

(revision date:4/30/2013)

## ***Common Cultural: Nutrient deficiency***

*Use Integrated Pest Management (IPM) for successful plant problem management.*

### ***Biology***

An insufficient supply of mineral nutrients can result in a variety of symptoms on plants. Nitrogen deficiency typically causes a chlorotic yellowing of older leaves. Iron deficiency symptoms are observed on the new growth as interveinal chlorosis (leaves yellow between the veins, while the major veins remain green). High pH soils which bind iron can cause tip chlorosis and necrosis on certain plants. Magnesium deficiency can also cause interveinal chlorosis. Boron deficiency can cause necrotic spotting or flecking on leaves.

### ***Management Options***

#### **Non-Chemical Management**

- ~ Have your soil tested for pH and nutrients. Fertilize accordingly.
- ~ Remove construction debris from soil. Lime leaching from concrete can raise soil pH and affect nutrient availability.
- ~ Root damage or disease, or trunk or branch injuries such as sunscald, cankers, or bark damage from string trimmers can impede nutrient uptake and distribution.

*Select non-chemical management options as your first choice!*

#### **Chemical Management**

***IMPORTANT: Visit Home and Garden Fact Sheets for more information on using pesticides***

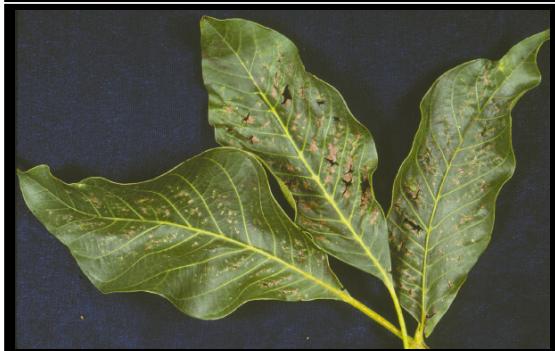
None recommended

*Common Cultural: Nutrient deficiency*

*Images*



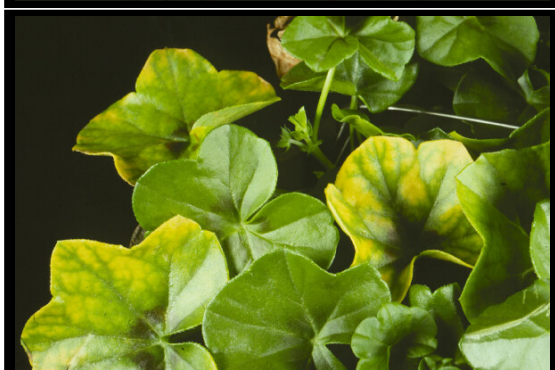
~ Caption: Iron deficiency on river birch  
~ Photo by: R. Maleike



~ Caption: Boron deficiency on walnut  
~ Photo by: R.S. Byther



~ Caption: Lily scorch (calcium deficiency)  
~ Photo by: R.S. Byther



~ Caption: Magnesium deficiency on geranium  
~ Photo by: R.S. Byther



~ Caption: Nitrogen deficiency on impatiens  
~ Photo by: R. Maleike



~ Caption: Iron deficiency on rose  
~ Photo by: R.S. Byther



~ Caption: Lime-induced chlorosis  
~ Photo by: R. Maleike



~ Caption: pH-induced chlorosis  
~ Photo by: R. Maleike



~ *Caption: Iron deficiency on juniper*  
~ *Photo by: R.S. Byther*