

BEAUTY AND ORDER

JULY 2015

Folks just called him 'Yellow'

**From the song recorded by Kenny Rogers, "Coward of the County"*

Plant growers and breeders are constantly looking for yellow shrubs that do a great job of lighting up dark areas in a landscape, but when it comes to trees, few are available.

Now, you may challenge me and that statement citing the observation of "yellow" trees all over town - but hold your horses!



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What you may be observing are trees with a nutritional problem called chlorosis.

Yellowing or chlorosis of birch, maple and oak leaves is often caused by the lack of

the available micro-nutrients iron and/or manganese.

Although they are needed in small quantities, they are just as essential for proper plant growth as the macronutrients, also known as the big three: nitrogen, phosphorus and potassium (N-P-K).

It is important to call out the word "available" as although there is nearly always plenty present in the soil, a high or alkaline soil pH (around > 7.5) causes the iron to get bound up in the chemistry of the soil and the tree can't pull it away; similar to a super-small magnet.

This results in a reduction in photosynthesis and chlorophyll production, and in time, yellow leaves.

The tell-tale diagnostic of chlorosis are green veins, but yellow leaf margins. Also, iron is a non-mobile ion, which

does not allow older leaves to give it to the newer leaves (like nitrogen which is mobile), so it is usually the worst at the tips of the branch.

If the deficiency continues long-term, often the leaves become stunted, turn black and/or brown and fall to the ground. In severe cases, twigs are lost and ultimately entire branches and/or the entire tree.

Treatment can be tricky in trees larger than 4 inches in diameter; the root plate is so large it becomes impractical to correct with soil treatments and requires an injection directly into the trunk (a tree IV of sorts).



Photos by Randy James

Because of the special nature of this procedure, we normally handle this work through our separate but "sister" company called Tree BioLogics Inc.

So if you have a yellow tree and wonder if it is supposed to be, let us know and we will see if we can get you back in the green... which is almost always a good place to be.



Top: The tell-tale diagnostic of chlorosis: green veins, but yellow leaf margins. Above: An overview of the entire tree.

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residential landscape management
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LANDSCAPE MANAGEMENT

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Our Mission: To serve and encourage property owners by creating and protecting landscape beauty and order.