The use of agricultural lime has been recognized down through the ages as a practice that is basic to good husbandry in humid regions, yet the application of limestone in the United States has declined from a peak of 30 million tons in 1947 to about 22 million tons today. In contrast, more than 80 million tons—nearly 4 times the current rate—should be used annually to maintain optimum soil reaction. Figure 1, taken from the 1954 Census of Agriculture, shows in a striking way how the use of lime has fallen behind as fertilizer consumption has increased rapidly and steadily during the past two decades. The changes in lime use since 1944 are directly related to changes in policy and availability of funds for subsidy payments by the Federal Government, which is an indication that the liming program had not been as widely accepted by farmers as an essential part of good management as it should have been. In our preoccupation with the use of higher and higher rates of fertilization we have been guilty of neglecting the very practice which is most essential to efficient utilization of these applied plant nutrients.

The emphasis in both research and educational programs in the past has been on the use of lime for legumes. In areas where rotations including legumes are standard practice there is probably little disadvantage in this approach. But in those large segments of the country where no definite legume-based rotations are followed, soil acidity undoubtedly has imposed yield ceilings on many row crops such as corn, cotton, tobacco, and peanuts. The problem assumes serious proportions as intensive management practices, including high rates of fertilization, become more and more used. Liming will make little difference in the income of the farmer who fertilizes for a half-bale of cotton per acre and fights the boll weevil half-heartedly, but it can make or break the man who invests heavily in fertilizer and insect poison with the intention of making a 3-bale crop.