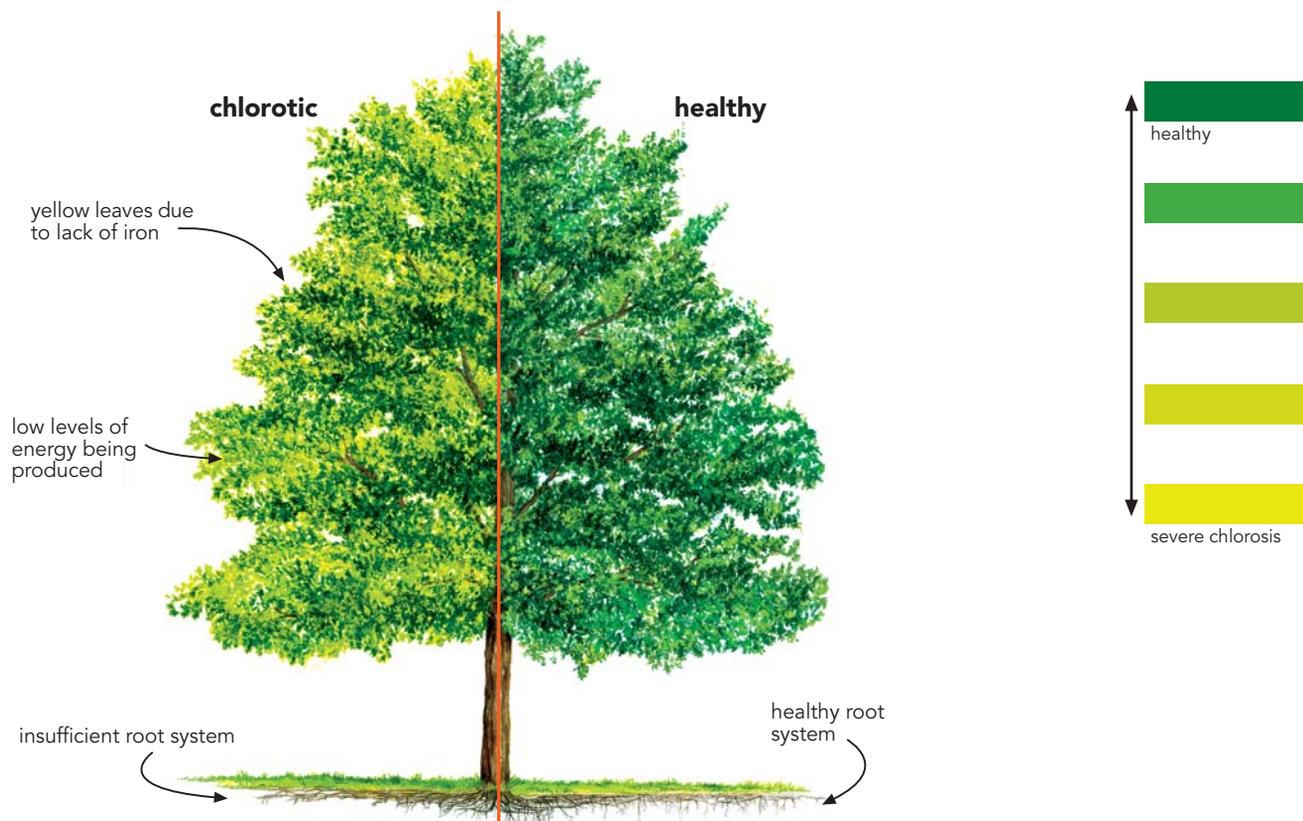


Caring for trees with Chlorosis



What is Chlorosis?

Chlorosis in trees can have many causes, but no matter what the cause, it ultimately results in a tree that is not manufacturing enough chlorophyll. Because chlorophyll is the green pigment found in leaves, this condition is easy to diagnose. Typically the leaves will be yellow and in extreme cases the leaves will be white.

If My Tree Has Chlorosis

What Does This Mean?

Because chlorophyll is the molecule that a tree utilizes to make energy for itself, trees with chlorosis are making less energy than they normally would. This condition results in a weaker, less durable tree that will rarely make it to maturity. Chlorotic trees are usually declining and will often die without treatment.

What Causes Interveinal Chlorosis?

There are a number of common causes of chlorosis; this includes root or vascular disease, over watering, or drought. However the health of the trees root system appears to be the key. A healthy root system will be able to extract the necessary nutrients a tree needs to make chlorophyll and perform all of its other metabolic processes.

Chlorotic Trees Are Trapped In a Catch 22

A healthy root system requires food made in the leaves to function and grow. Healthy leaves require healthy roots to extract nutrients from the soil. Without one, the other languishes. Without human intervention – the tree will be stuck in a decline spiral that will eventually lead to its death.

Treating Chlorosis

Nursing a tree afflicted with chlorosis back to health requires 2 things: Increase the amount of Chlorophyll in the tree and stimulate the tree to grow a healthy root system. The first step is for your arborist to diagnose why your tree is stuck in this decline spiral:

Common Reasons Trees Are Chlorotic:

- Tree never got well established
- Severe soil compaction
- Too Much Water
- Root Severing
- Disease or Insects
- Drought or overheated soil

Treating the Whole Problem – Not Just the Symptoms



Using Verdur™ to Stimulate Chlorophyll Production

Verdur is a readily available form of iron that last up to 3 years. The purpose of treatment is to evenly and completely cover the entire crown of the tree with enough active ingredient. This is done through a process called macro-infusion. The best time to treat trees is in the fall or anytime time during the dormant season. Treatments during the growing season can result in leaf drop. Results last approximately 3 years from one treatment.



Untreated Pin Oak



One year after Treatment with Verdur and Cambistat

Using Cambistat® to Stimulate the Root System

Cambistat has been shown in university studies to increase the size and surface area of root systems. It slows the expansion of cells in the top part of the plant which allows energy to be redirected to other parts of the plant. It also increases a hormone that stimulates root growth. This combination of events increases the plants health and vitality.

Other Cultural Practices

Certain species of trees such as river birch and silver maples have evolved in river bottoms or soils rich in organic matter. These trees have a difficult time maintaining a healthy root system in urban areas that have poor soil conditions. It is recommended that a mulch ring be placed around the tree. Mulch provides a more favorable growing environment for roots.



Cambistat®

for greener, healthier, lower maintenance tree



Untreated



3 years after Treatment with Cambistat



Untreated



3 years after Treatment with Cambistat