

# The colours of Autumn



During the spring and summer months leaves are filled with green chlorophyll.

Chlorophyll is the green pigment in the plants that helps plants create energy.

Spring/  
summer

The sun activates chlorophyll to make food in leaves.

Chlorophyll changes

$\text{CO}_2 + \text{H}_2\text{O}$   
(carbon dioxide) (water)

into sugars



Autumn

In autumn, the weather cools and the leaves start to receive less sun. Trees realise that winter is about to begin and chlorophyll breaks down and the other colourful pigments are revealed.

**Anthocyanins**

We see red and purple. Japanese maples produce plenty of anthocyanins and have really bright red leaves.

**Carotenes**

We see orange. One of the best trees to see carotene in action is sweet chestnut.

**Xanthophylls**

We see yellow. Xanthophyll pigments can be seen in a variety of trees including birches, beeches, ashes and field maples.

#ForestFocus