

WHAT IS FERTILIZER?

What is fertilizer? One of the better definitions of fertilizer is a substance containing one or more of the chemical plant food elements which can be absorbed by plants and promotes the growth and health of plants.

FERTILIZERS AND THEIR PLANT FOOD CONTENT - Plants are known to require fifteen plant food elements essential for normal growth. They have three sources from which they obtain food - the AIR, WATER and the SOIL. Oxygen and hydrogen are obtained by plants from water. Carbon and oxygen are taken in by the leaves from the air. All other elements used by the plant must come from soil. Soils vary in the total quantity of nutrient elements which may be available to plants. Crop removal of these elements plus leaching and other weathering losses finally bring most soils to a point where they are deficient in one or more elements of plant food. Commercial fertilizers applied, therefore, supplement and make up for any plant food deficiencies which may occur in a soil.

Plants cannot use primary plant foods in their elemental form. Nitrogen is a colorless inert gas. Elemental potassium is a light grey metal that burns fiercely when it comes into contact with water. Elemental phosphorus bursts into flame whenever exposed to air. However, since these common elements are able to enter into combination with one or more other elements to form stable compounds this is the form they are found in the fertilizer bag.

What's in the fertilizer bag? We often hear the question - Why doesn't a fertilizer material or a complete fertilizer mix have a 100% plant food content? For instance - a 16-6-8 analysis or grade adds up to 30% plant food or 30 lbs. per 100 lbs. of material. What is the other 70%?

The answer is one of practical chemistry since plants can't use "N" but require NO_3 or NH_4 , can't use "P" but requires P_2O_5 , etc. This means that for each part nitrogen you have three parts oxygen or four parts hydrogen, etc. In addition, you receive additional value from the carriers in the average fertilizer mix; Sulfur, Iron, Calcium, Magnesium etc.

THRU THE GREEN EDITOR

KEN SAKAI

Riverside Golf Course

P. O. Box 281, Coyote, CA 95014

Phone 408 463-0558

Deadline date fifteenth of each month

OFFICE 1233 Kansas Avenue, Modesto, CA 95351 Phone 209 523-7141