

## Why Do Trees Change Color?

One of the obvious signs of fall is the changing color of the leaves on trees. Orange, red, purple, yellow, brown, and variations thereof make for beautiful landscapes.

The process of making food for a tree takes place within the leaf, but in the fall this process stops. Chlorophyll, which is the extraordinary chemical that gives the leaves their green color in the spring and summer, begins to break down as the temperatures lower and the sunlight decreases. At the same time, other chemical changes increase, which form red pigments. The resulting chemical process leaves behind beautiful fall colors.

Sugar maples usually turn bright orange. Some oaks and a few other tree species turn brown, red, or russet and may keep their leaves until spring. Some of the yellow leaf colors may come from beech, elm, aspen, poplar, birch, ginkgo, or hickory. Others, like sumac and dogwoods, show various shades of red and purple for their autumn display. Weather affects the intensity of the leaf color. Rainy and overcast cool days increase the intensity of the fall colors, while early frost weakens it. Trees lose their leaves to conserve energy throughout winter. Take time to take a walk or a bike ride to get out into the wonderful fall weather and enjoy the changing colors.

For more information, please see

<https://www.esf.edu/pubprog/brochure/leaves/leaves.htm#:~:text=But%20in%20the%20fall%2C%20because,part%20of%20their%20fall%20splendor.>

Carol Lea Brown, OSU Extension Greene County Master Gardener Volunteer.