



Tree/Shrub of the month:

Birches are looking really good in the sunshine with bark showing well against the shade. I recently visited Kenneth Ashburner's garden at Stone Lane Gardens near Chagford. This garden has a variety of different species of birch and alder planted out in groups and is well worth a visit. <https://stonelanegardens.com/garden/>



Autumn colour

The best display of colour occurs during an autumn day with clear, dry, cool weather without freezing temperatures. At this time trees stop producing green chlorophyll pigment in the leaf, some species produce anthocyanins which are unmasked as chlorophyll decomposes. Anthocyanin produces the red and purple colours in autumn, other species have carotene and xanthophyll that produce yellow autumn colours. Orange colorations are found in species with a combination of chemicals in their leaves. Orange, red, and purple colours are most often seen in species such as the maples, particularly sugar maple / *Acer saccharinum*, the Japanese maples / *Acer palmatum* and *Acer japonicum*—these have many different cultivars of varying size and colour. Sweet gum / *Liquidambar styraciflua*, Tupelo / *Nyssa sylvatica*, scarlet oak / *Quercus coccinea*, great white cherry / *Prunus 'Tai-Haku'* also *P.shogun*, *P.Sargentii* and many other flowering cherries also have spectacular autumn colour.



It's easy to get a bit melancholy in the autumn, the Japanese can teach us a thing or two, here are a couple of my favorite autumn tree haiku:

Just this morning-
A single paulownia leaf
Has gently fallen.
Issa. (1763-1827).

Autumn evening
A crow perched
On a withered bough.
Basho (1644-94)

The foxglove tree /
Paulownia tomentosa (left)

has large pale green lobed leaves and can be cut to ground level to produce large attractive foliage in a border or as a mature tree it has spectacular pale violet to rich purple-blue foxglove-like flowers. The flowers form in autumn but do not open until the following spring and, as suggested in Issa's haiku the leaves fall early but without autumn colour. *Paulownia* needs plenty of space if it is allowed to grow to mature dimensions of 15-20m and is best grown in a sunny, sheltered site.

Disease alerts

Xylella fastidiosa a bacteria which invades the water conducting system of the host plant causing symptoms ranging from leaf scorch, withering of foliage and branches, to dieback and death.

It has not reached the UK yet but is spreading rapidly through Europe, the most likely way to arrive here would be on infected plant material. Symptoms to look out for include wilting, leaf scorch and stunted growth, the disease is difficult to identify particularly in winter. It has a wide range of host



One of the most impressive yellow autumn colours is seen in the maidenhair tree / *Ginkgo biloba* (above) also honey locust / *Gleditsia triacanthos*, Norway maple / *Acer platanoides*, and other maples, birches / *Betula spp* and beech / *Fagus sylvatica*.

plants including Olive /*Olea europaea*, *Prunus Spp*, *Hebe spp*, *Lavendula spp*, oleander, *Eleagnus spp* and has also been found on broadleaf species such as oak /*Quercus spp* in Europe. More information at ,www.forestry.gov.uk/xylella **Phytophthora lateralis.**

An aggressive fungal like pathogen of Lawson cypress / *Chamaecyparis lawsoniana*. Some infections have been found on northern white cedar /*Thuja occidentalis*, western red cedar /*Thuja plicata* and swara cypress/ *Chamaecyparis pisifera*. *P lateralis* has been found in Yorkshire, Sussex and Devon and has probably arrived in the UK in soil on imported plants. It is spread locally on footwear, machinery and vehicles, watercourses flowing through infected sites may also spread the infection. *Phytophthora lateralis* mainly attacks the roots and spreads up the main stem with foliage turning a pale green and then a rusty red brown on parts or all of the crown. When the bark is removed the inner bark usually has a cinnamon brown colour which is distinct from healthy tissue.

Infected trees should be felled and burned on site or chipped and buried provided there are no other *C. lawsoniana* on site. Disinfectant should be used on tools after work is complete and disinfectant mats used where public have access to infected areas. *Phytophthora lateralis* is a notifiable disease and should be reported to the plant health authorities - Further guidance from, forestry.gov.uk/pestsanddiseases and biosecurity advice from www.forestry.gov.uk/biosecurity

Phytophthora austrocedri.

Pathogen of Junipers *Juniperus spp*. Juniper / *Juniperus communis* is one of our 3 native conifers First found in 2011 in Scotland. It attacks the roots killing the phloem and eventually ring barking the tree. It is spread on footwear and vehicles. Infected plants go bronze/brown and lesions appear on stem with distinct yellow edges. Infected trees should be felled and burned, disinfectant used as for *P.lateralis*, it is notifiable.

A Christmas Trio (with thanks to Derek Patch)

Mistletoe / *Viscum album* is technically a hemi-parasite as it produces its own chlorophyll but depends on the host tree for water and mineral supplies. Normally the tree suffers very little and is found on many hosts such as apple *Malus spp*, hawthorn *Crataegus spp*, poplar, *populus spp*, lime *Tilia spp*, and false acacia, *Robinia pp*. In Europe there is a species that on pine *Pinus spp* and silver fir, *Abies alba*. Control, if necessary, consists of cutting out infected branches well below the point of attack.

Ivy /*Hedera helix* Is thought to be a pest when it grows thickly over hedgerow trees but it is not a parasite and only has adverse effects on trees where the added weight can cause breakage. Ivy does hinder the close inspection of tree stems and branches and can cover up important defects and may need to be severed to aid inspection. It is a good source of pollen and nectar in the autumn months which bees are reliant upon to

build up supplies for winter.

Holly / *Ilex aquifolium* Can be a pest when hundreds of plants appear in the herbaceous boarder in a good seed year, Holly suffers from phytophthora leaf blight, where foliage goes black and dies off, also holly leaf miner which causes brown patches with yellow boundaries. Probably more damaging (for the tree) is harvesting for Christmas decorations. Hollies flower on 2 year old wood so pruning off all this years berry bearing branches will remove many shoots that will flower next year. Selective harvesting will help with a continuous supply.

Now for a new year haiku:

The great morning
Winds of long ago
Blow through the pine tree. Onitsura (1661- 1738).



And lastly if anyone is interested in having there own Japanese type pruned tree (or Niwaki) you are welcome to come and visit and choose one to buy rootballed. I can deliver, if required. Best wishes for Christmas and the New Year.