

## Are Plant Nutrient Sources Really Different?

ATLANTA, Ga. — Potash and Phosphate Institute agronomists agree - nitrogen is nitrogen, no matter what the form .

From a plant's standpoint, there is no difference among the various plant nutrient sources. That's because plants don't use nutrients in their original form. All nutrients first must be disassociated from their original source and transformed into an ionic form before they can be taken up by plant roots.

So the original source, whether it is organic or inorganic, has no relationship to a healthy, vigor-

ously growing plant. Plants just require the presence of the essential nutrients in an adequate, continuous, and balanced amount to assure good growth and reproduction. Essential nutrients can come from organic materials such as animal manure, crop residues, or cover crops; from gaseous, solid, or fluid commercial fertilizer; or from native nutrient-bearing minerals in the soil.

The commercial fertilizer industry developed because the food, feed, and fiber needs of a growing world population removed more of the essential

plant nutrients in harvested crops then could be replaced by organic and native mineral sources. Without supplementing these sources, crop production could not have kept pace with world demand. Today, the worldwide commercial fertilizer demand expands as the challenges to feed an ever-increasing population continue.

The nutrients contained in commercial fertilizers are not imitations of nutrients in nature. The total amounts of the 16 essential nutrients are the same as when the earth was created. Through the ages, wind, rain, glaciers, volca-

nos, plant life and animal life have continually displaced and relocated nutrients and nutrient-bearing materials. Fertilizer phosphorus and potassium, for example, come from deposits which originated in oceans or seas over several geologic periods when conditions favored the formation of nutrient-bearing materials. And as for nitrogen, approximately 80 percent of the Earth's atmosphere is gaseous nitrogen...the same nitrogen used to manufacture fertilizer as well as that fixed by legumes.

Concerns by some that com-

mercial fertilizer is not "natural" and thus "bad" have no scientific basis. Processing and utilization of deposits of phosphorus and potassium represent the ultimate in recycling...recycling of nutrients back to the soil from which they were originally released by weathering. The fertilizer industry uses manufacturing processes to increase the purity and availability of nutrients by separating the nutrients from unwanted materials.

For more information, contact Dr. W.K. Griffith, eastern director, PPI, 865 Seneca Rd., Great Falls, VA 22066, (703)450-4835.

## COMING AUGUST 15th

# LANCASTER FARMING ISSUE

## Featuring

# 1992 AG PROGRESS DAYS

To Be Held Aug. 18, 19, 20 at Rock Springs Research Farms  
Near State College, Pa.

We'll have the information our readers will need to make their visit to the 1992 AG PROGRESS DAYS more enjoyable... maps, lists of exhibitors, schedules of events and related stories.



**Over 48,000 Paid Subscribers. Invest Your Dollars Wisely By Reserving Your Space Now In This Special Issue.**

**PUT YOUR MESSAGE TO WORK IN THE AUGUST 15th ISSUE OF LANCASTER FARMING!**

Normal advertising rates apply...deadline is Friday, August 7. Call (717) 626-1164 or (717) 394-3047 to reserve your advertising space!