

June 13, 2015

**What a time of year it is – for example, berry season starts with strawberries galore from local gardens, orchards and farm markets. Partake with great gusto. And now for a few of your gardening questions:**

**Q. - Does the discoloration of the leaves of the River Birch in the attached photo look like micronutrient deficiency to you? Iron maybe? Some spotting and maybe some pathogen is present, but that appears to be a separate issue to me. Your thoughts? – Mike H., Columbus**

A. – Although river birch is susceptible to leaf yellowing between the veins (interveinal chlorosis to be fancy) in alkaline soils resulting in iron deficiency, I suspect the problem in this case is the dry period we had for several weeks in May. These conditions, common throughout Ohio including northeast Ohio, results in what seems like major leaf yellowing and drop on river birch a week or so after the dry period. However, typically it is just the tree's way of limiting water loss through transpiration in the leaves. Some leaves yellow and drop, the better for the rest of the tree to function. Generally, the leaf drop is well less than 10% of the tree's foliage, though it often seems like more when the ground and sidewalk is littered with leaves. As long as the tree is otherwise in a good home, with slightly acid, moist but well-drained organic soil, all should be fine.

**Q. - There is a smelly black substance oozing from my silver maple. What is wrong with my tree and can it be saved? – Gina C., Tallmadge**

A. - There are several problems that cause oozing on trees. Based on the description, it sounds like you have bacterial wetwood, also called slime flux. The wetwood pathogen can be present in soil and water and typically enters a tree through root wounds. The disease affects a great variety of shade and ornamental trees including (but not limited to) elm, redbud, aspen, dogwood, beech, maple, sycamore, oak, tuliptree, cottonwood, and willow.

Signs of infection include light or dark streaks on your tree bark that originate from a crack or wound, slimy and sometimes foul smelling liquid running down the tree, and heartwood that is darker than the surrounding sapwood. As bacteria grow deep within the tree tissue, they begin a fermentation process, which leads to a buildup of pressure. The pressure forces the bacterial ooze out of the tree through cracks and pruning wounds. The foul smelling ooze discolors the tree and may attract insects.

Unless the tree is already stressed, bacterial wetwood usually does not cause tree decline or death. There is no control for bacterial wetwood. In many cases, preventing other stresses, like soil compaction, nutrient depletion and dryness, is the only management option. Keeping the tree healthy will allow it to compensate for the bacterial wetwood.

xxx

**Heather was going to send a question in soon, but here is another option if you need to go ahead with the copy before it arrives. Will send pictures for the river birch question and the smoke bush question.**

**Q. – What is this strange plant? – Anna C., Detroit, MI**

A. – This plant, a smoke bush, is indeed strange-looking, in this case partly due to the pruning method used on the High Line in Manhattan where this picture was taken. The plants are trained to have pompom like heads, which are quite dramatic against the urban scenes on the High Line. Though it would require some sleuthing, I suspect this particular plant is *Cotinus* ‘Grace’, a hybrid between the European smoke bush and American smoke bush. It has great multi-season effects, with the deep red foliage quite spectacular in fall with changes to oranges, purples and multiple hues on the same plant. Now, it sports its eponymous smoky effect of its flowering inflorescence. Smoke bush is a very tough plant, tolerating drought and varied soil conditions.