

Fall colors are generated when chlorophyll is destroyed and other pigments revealed or manufactured. Any climatic, site, or tree feature that affects pigment changes will affect fall colors. Probably most important to strong color presentations are the weather patterns of summer and fall. In some trees (with ring-porus architecture), even events early in the previous summer can affect this year's fall colors.

The best conditions for fall tree colors are:

- A) cool night temperatures with no freezes or frosts;
- B) cool, bright, unclouded sunny days; and,
- C) slight drought conditions in the last half of the growing season and on into the fall.

As in all life-associated functions, a healthy tree is needed for best color presentations. A simple summary of good color conditions would be cool (not freezing), sunny, and dry.

Fall rain fronts and long overcast periods diminish color presentation. So do strong wind storms that blow the leaves from the trees. Wet and humid growing seasons lead to many leaf infections and premature leaf abscision. Freezing temperature and hard frosts stop color formation dead.

To understand the presentation of fall colors, you need to examine the primary pigments involved in color changes, chlorophylls, carotenoids, and anthocyanins. The best color presentations are the additive effects and good fortunes of a healthy tree and perfect climate attributes. With so many different events leading to great tree color, only a few years have the perfect combination for best colors.

Further Information:

- Coder, Kim D. 1997. Autumn Forest and Landscape Color. University of Georgia Cooperative Extension Service Forest Resources publication FOR97-31. pp. 2..
- Coder, Kim D. 1997. Fall Tree Color Outline. University of Georgia Cooperative Extension Service Forest Resources publication pp. 1.
- Coder, Kim D. 1997. Fall Tree Color Pigments. University of Georgia Cooperative Service Extension Forest Resources publication FOR97-30. pp. 3.

Coder, Kim D. 1997. Initiating Fall Leaf Colors. University of Georgia Cooperative Extension Service Forest Resources publication FOR97-28. pp. 2.



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