



Chartreuse isn't the first color we think of to describe tree leaves. The color is half green/half yellow, but it's the perfect color to describe many trees in the area right now. What is causing trees to be this color and why is it happening now? Chlorosis could be the culprit and there are many causes for yellow/green color. With a little knowledge you can make your trees return to their dark green color.

Chlorosis describes any condition in which leaves or needles develop an abnormally light green or yellow color. Symptoms of iron chlorosis include yellow or pale green leaves with darker green veins. If severe enough, it can be left to burn or brown along the edge of the leaf or along the veins and dieback of the branches. If the tree is severely affected, it can lead to the decline and death of the tree.

There are many causes of chlorosis, but the most common reason for chartreuse leaves in our part of the state is due to iron chlorosis. Ferric chlorosis is caused by an iron deficiency in the tree. It causes trees to turn light green/yellow. Often, the high pH of our soil makes iron unavailable to the tree. We have iron in the soil, but it is difficult for the tree to absorb it. Other factors that can cause chlorosis include wet and/or compacted soils, damage to roots, high levels of nitrogen or phosphate, or low levels of other micronutrients such as manganese.

Some trees are more affected by iron chlorosis than others. The trees that most commonly suffer from iron chlorosis include some maple species such as silver, red, and Freeman; Oak pin, crab apple tree, pear, baldcypress and birch. Some other trees may suffer from this deficiency, but sometimes have underlying conditions that aggravate the severity of the deficiency.

There are several methods to treat chlorosis. Treatments depend on the size of the tree and each has its advantages and disadvantages. If you have a sapling with severe ferrous chlorosis, it might be more cost-effective and beneficial to select a replacement tree that is not susceptible to ferric chlorosis. Applying a product such as sulfur to the area around the tree can help lower the pH of the soil and make iron more available to the tree. This method is cheap, but it is a slow method. Changing the pH of the soil around the tree can take a year or two before improvements can be seen.

Combating iron chlorosis by applying iron chelate directly to the soil is another method. These products contain EDDHA (FeEDDHA) or ethylenediamine di-(o-hydroxyphenylacetate). These products are soluble in water and can be dissolved in water and poured around the base of the tree. This method can be expensive and have short-term effects, meaning that more applications would be needed annually to have an effect.

Other methods place iron directly on the tree trunk. Trunk injections or iron implants can put iron directly into the tree trunk through holes drilled in the root flare. These methods are effective and can last from 1 to 3 years. The disadvantages are that these methods create a wound on the tree every time it is treated. Over time, the tree may become completely snug and unable to absorb moisture. Iron injections must be performed by a certified pesticide applicator, which can increase the cost. The best time of year for treatments is in the fall or spring of the year. Making applications right now in the heat of summer is not a good idea. The tree may not absorb the iron and, in some cases, may burn or burn the tree.

The Whitcomb Method places a grid of holes that are drilled into the ground beneath the tree canopy and filled with three products: sulfur, a complete fertilizer, and a micronutrient fertilizer. This method can be very effective and provide long-term chlorosis control, but the initial treatment is labor-intensive and micronutrient products can be difficult to find.

Iron nails, shavings or other forms of solid iron buried in the ground or placed directly in the tree are not effective in treating iron chlorosis and should be avoided.

Don't let chartreuse leaves get you down. With a little iron or a little sulfur, you can have your trees in all the green glory in no time.

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