



UPPER LEFT: Your soil samples are numbered and ready for the analysis.

LOWER LEFT: Soil samples are arranged in trays by number, after being classified by soil class. Armand Bauer (left) shows method of texturing.

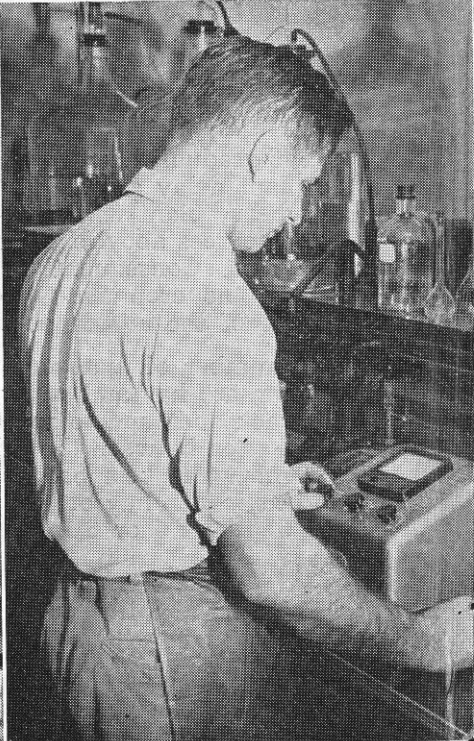
CENTER LEFT: A test being made to determine the degree of acidity or alkalinity with a pH meter. The instrument also determines the salt content of the soil.

INSET: This soil is high in calcium carbonate. After treatment with an acid, the amount of calcium carbonate is determined.

UPPER RIGHT: Technicians are shown preparing soil for phosphorus test. They use a solution to extract the phosphorus from the soil.

MIDDLE RIGHT: The charge is stirred thoroughly for one-half hour to bring the soil particles into solution.

LOWER RIGHT: The solutions are filtered to remove the soil particles from the solution. The phosphorus is then determined.



## NDAC'S NEW ENLARGED

More soil tests can be analyzed in the new laboratory, more space and personnel.

The analysis of your soil by a county extension agent can give you the best methods of getting the sample.

This picture story gives you a better idea of what you will receive. It will be of more use to you.

sample is finely ground to prepare

samples are unpacked and stored in  
bags being textured to determine the  
(left), supervisor of soil testing,

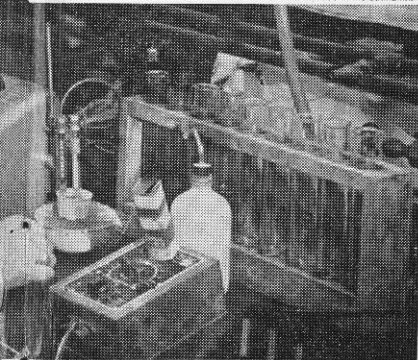
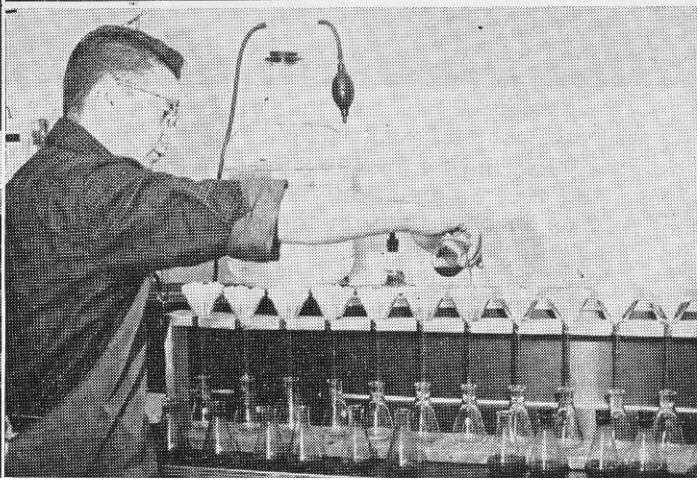
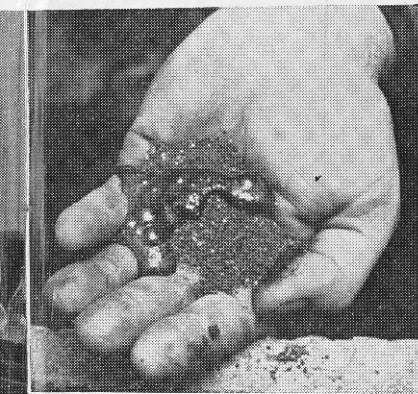
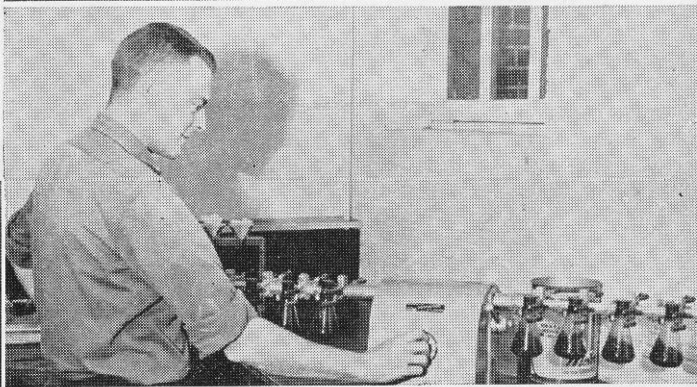
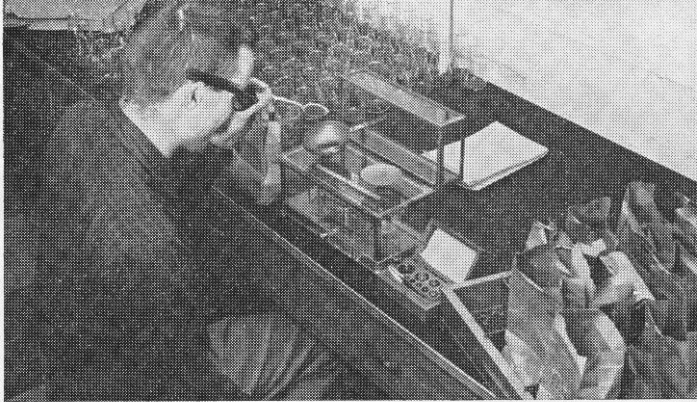
test being run by Bauer to determine  
alkalinity of the sample, with a  
test at lower right in this picture  
test of the soil.

test time as shown by the bubbling  
test. This determines the relative  
test rate.

test samples weigh out exact amounts of  
these samples are then charged  
with the phosphorus.

charged samples are then shaken  
in a shaker to allow phosphorus to go

into solution. The solutions are then filtered to separate  
the solution containing the extracted



## LARGED SOIL TESTING LABORATORY IN OPERATION

analyzed by new soil testing laboratory at NDAC than ever before. New equip-  
ment assure farmers of a thorough soils test and accurate recommendations.

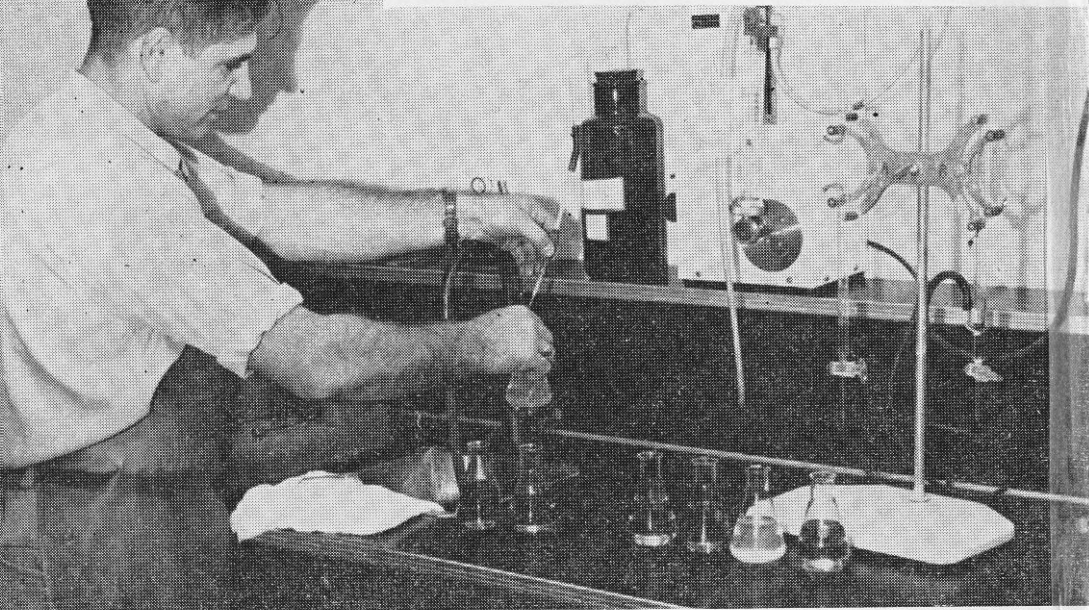
Quality of the laboratory can be only as good as the soil sample you send in. Your  
technician give you complete instructions on obtaining samples and can advise you on  
how to send samples to the laboratory in proper condition for testing.

Get some idea of the many tests that are made so that the recommendations you  
receive will be of help to you in the farm management program.

(See next page)



Final color test to determine the phosphorus content of the soil. The intensity of the color is in direct relation to the phosphorus content of the soil. The color intensity is determined with a colorimeter. More than one hour is required to complete each soil test in the laboratory.



The most important part of the entire soil testing procedure is the recommendation. The fertilizer recommendations are for the crop to be grown on the soil the next year and **not** for **any** crop that the farmer wishes to grow. It is for the crop that was indicated on the soil sample information sheet by the farmer.

In making the recommendation, the laboratory data and information supplied by the farmer on the soil sample information sheet are considered. The recommendations are based on experimental work done by NDAC Experiment Station, on farm trials, on experiments in other states and on observations by qualified technical personnel.

