

Don't Ignore Soil Fertility After Planting

BLUE SPRINGS, MO.

After spring planting, farmers often put soil fertility on the back burner to concentrate on protecting crops from insects, diseases and weeds. This can be a costly mistake, said a University of Missouri Extension agronomy specialist.

"Farmers should scout for nutrient deficiencies throughout the growing season, just as they monitor for insects, diseases and weeds," said Travis Harper.

Soil that was adequately fertilized before planting won't necessarily stay that way throughout the season, Harper said. Soil moisture, compaction, acidity and temperature all can affect nutrient availability.

Peter Scharf, University of Missouri Extension agronomist, estimates that nearly 70 million bushels of corn in Missouri were lost due to nitrogen deficiency in 2008. Most farmers applied enough nitrogen before planting, but heavy spring rains resulted in extensive nitrogen loss due to volatilization, runoff or leaching.

Signs of nutrient deficiency vary by crop and nutrient. When nutrient deficiencies occur, rescue fertilizer applications may be possible. If it is too late for an application, document the nutrient deficiency and the conditions that may have caused it. Tracking this information can help avoid similar nutrient deficiencies in the future.

"Plant tissue testing, when used in conjunction with soil testing, will minimize potential yield loss due to nutrient deficiencies," Harper said.

Tests of soil and plant tissue samples are available through county extension centers or MU Extension's Soil and Plant Testing Laboratory. For more information, see soilplantlab.missouri.edu/soil or call 573-882-0623.

The MU Extension publication "Crop Nutrient Deficiencies and Toxicities" (IPM1016) is available for purchase or free download at extension.missouri.edu/publications/DisplayPub.aspx?P=IPM1016. Δ