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# Technical Data



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## A KEY TO FURTHER PROFITS

Part - 1

This is your file copy.  
Additional copies upon request.

YOUR CUSTOMER has one, primary interest in doing business with you -- his own, his very own *profit* -- no one else's. To serve him -- to give him cause to come back to you or your dealers, you must boost his profits.

HOW? - well, fine seeds with excellent service tell part of the story, but, --- will they, by themselves guarantee his profit?

NO, THEY WON'T! So that's why we want to discuss the rudiments, the essentialities, of this increasingly important *fertilizer problem*. We don't know all the answers, no one does, but we've been doing a lot of experimenting and so in this bulletin WHY FERTILIZE, and next month, WHAT ARE FERTILIZERS we'll cover the problem and its profit potentialities for YOU and YOUR CUSTOMERS, as we see it.

### WHY FERTILIZE .....

Well, when your ancestors and mine first began to rob the soil of its minerals, they had no worry, the soil was rich and fully able to give a full measure of productivity.

Years and years of constant tilling, however, have generally depleted soils of their chemical ability to produce crops with that extra tonnage margin which means the difference between profit and loss to YOUR CUSTOMERS. Especially, will this be so, as farm prices begin to lower while costs follow more slowly.

Although a complete soil analysis shows sufficient quantities of all chemical elements present to keep plant life for hundreds of years, they are usually within the interior of the soil particle. Plants absorb their food by giving off carbon dioxide, which is taken up by soil moisture and forms carbonic acid. Carbonic acid attacks the outer layer of the soil particle and dissolves plant food which then becomes available to the plant.

It is not hard to understand how this process can take the available plant nutrients from the soil. The replacement of these elements in the amounts of which they are removed from the soil is the only way to insure quality and high yields.

Not only the type of soil, but the type of crop to be grown must be taken into consideration before adopting a fertilizer program, as the demands upon the soil differ greatly with various crops.

Plants, you see, can be compared to animals or human beings in that they must have a balanced diet. Feeding plants one element only is bad practice if continued year after year.

Mixed fertilizers are formulated to give a slow continuous feed to the plant throughout the growing season. The nitrogen content is an example of this, as it is made up of the different kinds of basic chemicals which in some cases, act immediately, in others, slowly. Mixed fertilizers include all these types of chemical compounds, which provide food for the plants to consume through the bulk of the season rather than temporary short periods of fertilization followed by food shortages for the remainder of the season.

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"AMERICA'S *Safest* GROWERS"



AMERICA'S SAFEST CROWERS

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Plants, you see, can be compared to animals or human beings in that they must have a balanced diet. Feeding plants one element only is bad practice if continued year after year.

Mixed fertilizers are formulated to give a slow continuous feed to the plant through out the growing season. The nitrogen content is an example of this, as it is made up of the different kinds of basic chemicals which in some cases, act immediately, in others, slowly. Mixed fertilizers include all these types of chemical compounds, which provide food for the plants to consume through the bulk of the season rather than temporary short periods of fertilization followed by food shortages for the remainder of the season.

AMERICA'S SAFEST CROWERS

SALES HINTS

A farmer's soil is much like a bank account, i.e., in order to maintain a balance (fertility) deposits (fertilizer) must be made to equal withdrawals (crops). We know crops remove all of the big three, i.e., nitrogen, phosphorons and potash, and the only common sense program is to replace these elements to maintain production and quality.

Fertilizer sales are most gratifying in that they nearly always result in a feeling on the part of the farmer that he has been done a favor since the response speaks for itself. Generally speaking, a survey of results throughout the United States during recent years shows a return of five dollars for each one invested in fertilizers. Even in times when farm products were bringing low prices, fertilizer investment showed a return of three to one. When this is the situation, the use of fertilizer is even more important in order to show a profit. In other words, quality is the answer here.

Evidence of fertilizer response has been demonstrated time and time again to the farmer until now it is no longer a product that requires testimonials in order to sell.

NOW, A KNOWLEDGE of basic fertilizer chemicals and their action, is necessary to merchandise fertilizer accurately and profitably. Next issue, we'll discuss the various chemical components and attempt to analyze the problem somewhat.

SERIES 1 - BULLETIN 5  
20 February, 1948

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RESEARCH DEPARTMENT

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SERIES 1 - BULLETIN 2  
10 February, 1948