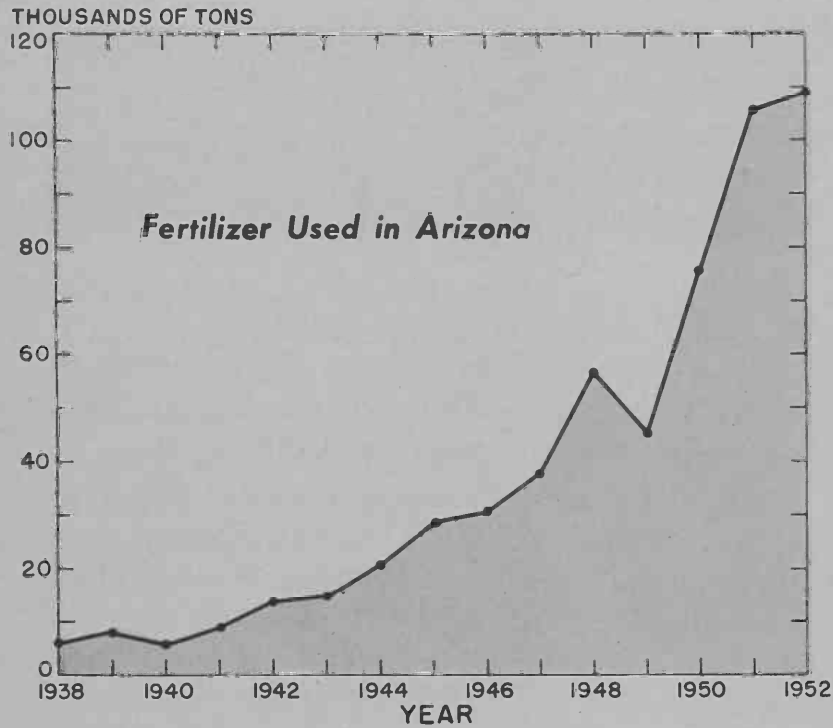


Fertilizer Use *Expands*

A combination of laboratory experiments and fertilizer tests in the field show that in Arizona soils the most deficient element is nitrogen. Potassium is rarely deficient, and phosphorus is intermediate — that is, not deficient, but so slightly soluble that it is not available to some crops.

In research on soil fertility, fertilizer experiments have been conducted on ranches in practically all the counties in the State and laboratory tests have been made on thousands of soil samples. The importance of this work is reflected in the tonnage of fertilizer now used.



The amount used in 1952 was 109,234 tons. On the basis of 1,300,000 acres under cultivation this represents 168 pounds per acre.

In 1938 only 8,000 tons of commercial fertilizer were used in Arizona. On the basis of 653,000 acres under cultivation at that time, this represents only 14 pounds per acre.

The team work represented in this recognition of the value of fertilizer for Arizona soils and crops involves the farmers who cooperate in field tests, the County Agricultural Agents, the Experiment Station, and the fertilizer industry in which both sales and technical personnel are represented by many men trained at the University of Arizona College of Agriculture.



Here's a fertilizer field test in Cochise county. Applications were 100 pounds of nitrogen per acre (at left) and 50 pounds of P_2O_5 (at right).