

THE PURDUE LANDSCAPE REPORT

Early Fall Color – A Symptom of Stress

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Many trees are planted for their beautiful fall color, especially in locations where the climate provides reliable autumn weather. I have said this multiple times during extension talks and conversations with submitters to the PPDL, but I seem to have not experienced a 'normal' fall since moving to Indiana with how erratic the weather has been from year to year. Depending on weather conditions, such as high heat and drought, colors may develop early or may be duller for specific varieties than expected.



However, individual trees that begin to show fall colors earlier than expected (August, September, even early October) may be shouting out a proverbial cry for help. Plants will often show yellow or red foliage coloration during periods of stress, so this may occur at any point during spring, summer, or fall. Individual trees may also show fall coloration earlier than others of their species in the same area. Now is the time to keep an eye out for this kind of early fall color as it can give you a heads-up on issues

you can expect next year.

When examining a tree with early fall color, I would recommend checking the following:

- Is there a root flare?
<https://www.purduelandscape.com/article/another-case-of-mortality-from-planting-trees-too-deep/>
 - If not – tree could be planted too deep or the soil grade may have been changed
- Is there any obvious damage to the trunk, root flare, or surface roots?
 - If so, there could be internal decay that is not obvious and could be contributing to stress
- Are there any girdling roots?
<https://www.purduelandscape.com/article/stem-girdling-roots/>
 - If present, they could be affecting the vascular system and strangling the tree
- Is the rootzone mulched?
 - If not, the tree could be under stress from earlier drought, or weed and grass competition.
 - If so, make sure it is not mounded against the trunk of the tree
- Does the soil appear compacted? Was there construction near the tree within the last 5 years?
 - Compaction leads to issues with water, nutrient, and even oxygen availability to the roots and could lead to general decline

It is important to know the host species, but with the sheer volume of plant material available for sale in the nursery trade, it is even more important to know the cultivar that you are planting so you know what you might expect coming into the fall.

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