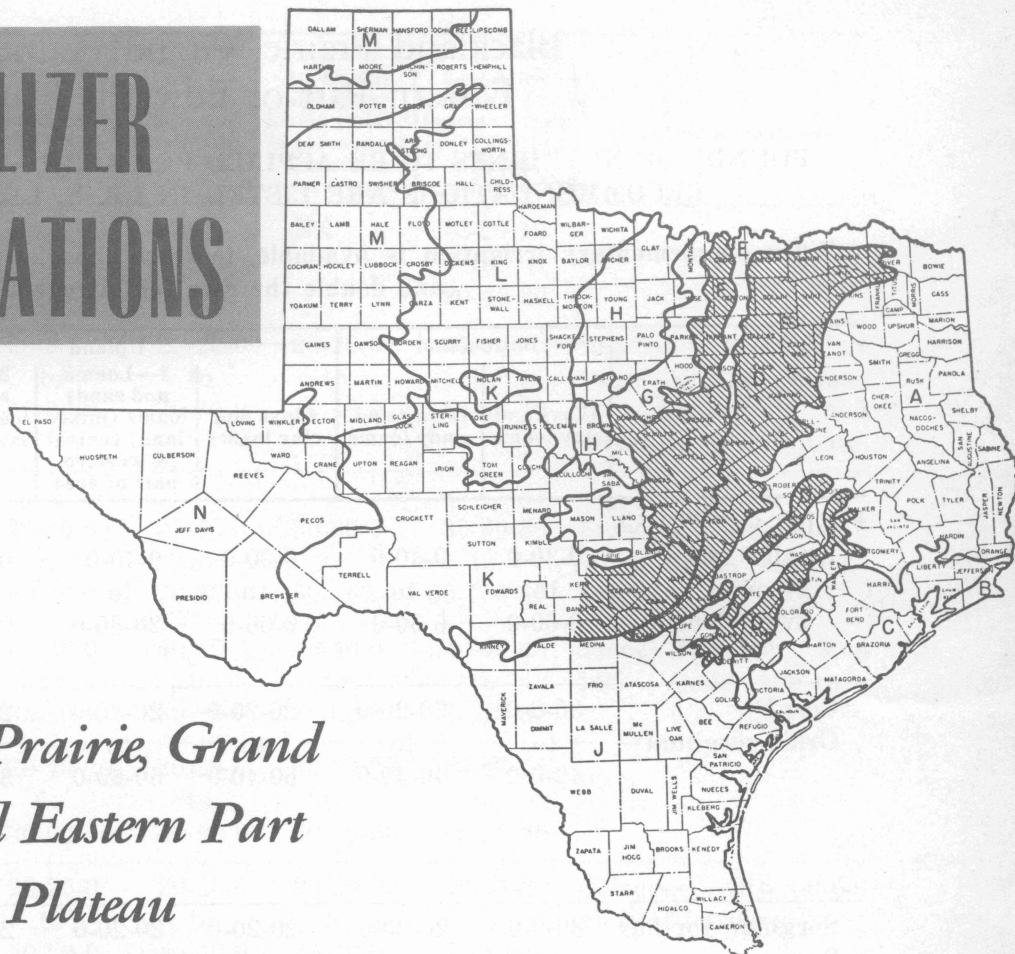


GENERAL FERTILIZER RECOMMENDATIONS



*for the Blackland Prairie, Grand
Prairie and Eastern Part
of Edwards Plateau*

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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Blackland Prairie, Grand Prairie* and Eastern Part of Edwards Plateau

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

When supplementary irrigation is available, increase phosphorus and potassium by one-half,
and double the rate for nitrogen.

| | Bottomland | | Upland | | | Additional treatment |
|---|--------------------------|--------------------------|--------------------------|--|--|--|
| | Clays and clay loams | Loams and sandy loams | Clays and clay loams | 1—Loams and sandy loams (mixed land) central & western part of area | 2—Loams and sandy loams (mixed land) eastern edge of area | |
| FIELD CROPS | | | | | | Apply 0-40-0 annually in fall to maintain al- falfa. On acid soils, lime according to soil test. |
| Alfalfa and biennial sweetclovers | 0-30-0 to 0-60-0 | 0-40-0 to 0-60-0 | 0-30-0 to 0-60-0 | 0-40-0 to 20-80-0 | 0-40-40 to 20-80-80 | |
| Corn† Grain sorghum† | 30-0-0 to 40-0-0 | 20-20-0 to 40-40-0 | 20-20-0 to 50-40-0 | 20-40-0 to 50-60-0 | 20-40-20 to 30-60-30 | |
| Sorghum for hay Sudan Johnsongrass | 30-0-0 to 40-40-0 | 20-20-0 to 40-40-0 | 20-20-0 to 40-40-0 | 20-20-0 to 40-40-0 | 20-40-20 to 30-60-30 | Topdress with 30-0-0 every 4 to 6 weeks if soil moisture is ade- quate. |
| Cotton† | 20-0-0 to 40-40-0 | 20-20-0 to 50-50-0 | 20-20-0 to 40-40-0 | 20-20-0 to 40-40-0 | 20-40-20 to 40-80-40 | In Western part of area, or on shallow soils, clay soils should not be fertilized. |
| Annual legumes | 0-20-0 to 0-40-0 | 0-30-0 to 0-40-0 | 0-30-0 to 0-50-0 | 0-30-0 to 0-50-0 | 20-40-20 to 30-60-30 | |
| Wheat, oats and other small grain for grain | 0-0-0 to 0-30-0 | 0-20-0 to 0-40-0 | 0-20-0 to 0-40-0 | 0-20-0 to 0-40-0 | 15-30-15 to 25-50-25 | Topdress with 30-0-0 in late February. |
| Pastures, grasses only | 20-20-0 to 40-40-0 | 20-20-0 to 40-40-0 | 20-20-0 to 50-40-0 | 20-40-0 to 50-60-0 | 20-40-20 to 30-60-30 | Topdress with 30-0-0 each time cut or grazed down if soil moisture is adequate. |
| Pasture grasses with legumes | 0-20-0 to 0-40-0 | 0-70-0 to 0-40-0 | 0-20-0 to 0-40-0 | 0-40-0 to 30-60-0 | 20-40-20 to 30-60-30 | Repeat for mainte- nance annually. |

| | Bottomland | | Upland | | | Additional treatment |
|------------------------------|--------------------------|----------------------------|--------------------------|---|---|--|
| | Clays and clay loams | Loams and sandy loams | Clays and clay loams | 1—Loams and sandy loams (mixed land) central & western part of area | 2—Loams and sandy loams (mixed land) eastern edge of area | |
| Peanuts | NR | NR | NR | NR | 10-20-10 to 20-40-20 | |
| Wheat, oats†† for grazing | 20-0-0 to 40-30-0 | 20-0-0 to 40-30-0 | 20-20-0 to 30-30-0 | 20-20-0 to 40-40-0 | 20-0-0 to 40-40-40 | Topdress 20-30# N twice during season for grazing if soil moisture is adequate. |
| TRUCK CROPS | | | | | | |
| Cabbage | 15-30-0 to 30-60-0 | 20-40-0 to 40-80-0 | 30-40-0 to 40-80-0 | 30-60-0 to 50-100-0 | 30-60-30 to 50-100-50 | Sidedress with 60-0-0 when heads begin to form. |
| Onions | 30-30-0 to 60-60-0 | 40-40-0 to 80-80-0 | 40-40-0 to 80-80-0 | 40-40-0 to 80-80-0 | 40-40-40 to 80-80-80 | Place fertilizer 3 - 4 inches under the row. |
| Cantaloupes | 20-20-0 to 40-40-0 | 20-40-20 to 30-60-30 | 20-30-0 to 40-60-0 | 30-30-30 to 50-80-50 | 40-40-40 to 60-80-80 | |
| Okra | 20-0-0 to 40-40-0 | 20-20-0 to 50-50-0 | 20-20-0 to 40-40-0 | 20-20-0 to 40-40-0 | 20-40-20 to 40-80-40 | Sidedress with 30-0-0 at first harvest. |

*Response to fertilizer has not been profitable in the northern half of the Grand Prairie Region.

†When corn, grain sorghum or cotton follow legumes, the amount of nitrogen recommended may be reduced. Following forage sorghum or grain sorghum, the amount of nitrogen may be increased by 20 to 30 pounds on deep soils.

††No nitrogen should be used in the fall north of the line running east and west through Waco unless grazing is planned due to tendency for increasing growth to cause winterkilling. South of this line 30 pounds of nitrogen may be used to increase grazing.

ALTERNATIVE RATES

A range of fertilizer rates is given for each crop. The lower rate is for use under conditions of low yield potential such as low subsoil moisture or poor insect control. The higher rate is for use with high yield potentials such as adequate moisture, good rotation, no disease present and insects are controlled.

GRADES OF FERTILIZER

The fertilizer recommendations are expressed in pounds of nutrients per acre and do

not represent fertilizer grades. For example, 15-30-0 means 15 pounds nitrogen (N), 30 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 20-40-0, which is a 1:2:0 ratio, can be obtained by applying 250 pounds of 8-16-0 or 200 pounds of 10-20-0. Again, if a recommendation calls for 30-30-0, this may be obtained by applying 200 pounds of a 15-15-0 or 300 pounds of 10-10-0 or it would be close enough to apply 175 pounds of 16-20-0.

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 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: Fertilizers for small grains may be broadcast, drilled in or plowed in. Fertilizers containing nitrogen and potassium should not be placed in contact with wheat seed but are not likely to harm oats.

Phosphorus, potassium and part of the nitrogen should be applied at or before seeding. The rest of the nitrogen, if heavy rates are being used, 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.