Cl sources were essentially equal in correcting Cl deficiency.

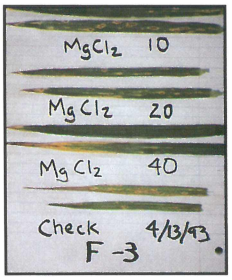


Figure 1. Effects of foliar $MgCl_2$ on septoria leaf spot with 10, 20 and 40 lb/A Cl rates compared to the check.

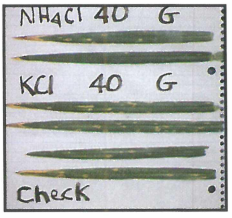


Figure 2. Effects of soil applied NH_4Cl and KCl at 40 lb/A Cl rates compared to the check.

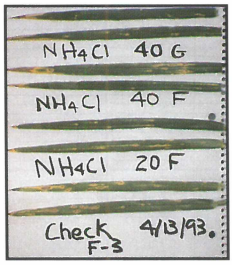
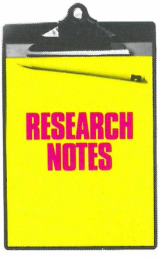


Figure 3. Effects of foliar and soil (G) applied NH_4Cl at 20 and 40 lb/A Cl rates compared to the check.

Conclusions

Texas studies continue to indicate that Cl fertilization on low Cl soils can have significant suppressive effects on fungal leaf diseases of wheat (leaf rust and septoria). Responses vary somewhat with variety, management and growing conditions. Grain yields have been significantly increased as a result of Cl application. Late winter or spring Cl applications appear to be more effective, probably due to leaching of Cl by winter precipitation. ■

Texas



Stand Dynamics and Yield Components of Alfalfa as Affected by Phosphorus Fertility

SCIENTISTS at Texas A&M, Beaumont, measured the effects of phosphorus (P) fertilization on alfalfa yield and stand components. The test soil, a Windthorst fine sandy loam, was low in P. Three preplant incorporated rates of P_2O_5 (0, 60 and 120 lb/A) and five annual surface broadcast rates (0, 15, 30, 60 and 120 lb/A) were applied to two field experiments.

Preplant incorporated P increased dry matter yields more efficiently than did broadcast P. Neither plant nor shoot densities were different among treatments. Researchers concluded that yield differences were a function of yield per shoot. Where no P was applied, root mass was concentrated in the upper 8 inches of soil. Where adequate P was available, root mass was distributed throughout the upper 16 to 20 inches. ■

Source: Sanderson, M.A. and R.M. Jones. 1993. Agron. J. 85:241-246.

New Color Slide Program Features Identification of Nutrient Disorders in Sugarcane

THE Potash & Phosphate Institute (PPI) has prepared a color slide set as a companion to the book *Sugarcane Nutrition*, published jointly by PPI, the Potash & Phosphate Institute of Canada (PPIC), and the Foundation for Agronomic Research (FAR) in 1991. The slide set consists of 69 color 35mm slides, with printed script.

The slide set serves as a visual guide to identification of plant nutrient disorders in sugarcane.

The color slide set with script is available at a cost of $40.00 plus shipping. Discounts are available for quantity purchases and for members of PPI, contributors to FAR, and to university and government agencies.

For additional information or to place an order, contact: Circulation Department, PPI, 655 Engineering Drive, Suite 110, Norcross, GA 30092; phone (404) 447-0335, fax (404) 448-0439. ■