

### Iron Deficiency in tomatoes

(Physiological disorder)

	Prevention	Monitoring	Direct Control	Direct Control	Restrictions
 <p>Leaf chlorosis on young leaf (Source: <a href="http://biology.clemson.edu">http://biology.clemson.edu</a>)</p>  <p>The old leaves are green while and the younger leaves are bright yellow (Source: <a href="http://biology.clemson.edu">biology.clemson.edu</a>)</p>  <p>Advance stages of chlorosis in tomatoes (Source: <a href="http://www.yara.us">www.yara.us</a>)</p>	<ul style="list-style-type: none"> <li>◆ Avoid burning of crop residue in the cropping area</li> <li>◆ Incorporate organic materials such as compost manure (400kg/acre) in the soil to avoid poor drainage or cracking of the soil when dry</li> <li>◆ Construct drainage canals to avoid water logging on the farm</li> <li>◆ Leave the farm fallow for at least 1 season</li> <li>◆ Always test your soils for iron levels and pH, 1-2 months before planting</li> <li>◆ Carry out yearly monitoring of soil PH. If it is above 7 take action</li> </ul>	<p>Look for:</p> <ul style="list-style-type: none"> <li>◆ yellowing and interveinal chlorosis on new emerging leaves of the plant with old leaves still green</li> <li>◆ stunted chlorotic tomato plants</li> <li>◆ Start direct control when you notice 1-2 new leaves are showing bright yellow colour.</li> </ul>	<ul style="list-style-type: none"> <li>◆ Use commercial organic fertilizer Yad bio-vitalizer (contains 15637ppm) at a rate of 300kg/acre (750 kg/ha)</li> <li>◆ Incorporate organic materials such as Tithonia leaves and soft branches, compost or farmyard others in soil at planting at the rate of 0.5 kg/m<sup>2</sup> (2 tons/acre)</li> </ul>	<ul style="list-style-type: none"> <li>◆ Apply inorganic fertilizers (iron sulphate, Mavuno, YaraMila or cereal) during planting at recommended rates after soil testing</li> <li>◆ Spray foliar feeds (Iron sulphate, Bayfolan, Wuxal) as per instructions and repeat after 14 days if iron deficiency is severe.</li> </ul>	<ul style="list-style-type: none"> <li>◆ Always wear protective clothing when applying fertilizers</li> <li>◆ Always follow instructions on the label such as dosage, timing of application, maximum number of applications and protective clothing.</li> <li>◆ Dispose excess fertilizer properly to avoid aquatic contamination</li> <li>◆ Store mineral fertilizers at dry conditions and separate from pesticides</li> </ul>
  <p>Ministry of Agriculture</p>	<p><b>Kenya</b>  <b>CREATED:</b> August 2014 <b>USER FEEDBACK:</b> Please send your comments to <a href="mailto:plantwise@cabi.org">plantwise@cabi.org</a>  <b>AUTHORS:</b> Kagai K.K (MoAL&amp;F), Oyoo J.(KALRO), Gachini G.N. (KALRO) and Otipa M (KALRO),  <b>EDITED BY:</b> Judith Oyoo (KALRO), PeninahMunyao (MoAL&amp;F) and Wilson Nabakwe(MoAL&amp;F)</p>				