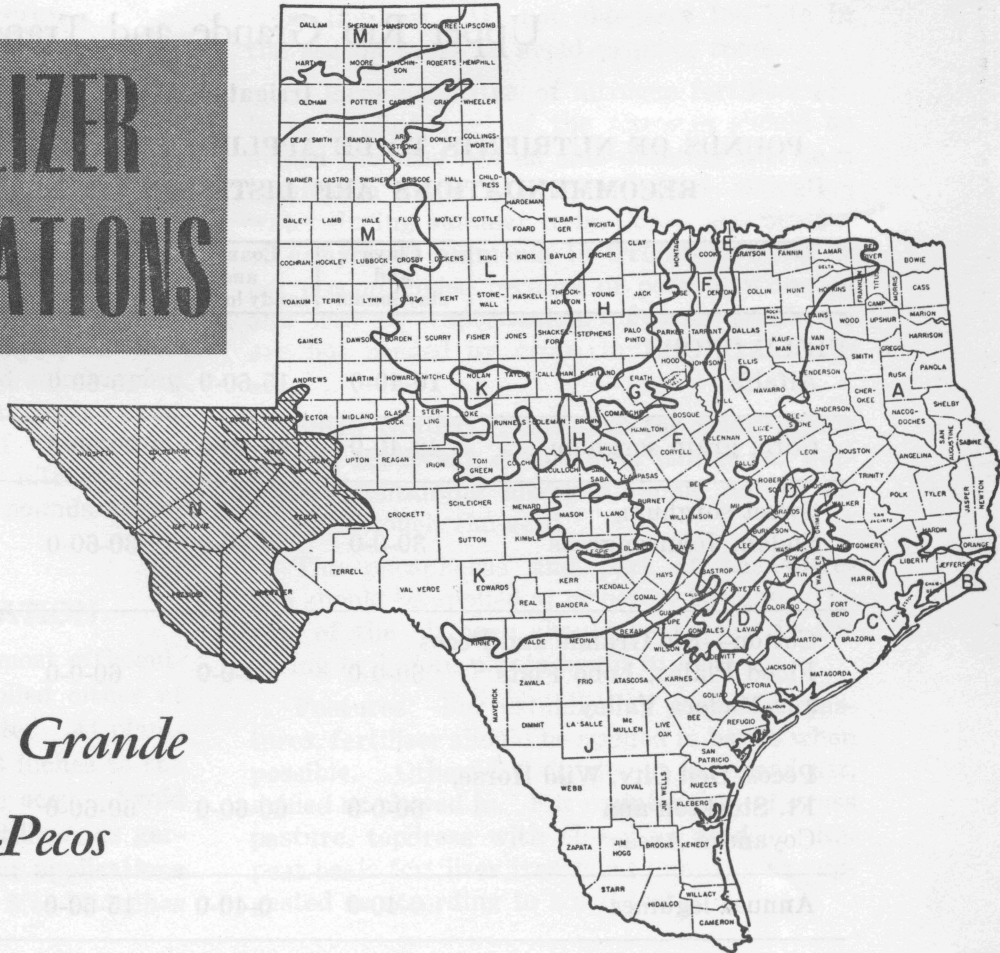


*Mrs. Dot Holland*

# GENERAL FERTILIZER RECOMMENDATIONS



*for the Upper Rio Grande and Trans-Pecos*

TEXAS AGRICULTURAL EXTENSION SERVICE  
 J. E. HUTCHISON, DIRECTOR, COLLEGE STATION, TEXAS

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 seed bed, good stand, absence of disease, adequate moisture, aeration and good cultural practices. Where soil conditions and soil and crop management practices are very favorable, even higher rates of fertilization than those shown may be economically advantageous.

**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

Developed by Personnel of the Departments of Agronomy and Horticulture, College Station and Substation No. 17, Ysleta Substation No. 9, Pecos of the Texas A. & M. College System

# Upper Rio Grande and Trans-Pecos

## Irrigated Areas

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

|  | Clays<br>and<br>clay loams | Loams<br>and<br>sandy loams | Sands    | Additional treatment   |
|--|----------------------------|-----------------------------|----------|--|
| <b>FIELD CROPS</b>   |                            |                             |          |  |
| Alfalfa  | 10-40-0                    | 15-60-0                     | 15-60-0  | Topdress 0-60-0 annually in spring for maintenance   |
| Corn, grain sorghum  | 40-40-0                    | 40-40-0                     | 60-60-0  | Sidedress with 80-0-0 in 35 days   |
| Sweet sorghum,<br>Sudan, Johnsongrass  | 30-0-0                     | 30-30-0                     | 30-60-0  | Side or topdress with 60-0-0 after each cutting or each time grazed down   |
| Cotton—Rio Grande and Pecos<br>Flood Plains, Lobo Flats<br>and Madera Valley | 60-0-0                     | 60-0-0                      | 60-0-0   | Sidedress with 40-0-0 in late May or early June. Apply 60 lb. P <sub>2</sub> O <sub>5</sub> to land once every 5 years |
| Pecos, Dell City, Wild Horse,<br>Ft. Stockton and<br>Coyanosa Areas*         | 60-0-0                     | 60-60-0                     | 60-60-0  | Sidedress with 100-0-0 in late May or early June   |
| Annual legumes   | 0-40-0                     | 0-40-0                      | 15-60-0  |  |
| Pastures<br>Grasses only, grasses<br>and legumes including<br>small grains   | 40-0-0                     | 40-0-0                      | 60-60-0  | Topdress with 60-0-0 each time cut or grazed down  |
| <b>TRUCK CROPS</b>   |                            |                             |          |  |
| Lettuce  | 30-30-0                    | 60-60-0                     | 60-60-0  | Sidedress with 60-0-0 when plants begin to head  |
| Tomatoes, peppers  | 20-40-0                    | 30-60-0                     | 40-80-0  | Sidedress with 40-0-0 at set of first fruit  |
| Cantaloupes  | 40-40-0                    | 40-80-0                     | 40-80-0  | Sidedress with 50-0-0 at first bloom   |
| Onions   | 40-80-0                    | 50-100-0                    | 50-100-0 |  |

Adequate water supply must be available at all times.

Under heavy water application, the amount of fertilizer may be increased.

\*Rates may vary, depending upon soil permeability, water and management practices. With frequent irrigation, some additional nitrogen should be applied in small quantities in the summer irrigation waters.



## GRADES OF FERTILIZER

The fertilizer recommendations are expressed in pounds of nutrients per acre and do not represent fertilizer grades. For example, 60-60-0 means 60 pounds nitrogen, 60 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 100-50-0 can be obtained by applying 250 pounds of 10-20-0 at planting and sidedressing an additional 75 pounds of nitrogen as a straight nitrogen fertilizer. If the recommendation calls for a 60-0-0, any nitrogen fertilizer can be used to supply 60 pounds actual nitrogen.

## METHOD OF APPLICATION

**Row Crops:** Fertilizers are most efficiently used by row crops when applied either at planting time or several weeks later. At planting, applications should be 2 to 3 inches to the side and 2 to 3 inches below the seed. Avoid putting seed too close to the fertilizer, as germination may be impaired. Later applications should be 6 to 8 inches deep and 8 to 10 inches

from the row. Do not sidedress too late in the season so as to avoid pruning roots.

If large quantities of nitrogen fertilizer are to be applied, part of the nitrogen should be drilled into the soil as side dressing and part applied in small quantities in the irrigation water during summer irrigations. Application of anhydrous ammonia in irrigation water is not recommended because of poor distribution and loss by vaporization. Potash fertilizers are not needed by crops in the Trans-Pecos area.

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

The phosphorus and part of the nitrogen should be applied at or before seeding. The rest of the nitrogen should be applied in the spring or before plants begin to head up.

**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 60-0-0 as needed. Repeat basic fertilizer treatment annually as suggested or according to a soil test.

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Most county extension agents have their offices in the county courthouse or agriculture building. Get to know them and take advantage of their services.

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