SOIL TEST REPORT

Results also available on-line at http://uwlab.soils.wisc.edu/reports

This Report is for:
Bucky Badger

NUTRIENT RECOMMENDATIONS

<table>
<thead>
<tr>
<th>Cropping Sequence</th>
<th>Yield Goal</th>
<th>Crop Nutrient Need</th>
<th>Legume Nutrient Need</th>
<th>Fertilizer Credit</th>
<th>Nuts to Apply</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>per ac.</td>
<td>K2O</td>
<td>N</td>
<td>P2O5</td>
<td>K2O</td>
</tr>
<tr>
<td>Corn, grain</td>
<td>131-150 bu</td>
<td>below 30</td>
<td>85</td>
<td>80</td>
<td>45</td>
</tr>
<tr>
<td>Soybean, grain</td>
<td>46.5-56 bu</td>
<td>0</td>
<td>0</td>
<td>130</td>
<td>0</td>
</tr>
<tr>
<td>Alfalfa, seeding</td>
<td>1-2.5 ton</td>
<td>0</td>
<td>25</td>
<td>155</td>
<td>0</td>
</tr>
<tr>
<td>Alfalfa, established</td>
<td>4.6-5.5 ton</td>
<td>0</td>
<td>0</td>
<td>350</td>
<td>0</td>
</tr>
</tbody>
</table>

6) For corn following small grains on medium and fine textured soils, the middle to low end of the range is most appropriate.

5) If there is a likelihood of residual N, then use the low end of the range or use the high end of the range and subtract preplant nitrate test (PPNT) credits.

4) For medium and fine textured soils with 10% or more organic matter, use the low end of the range; for medium and fine textured soils with less than 2% organic matter, use the high end of the range.

3) If 100% of the N will come from organic sources, use the top end of the range. In addition, up to 20 lb N/ac in starter fertilizer may be applied in this situation.

2) For small grains grown on medium and fine textured soils, the mid to low end of the profitable range is the most appropriate.

1) If there is more than 50% residue cover at planting, use the upper end of the range.

NUTRIENT RECOMMENDATIONS:

Guidelines for choosing an appropriate N application rate for corn (grain)
1) If there is more than 50% residue cover at planting, use the upper end of the range.
2) For small grains grown on medium and fine textured soils, the mid to low end of the profitable range is the most appropriate.
3) If 100% of the N will come from organic sources, use the top end of the range. In addition, up to 20 lb N/ac in starter fertilizer may be applied in this situation.
4) For medium and fine textured soils with 10% or more organic matter, use the low end of the range; for medium and fine textured soils with less than 2% organic matter, use the high end of the range.
5) If there is a likelihood of residual N, then use the low end of the range or use the high end of the range and subtract preplant nitrate test (PPNT) credits.
6) For corn following small grains on medium and fine textured soils, the middle to low end of the range is most appropriate.

SUGGESTED N APPLICATION RATES FOR CORN (GRAIN) AT DIFFERENT N:CORN PRICE RATIOS

<table>
<thead>
<tr>
<th>N: Corn Price Ratio ($/lb N:$/bu)</th>
<th>Rate 0.05</th>
<th>Range 120-160</th>
<th>Rate 0.10</th>
<th>Range 80-100</th>
<th>Rate 0.15</th>
<th>Range 60-80</th>
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</thead>
</table>

Guidelines for choosing an appropriate N application rate for corn (grain)
1) If there is more than 50% residue cover at planting, use the upper end of the range.
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6) For corn following small grains on medium and fine textured soils, the middle to low end of the range is most appropriate.

ADDITIONAL INFORMATION

First year legume N credit is based on a previous fair stand of alfalfa, established with less than 8" of regrowth, as specified on sample submission form.

Fertilizer credit based on 1 year(s) of 15 tons/ac of surface dairy manure.

Lime recommendation may not achieve desired pH in 3 years. Retest then and apply as recommended.

If lime has been applied in the last two years, more lime may not be needed due to incomplete reaction.

Recommended rates are the total amount of nutrients to apply (N-P-K), including starter fertilizer.

This soil should be monitored more closely because of its relatively low potassium buffering capacity.

Start fertilizer (e.g. 10+20+20 lbs N-P2O5+K2O/ac) is advisable for row crops on soils slow to warm in the spring.

Year 1: If corn is harvested for silage instead of grain add extra 30 lbs P2O5 per acre and 90 lbs K2O per acre to next crop.

If alfalfa will be maintained for more than three years, increase recommended K2O by 20% each year.

For more information on the new N application rate guidelines for corn see http://uwlab.soils.wisc.edu/pubs/MRTN.pdf.

TEST INTERPRETATION

Rotation pH XXXXXXX

LABORATORY ANALYSIS

<table>
<thead>
<tr>
<th>Sample Identification</th>
<th>Soil pH</th>
<th>C.E.C.</th>
<th>P2O5 ppm</th>
<th>K2O ppm</th>
<th>Mg ppm</th>
<th>Mn ppm</th>
<th>Zn ppm</th>
<th>Sulfur ppm</th>
<th>Texture Code</th>
<th>Sample Density</th>
<th>Buffer pH</th>
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<tbody>
<tr>
<td>1</td>
<td>5.8</td>
<td>2.1</td>
<td>23</td>
<td>65</td>
<td>15.8</td>
<td>1</td>
<td>2</td>
<td>1.01</td>
<td>6.2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Adjusted Averages</td>
<td>5.8</td>
<td>2.1</td>
<td>23</td>
<td>65</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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