

Aglime...It's Good for the Environment

Farmers apply aglime to neutralize soil acidity...and for a host of other reasons. Aglime improves the physical, chemical, and biological conditions of soil. It increases crop growth and improves nutrient and water uptake, which helps protect the soil from wind and water erosion. It enhances the effectiveness of some herbicides and improves fertilizer nutrient efficiency.

Best plant growth, and greatest fertilizer efficiency, occurs at an optimum soil pH range of about 5.8 to 7.0 for most crops. (A few crops prefer acid soils.) Liming soils to the optimum range can increase fertilizer use efficiency by as much as 50%. And a doubling of efficiency means half as much fertilizer is needed for optimal crop growth and that cuts fertilizer costs. In addition to affecting plant nutrients and crop growth, aglime improves the performance of certain herbicides, increasing their ability to control weeds that rob the crop of nutrients and water.

Liming acid soils can dramatically increase crop and forage yields. That means more of the fertilizer nutrients...and soil nutrients...are removed from the field with crop harvest. So, potential losses to leaching are reduced. Aglime helps get the crop off to a fast start, with quicker canopy cover, which helps to minimize the impact of rainfall and reduces runoff and erosion. Also, increased crop yields mean more plant roots and more crop residues to build soil organic matter and improve soil aggregation and tilth.

There are many benefits from applying aglime. There is also a great need. A recent survey suggested that aglime is needed on nearly one-third of the farmland in North America. Summarized results from public and private soil testing laboratories showed that 31% of the 3.4 million samples collected in the fall of 2004 and spring of 2005 had a pH less than 6.0. Soil pH in 60% of samples was less than 6.5, suggesting that crop producers need to be diligent in monitoring soil pH and following up with recommended lime additions.

Aglime does more than simply increase soil pH. It also improves the soil's productivity and in so doing helps protect the environment. EB

