

# Japanese Maples

## Why Japanese Maples and Other Purple Leafed Plants Might Turn Green

Plants such as: red leaf Japanese Maples (*Acer palmatum*); Purple Smoke Bush (*Cotinus*), Purple Leaved Plums (*Prunus cerasifera*), Fringe Flower (*Loropetalum*) and some European Beech varieties (*Fagus sylvatica*) are grown for their red or purple foliage. In the spring they leaf out in shades of vibrant reds and purples and will usually hold that color all season if planted in ideal conditions. Sometimes things don't go quite as planned and your red Japanese maple may turn to a shade of green. This does not indicate an ailment and is quite normal. There are several reasons that can cause this phenomenon.

### Too Much Shade/Too Much Sun

While Japanese Maples can grow in full sun to full shade, they will always look their best in morning sun and afternoon shade. The pigment anthocyanin that causes leaves to be purple or red and can only be produced in adequate sun. If there isn't enough sun the leaves produce more chlorophyll that will cause the leaves to turn green in order to help them photosynthesize more efficiently in the lower light levels. Maryland summers can be brutally hot and too much afternoon sun will also result in more chlorophyll production. So it's best to plant them on the east side of a house where they benefit from the softer morning sun and be shaded from the intense afternoon heat.

### Too Much Water

Since anthocyanins are a sugar producing pigment, too much water will leach those sugars out of the leaves causing the color to fade. Try not to over water and use a rain gauge to see how much precipitation has fallen that week. Newly planted trees and shrubs require one inch of water per week to become well established. Occasionally we may get prolonged periods of rain in the spring and the only course of action is to make sure the tree or shrub has been properly planted and given sufficient drainage.

### Nutrient Deficiency

Nutrient deficiencies can also cause leaves that are normally red or purple to turn green. One sign of nutrient deficiency is the leaf will turn more yellowish green with dark green veins. When selecting a fertilizer be sure to get one that also has micronutrients in addition to the normal NPK. Deficiencies in micronutrients such as Magnesium and Manganese are often the culprit.

### Soil pH

Japanese maples can tolerate a range of pH but for best performance they prefer slightly acidic soil. That means a pH of less than 7. If the soil is too alkaline the leaves will turn yellow while the veins will retain their original color of red, purple or green. Before attempting to alter pH it is best to test the soil. It is a free service we offer at American Plant and only takes a couple minutes. Once you know your exact pH you can then lower it accordingly.

### Rootstock Reversion

Almost all commercially available Japanese Maples are grafted to a generic, straight species rootstock. The straight species of Japanese maple has a better root system for heavier soils than the cultivated varieties grown for foliage color. They also have green leaves. Occasionally, especially in times of stress, the rootstock will send up shoots from beneath the graft union. The more vigorous rootstock can eventually overtake the slower growing red or purple graft. These shoots should be pruned off immediately because it can take over and ruin the cultivated species. If the tree was planted with the graft union below the soil it can lead to even worse reversion that will quickly revert the entire tree. Proper planting practices should prevent this from happening.



**Bethesda-Chevy Chase**  
5258 River Road  
Bethesda, MD 20816  
301-656-3311

[americanplant.net](http://americanplant.net)

**Beltway**  
7405 River Road  
Bethesda, MD 20817  
301-469-7690

**Landscape Design**  
**Build | Maintain**  
301-762-6301

## Choose the Right Cultivar

Some Japanese Maples will hold their color better than others. Here is a list of the best.

### **Weeping/Laceleaf:**

**Tamukeyama** – Small mounding tree that gets to 5-10' tall and wide can tolerate hot afternoon sun without burning. Leaves emerge deep crimson red in spring then more dark reddish purple in summer. Fall color is bright scarlet.

**Red Dragon** – Small mounding tree that gets 6-8' tall and wide. Spring color is bright scarlet then dark burgundy in early summer. Fall color is back to bright scarlet. Hold its color better than any of the other cultivars in sun or shade throughout the summer.

**Crimson Queen** – strongly cascading small tree that gets 5-10' tall and 6-12' wide. Stays very red throughout the growing season and can withstand very hot sun and not burn. In full sun will turn orange red and stays deep red in partial shade. Fall color is bright scarlet.

### **Upright Japanese Maples:**

**Bloodgood** – medium sized upright tree that matures to 15-20' tall and wide. Holds red color throughout the summer and does not bronze like many other cultivars in sun or part shade and is one of the most cold hardy cultivars. Fall color is bright crimson.

**Emperor 1** – medium sized upright tree that grows rapidly to 15-20' tall and wide. Leaves emerge two weeks later than other Japanese maples making it less likely to be damaged by late frosts. Foliage color is a dark purplish red in spring and summer turning to dark crimson in fall. Holds color in sun or shade.

**Fireglow** – small upright growing tree gets to 12-15' tall and 8-10' wide. Red leaves are more intensely red than Bloodgood and color persists throughout the summer even in hot, full sun. By early fall leaves become shades of purple, red and green then turning to bright crimson. When the leaves are backlit by the sun there is a strong translucent red glow.



**Bethesda-Chevy Chase**  
5258 River Road  
Bethesda, MD 20816  
301-656-3311

[americanplant.net](http://americanplant.net)

**Beltway**  
7405 River Road  
Bethesda, MD 20817  
301-469-7690

**Landscape Design**  
**Build | Maintain**  
301-762-6301