## Diagnostic key for identifying nutrient toxicities in rice

<table>
<thead>
<tr>
<th>Nutrient Toxicities</th>
<th>Mn</th>
<th>Fe</th>
<th>Al</th>
<th>Sulfide</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intervinal chlorosis of emerging leaves</td>
<td>Leaf symptoms similar to Fe deficiency</td>
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<td>Leaf symptoms similar to Fe deficiency</td>
<td>Leaf symptoms similar to Fe deficiency</td>
</tr>
<tr>
<td>Localized on older leaves first</td>
<td>White leaf tips</td>
<td>Yellow to white tip mottling of interveins</td>
<td>Leaf tip death scorch</td>
<td>Leaf tip death scorch</td>
</tr>
<tr>
<td>Stunted growth, reduced tillering</td>
<td>Stunted growth, reduced tillering</td>
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<td>Stunted growth, reduced tillering</td>
<td>Stunted growth, reduced tillering</td>
</tr>
<tr>
<td>Narrow leaves</td>
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<td>Narrow leaves</td>
</tr>
<tr>
<td>Acid upland soils</td>
<td>Acid sulfate soils</td>
<td>Acid sulfate soils</td>
<td>Acid sulfate soils</td>
<td>Acid sulfate soils</td>
</tr>
<tr>
<td>Very rare in irrigated rice</td>
<td>Some costal saline soils</td>
<td>Under permanent flooding</td>
<td>Often associated with other nutrient deficiencies</td>
<td>Often associated with other nutrient deficiencies</td>
</tr>
<tr>
<td>Black coating on root surfaces</td>
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<td>Black coating on root surfaces</td>
</tr>
<tr>
<td>Under permanent flooding</td>
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<td>Under permanent flooding</td>
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</tr>
<tr>
<td>Mainly on acid upland soils</td>
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</tr>
<tr>
<td>Flooded soils with pH&lt;4</td>
<td>Flooded soils with pH&lt;4</td>
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<td>Flooded soils with pH&lt;4</td>
<td>Flooded soils with pH&lt;4</td>
</tr>
<tr>
<td>Acid sandy saline soils</td>
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