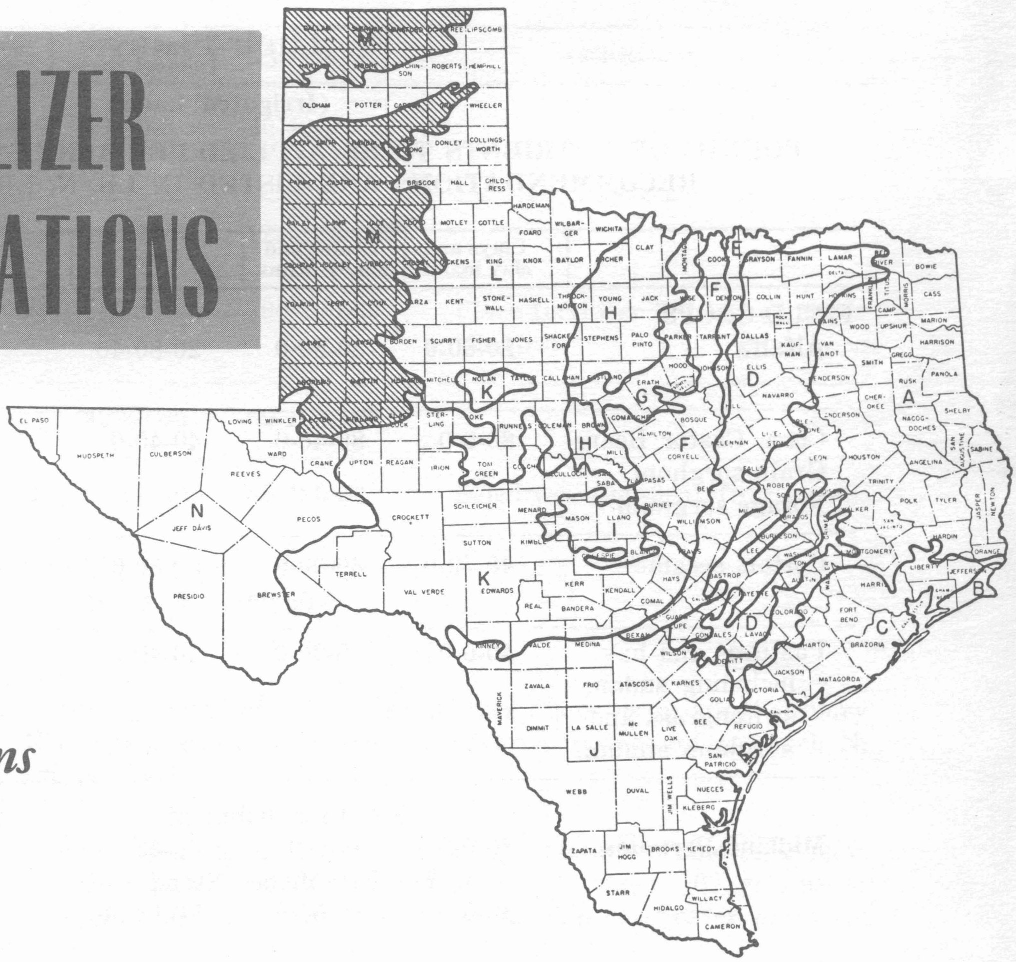
12-6-63
2 ½M

GENERAL FERTILIZER RECOMMENDATIONS



for the High Plains

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

Developed by Personnel of the Department of Soil and Crop Sciences, College Station and Substation No. 8, Lubbock USDA Southwestern Great Plains Field Station, Bushland of Texas A&M University

TEXAS A&M UNIVERSITY
TEXAS AGRICULTURAL EXTENSION SERVICE
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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. P_2O_5 and LB. K_2O

	Clays and clay loams	Loams and sandy loams	Sands	Additional treatment
FIELD CROPS				
Alfalfa	20-60-0	20-80-0	20-80-40	Topdress 0-60-0 on clay and loams and 0-60-60 on sands annually for maintenance.
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 sufficient water is applied.
Cotton, sesame	40-40-0	60-60-0	60-60-0	Following high residue crops, increase N by 30 lb. N.
Pastures and hay including sudan, switchgrass and sorghum almum.	40-0-0	40-30-0	40-40-0	Sidedress with 40-0-0 after each cutting or after each hay grazing.
Midland Bermuda	For Establishment 40-0-0	40-0-0	40-40-0	Topdress 40 lb. N when grass begins to run.
	For Established Stands 80-0-0	80-60-0	80-60-60	Topdress 70-0-0 each time cut for hay and 50-0-0 each time grazed down.
Soybeans	0-0-0	0-40-0	15-60-30	
Sugar beets	100-60-0	100-80-0	100-100-50	
Wheat, oats	60-0-0	60-30-0	30-60-0	Topdress sands and loamy sands with 40-0-0 in Jan. or early Feb.
Wheat, oats to be grazed	90-0-0	90-40-0	60-60-0	Topdress sands and loamy sands with 40-0-0 in Jan. or early Feb.
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 or at 4-6 leaf stage.
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	

	Clays and clay loams	Loams and sandy loams	Sands	Additional treatment
Carrots, beets, turnip roots	20-40-0	40-40-0	40-40-0	
Irish potatoes	100-100-0	100-120-40	120-120-120	
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, okra	40-80-40	60-80-40	80-120-60	Sidedress 40-0-0 at first bloom.
Watermelons	40-60-0	40-80-40	60-80-60	

Pecans *Nitrogen*—All soil types

For bearing trees, apply ⅓ 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 are not generally recommended on dryland, however, when subsoil moisture is favorable, moderate rates may be profitable.

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 125 pounds of 11-48-0.

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