

*Twenty-ninth*  
**ANNUAL REPORT of the**  
**FERTILIZER CONTROL SERVICE**

*December 31, 1958*



**New Mexico**  
*State Department of Agriculture*  
**FEED & FERTILIZER CONTROL OFFICE**  
New Mexico State University

*R. W. Ludwick*  
Chief of Division



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## State Department of Agriculture

### FEED AND FERTILIZER CONTROL OFFICE

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State College, New Mexico

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## TWENTY-NINTH ANNUAL FERTILIZER REPORT

of the

New Mexico Feed and Fertilizer Control Office

Fertilizer regulatory work in New Mexico was authorized by Chapter 151, Session Laws of New Mexico for 1929 and amended in 1953. Enforcement of the law was passed by the Board of Regents of the New Mexico College of Agriculture and Mechanic Arts to the Feed and Fertilizer Control Office, State College, New Mexico.

The New Mexico Commercial Fertilizer Law is essentially a labeling law, requiring manufacturers to guarantee the accuracy of information on containers of fertilizer and in registration filed, which will enable each purchaser to determine for himself the value of the fertilizer offered for sale. Inspection and analysis by the Fertilizer Control Office at frequent intervals will give information as to the reliability of the labels which the manufacturer attaches or prints on the container of each parcel of fertilizer.

#### COMMERCIAL FERTILIZERS DEFINED

Commercial fertilizers are defined in our law as: "Any substance shall be deemed to be a commercial fertilizer if by reason of its chemical composition or other quality, it is sold, offered, or exposed for sale, or distributed in this state for the purpose of increasing the crops produced by land."

This definition includes the common commercial fertilizers carrying Nitrogen (N), Phosphorus ( $P_2O_5$ ), and Potash ( $K_2O$ ); also includes inoculating materials, and all materials for which claim of inoculation is made.

#### REGISTRATION OF FERTILIZERS

Each brand of commercial fertilizer coming under the provisions of the New Mexico Commercial Fertilizer Law must be registered annually in this office. Applications for registration must be made in the form of an affidavit on blanks furnished by the Feed and Fertilizer Control Office, State College, New Mexico. A separate registration is required for each brand and each grade of the same brand. Application for registration of each brand and grade must be accompanied by a fee of five (\$5.00) dollars. Registration may be filed for new fertilizers at any time during the year, but all registrations expire December 31. Registrations should be renewed the first of each year in order that they may be listed in the annual report published in February.

#### LABELS FOR COMMERCIAL FERTILIZERS

The guaranteed analysis of the fertilizers is required by law to be printed on the bag or on a tag attached to the bag, so that the purchaser can see what he is buying. The information required on the package or tag is as follows:

Net weight of package.  
Name of fertilizer.  
Name and address of manufacturer.

Guaranteed analysis:

Nitrogen, not less than .....	%
Available Phosphoric Acid, not less than .....	%
Potash Soluble in Water, not less than .....	%



The order in which the fertilizing elements should appear on the label is nitrogen, available phosphoric acid, and potash. In mixed fertilizers the figures representing the analysis of these three ingredients should appear as a part of the fertilizer name, and in the same order as stated as "XYZ Fertilizer" (4-10-4),—meaning that the fertilizer contains 4 per cent of nitrogen, 10 per cent of available phosphoric acid, and 4 per cent of potash.

### NOTICE OF SHIPMENT REQUIRED

A provision of the New Mexico Fertilizer Law requires that each manufacturer, importer, jobber, firm, association, corporation, or person notify the Feed & Fertilizer Control Office, State College, New Mexico, within 24 hours after making any shipment of fertilizer, as to the date, amount, consignee and destination of each shipment into or within the state. This report may be made by a copy of the invoice, or on forms furnished by this office, or any other way convenient to the manufacturer or party making the shipment.

### NEW MEXICO COMMERCIAL FERTILIZER LAW AMENDED IN 1953

Effective July 1, 1953, the use of inspection tax tags and tax stamps to show payment of inspection fees was eliminated and in lieu thereof a quarterly tonnage reporting basis was provided.

### INSPECTION FEES

Commercial fertilizers sold, offered or exposed for sale or distributed in New Mexico are subject to an inspection fee of 25 cents per ton. Payment of this fee is to be made quarterly in January, April, July and October for the preceding three months along with a certified statement as to fertilizer sales for that period. "If any quarterly affidavit is not filed or if the inspection fee is not paid within the thirty day period, a penalty of \$5.00 per day for each delinquent day thereafter shall be assessed for each delinquency."

### PAYMENT OF INSPECTION FEE ON SMALL PACKAGES

"For each brand of commercial fertilizer sold, offered or exposed for sale, or distributed in New Mexico in packages of only five pounds or less or in bottles of only one quart or less there may be paid by the person, firm, association or corporation registering the brand an annual inspection fee of \$10.00 in lieu of the inspection fee based on tonnage, such annual fee to be paid during the month of July of each year.

### EXPLANATION OF TERMS

Nitrogen, phosphoric acid, and potash are the principal constituents found either singly or combined in commercial fertilizers. Many consumers are not familiar with their function, so that a brief summary of their effects is given.

**NITROGEN:** Nitrogen is that constituent of fertilizers which promotes the growth of stems and leaves, while retarding the development of the fruit, thereby producing luxuriant growth in the plant prior to bloom. It also has the effect of increasing the content of nitrogen in parts of the plant and producing a deep green color in the foliage. Nitrogen deficiency is indicated by early shedding of leaves and light-weight or shriveled grains of cereals, while excessive amounts are known to adversely affect the color, flavor and keeping properties of some fruit and vegetables.

**PHOSPORIC ACID:** Phosphoric acid produces two important effects which are well understood. It hastens the maturity of a plant by affecting the setting and filling of the grain. It also tends to produce a strong root development. It therefore neutralizes to some extent the effect of liberal amounts of nitrogen.

Total phosphoric acid is the entire quantity of the phosphoric acid present, whether available or not to plant growth. Available phosphoric acid is the phosphoric acid in fertilizers which can be utilized readily by plants.

**POTASH:** Potash is essential for successful growing of crops which are rich in sugar and starch. The cellulose or woody portion is also built up from soluble starches or sugars. Thus the stem as well as the root of the structure depends on a supply of this element for their proper development. Potash is believed to help the disease resistance of plants and to improve the flavor, quality, and keeping strength of their fruits.

### JUDGING THE VALUE OF FERTILIZERS

The utility of a fertilizer can generally be judged from the amounts of three constituents guaranteed—nitrogen, available phosphoric acid, and potash. Some soils may require the application of definite quantities per acre of each of three constituents while others may require the application of only one or two of the plant foods named. Purchasers of commercial fertilizers are advised to study their soil requirements and determine in advance of purchase the kind of fertilizer needed. Advice and assistance in such cases can always be obtained from your County Extension Agent, Agricultural Experiment Station, or Extension Service. While it is against the policy of the Feed and Fertilizer Control Office to make any recommendations regarding the kinds, amounts to use, and values of commercial fertilizers, it is always ready to assist purchasers and users of fertilizers by answering questions regarding the guarantees and analysis of the different brands and by securing and analyzing samples which are suspected of being below guarantee made by manufacturers.

### COMMERCIAL ANALYSIS OF FERTILIZERS

The Feed and Fertilizer laboratory in connection with this office is in position to make commercial analysis of fertilizers sent in. The charge made for analyzing a fertilizer, the analysis of which can only benefit an individual or firm will be as follows:

Nitrogen .....	\$1.50
Phosphorus .....	
Total P <sub>2</sub> O <sub>5</sub> .....	\$4.00
Available P <sub>2</sub> O <sub>5</sub> .....	\$5.00
Potash (Water Soluble) .....	\$5.00

Method of sampling as provided for in the law is as follows:

"In sampling commercial fertilizers packed in packages of twenty-five (25) pounds or less, an original unbroken package may be taken as the official sample and the ordinary retail price tendered therefor. When the fertilizer is in packages over twenty-five (25) pounds in weight, portions for the official sample shall be taken from at least ten packages if that many are in the lot. In sampling fertilizer in bulk, not less than ten portions shall be drawn, and these shall be from various parts so as to represent fairly the whole."