Free guides available to help interpret soil tests

August 03, 2007

Two new guides are available to help you interpret soil test reports and determine fertilizer rates.

Soil sampling is the most important tool in developing an efficient soil fertility program and is the best way to determine nutrient availability, says Clain Jones, Extension soil fertility specialist in the Department of Land Resources and Environmental Sciences.

"Soil sampling provides the information you need to determine fertilizer rates specific to your soil and crops," Jones says. "Prior to the growing season, soil sampling provides an estimate of your soil's current nutrient availability, and can also indicate the efficiency of your fertilizer use. With near record fertilizer and commodity prices, accurate fertilizer rates are more important than ever to maximize your profit."

Typically in Montana soils, a two percent organic matter content is considered normal. Soils that contain greater amounts of organic matter will provide more nitrogen and soils that test lower in organic matter will provide less nitrogen.

"General guidelines are to reduce fertilizer nitrogen recommendations by 20 pounds per acre for soils with greater than three percent organic matter, and to increase fertilizer nitrogen recommendations by 20 pounds per acre for soils with less than one percent organic matter," Jones says. He added that, "Soils that are low in organic matter typically have poor soil structure, which reduces water holding capacity and increases the risk of soil loss from erosion."

More information is available in the new MontGuides "Interpretation of Soil Test Reports for Agriculture" (MT200702AG) and "Developing Fertilizer Recommendations for Agriculture" (MT200703AG).

"By using these new MontGuides, you can interpret your soil test report and calculate optimum fertilizer rates based on the report," Jones said. Both guides provide examples on how to calculate and adjust fertilizer rates in order to maximize fertilizer efficiency and crop yield.

For copies of the MontGuides, please refer to the Web at http://www.montana.edu/wwwpb/coms.prev/\$order.html or call Extension Publications at (406) 994-3273. Contact your local MSU Extension agent (http://extn.msu.montana.edu/localoffices.asp) or crop adviser for help with your soil test results and for specific fertilizer decisions.

Contact: Clain Jones (406) 994-6076 or clainj@montana.edu