Steven B. Phillips Joins Staff of IPNI as Southeast Region Director


Dr. Steven B. Phillips

Dr. Steven B. Phillips joined the staff of IPNI as Southeast Region Director effective June 1, 2007. He has responsibility for agronomic programs of the organization in the states of Alabama, Arkansas, Florida, Georgia, Kentucky, Louisiana, Mississippi, Missouri, North Carolina, South Carolina, and Tennessee.

"We welcome Steve Phillips to the staff of IPNI and know he will be a great asset to the programs of this new organization," said Dr. Terry L. Roberts. "He has a strong background in research and extension programs focused on applied soil fertility and plant nutrition as related to production agriculture. His record of both academic and extension publications and presentations is impressive."

Dr. Clifford S. Snyder of Conway, Arkansas, served as Director of the Southeast Region and previously the Midsouth Region of IPNI (formerly the Potash & Phosphate Institute) since 1995. He was recently appointed to the new position of Nitrogen Program Director and coordinates IPNI efforts dealing with environmental issues associated with N fertilizer use in agriculture, both in North America and internationally.

A native of Oklahoma, Dr. Phillips holds a B.S. degree (1993) from Cameron University in Lawton, and M.S. and Ph.D. (1999) degrees from Oklahoma State University at Stillwater. From 1999 until June 2005 he was Assistant Professor, Soil Fertility and Plant Nutrition, Department of Crop and Soil Environmental Sciences, Eastern Shore Agricultural Research and Extension Center (AREC), Virginia Tech.

He became Associate Professor in July 2005 and maintained a 75% research/25% extension responsibility. The majority of his research dealt with efforts to improve the fertilizer use efficiency of various field and vegetable crops. A portion of this work focused on developing an optical sensor-based fertilization system to be used for winter wheat and corn production. Another area of Dr. Phillips research was broiler litter management.

The extension component of his work involved dissemination of production-related information to growers, industry, and county extension personnel, including soil fertility recommendations, assisting with soil test interpretations, and various presentations of research results. Dr. Phillips also carried responsibility for advising graduate students. In recent years, Dr. Phillips has been involved in several international workgroups and collaborative research projects with scientists in Argentina, Mexico, India, and other countries.

His professional affiliations include membership in the Soil Science Society of America, American Society of Agronomy, Crop Science Society of America, and others. BC

Cl played an important role in the suppression of the disease. In contrast, this research indicates that Cl plays a less important role in stalk rot suppression than K. This inconsistency may be due to differences in nutrient status of the test soils. Sanogo and Yang (2001) reported that soil amendment with KCl when the soil was not deficient in K resulted in 36% decrease in the severity of soybean sudden death syndrome (SDS), a soil-born disease. Conversely, disease severity was increased by 43% with K_2SO_4 application, and by 45% with KNO_3, compared to the study's controls. Thus, Cl was helpful in reducing SDS and K application was not found beneficial. A comparison of the available K concentration (0 to 20 cm depth) between this research and Heckman's U.S. study finds the initial K fertility in the U.S. study to be 92 mg/kg, which is over twice the level measured in this work (**Table 1**). Additionally, soil Cl in the 0 to 30 cm soil layer was only 6 mg/kg (low) in Heckman's experiment, while this study's soil Cl concentration in 0 to 20 cm layer was 30 mg/kg. Therefore, under conditions of soil K deficiency and Cl sufficiency, the influence of K nutrition on corn stalk rot was much more strongly pronounced than the influence of Cl. Apparently the result is opposite under soil K sufficiency and Cl deficiency.

In conclusion, the role of K and Cl in disease suppression must be examined in conjunction with the soil nutrient status. Therefore, whether K or Cl play the dominant role in corn stalk suppression will depend on the K and Cl status of the soil. A well-balanced fertilization strategy is necessary for both yield increases and disease control. BC

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Acknowledgments

We thank Professor Kuan Zhang, Professor Xiu-fang Wang, and Professor Qi-ming Jin, Jilin Academy of Agricultural Sciences, for their help in managing these field experiments and in investigating the incidence of corn stalk rot.

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