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IPNI RELEASES NEW SUMMARY OF SOIL TEST LEVELS IN NORTH AMERICA

The International Plant Nutrition Institute (IPNI) recently released its fourth in a series of summaries dating back to 2001. This 2015 summary has captured information on 7.5 million soil samples. The summary is made possible through the generous, voluntary participation of 61 private and public soil testing laboratories. For a complete list of participating labs, see soiltest.ipni.net/about/Labs.

The recently released bulletin, available at <http://ipni.info/NAP-3018>, provides summary information at the North American scale for phosphorus (P), potassium (K), soil acidity (pH), magnesium (Mg), sulfur (S), zinc (Zn), and chloride (Cl⁻). For the first time, IPNI has now statistically analyzed trends for 2001 to 2015.

Over the period 2001 to 2015, fewer samples now test higher in P and K and more samples test lower. Many states in the eastern Corn Belt showed increased needs for P. Increasing needs for both P and K were demonstrated for the Cotton Belt in 2015. Across the 15-year period, more samples across North America now test in the range of soil acidity where crop growth and nutrient availability are greatest: pH 6.1 to 7.5.

Fewer years of data are available for the other nutrients. Data from 2005 to 2015 indicate an increase in soil test Mg levels for North America. During the same period, the percent of samples testing low in S has been growing—a trend consistent with lower S deposition from the atmosphere during the same time period. Data from only 2010 and 2015 are available for Zn and Cl⁻. No trends can yet be determined for those nutrients.

A free, interactive website (soiltest.ipni.net) has been developed to access data on any combination of states and provinces. Data are available from 2001 to 2015 and include percentages of samples in various soil test categories and changes in those percentages over time. Data from state to state and province to province are often quite variable.

North American agriculture relies heavily on soil testing to assess soil fertility and guide future nutrient management decisions. This summary demonstrates that soil tests do indeed change over time in response to management. Producers who have soils that have not been sampled recently have much to gain by getting into the regular practice of soil sampling.

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