

Malling Deanery: More than just a garden.



Note: Photographs used are not of the trees in the garden but used to illustrate the characteristics of the species.

Pterocarya fraxinifolia



Pterocarya fraxinifolia to give the Caucasian Wing Nut its full botanical name is a large deciduous tree and one of seven in the species. The tree in Mallory Deanery is recorded as being *Pterocarya x Rehderiana* a cross between *Pterocarya fraxinifolia* and *Pterocarya stenoptera* which was first raised in the Arnold Arboretum near Boston in the USA. The cross is believed to have been effected by wind on trees growing close together at the Arboretum de Segrez, situated some forty kilometers south of Paris, which in 1875 was believed to have been the home to one of the largest collections of woody plants in the world. The seed was sent to the Arnold Arboretum in 1879.

Pterocarya fraxinifolia is a native of the Caucasus and Iran while *Pterocarya stenoptera* is a native of China with seed known to have been sent to France in 1844.

Betula maximowicziana

Betula maximowicziana, known as the Monarch Birch, has large heart shaped leaves up to 12cm in length and a dark brown trunk when juvenile.

Always great fun to identify as it catches most out in that it looks nothing like how a birch should look! Introduced from its native Japan in the 1890s, this Birch curiosity is great for collectors and arboretums.

Betula maximowicziana thrives on most free draining soils and its foliage turn a lovely yellow in autumn.
Mature height: 12-17m



Quercus cerris



Quercus cerris, the Turkey oak or Austrian oak, is an oak native to south-eastern Europe and Asia Minor.

It is the type species of Quercus sect. Cerris, a section of the genus characterised by shoot buds surrounded by soft bristles, bristle-tipped leaf lobes, and acorns that usually mature in 18 months.



Quercus macrantha



A tree up to 30 m tall occurring in the highlands of the Caucasus and Northern Iran at altitudes of up to 2,500 m. Young specimens have a silvery bark that turns dark grey with advancing age. Branches mostly begin low down. The bark becomes rough and takes on deep grooves: young twigs are covered in thick woolly hair. The leathery obovate leaves are 12 - 22 cm long and 5 - 14 cm wide. They are regularly lobed with 8 - 10 pairs of shallow blunt lobes. They are rough and dark green on the upper side: the underside is grey and felt-like. The acorns are grouped from 1 to 4, are approx. 2.5 cm in size and are half to two-thirds enclosed in the cupule. The cupule is covered with narrow contiguous scales. *Q. macranthera* is resistant to mildew.

Acer saccharinum



A large, stately growing tree with an undulating crown due to its slightly hanging branches. Growing to an above-average height with open branching.

In its original habitat in North America there are specimen of 35 m.

The leaf is deeply lobed and is 5-lobed to 5-foliate. The colour is green with a grey white underside. The leaf stalk is red. In autumn the leaf usually turns yellow. Some leaves often turn orange to red creating a decorative effect.

The flowers emerge before the leaves unfurl. It has a shallow root system with strongly branching roots and many fibrous rootlets. The main roots may push up hard surfaces. Is tolerant to moist soil and therefore multi-functional. Often applied as a street tree, but, due to branches breaking easily, caused by wind, it is now increasingly applied as a park tree. Acer saccharinum grows in its natural habitat close to rivers and marshes. But the tree can also grow on drier sites.

Tilia euchlora



The Tilia x euchlora has large dark green leaves which are characteristic of Lime.

The fragrant creamy yellow flowers appear in late Spring followed by bright yellow/orange colour in the autumn time.

Tilia x euchlora is the result of a cross between Tilia cordata and Tilia dasystyla and usefully aphids are not attracted to its dark green foliage, so the associated “stickiness” is not a problem.

Lime is a tough and tolerant tree and will cope with planting in a wide range of conditions including heavy clay soils.

This large tree can get as broad as it is tall, so care should be taken to plant where space allows thus is probably best selected for a parkland setting.

It is a vigorous tree which is the perfect addition to a traditional planting scheme or avenue.

Mature height: 17-22m

Tilia tomentosa



The Silver Lime is a handsome tree, but with a rather variable habit. Introduced in 1767 from its native South Eastern Europe, its flowers can be toxic to bees so this should be considered if planting in a rural setting.

A large tree of generally pyramidal habit, the Silver Lime has the advantages of being resistant to both aphids and drought.

It grows well in urban areas, although it requires plenty of space.

Its dark green leaves have silver-white undersides, creating a beautiful effect when rustled by the breeze.

Good for avenues and parks, it will also stand up well to salt-laden coastal winds.

Mature height: 17-22m

Ginkgo biloba

This tree species is now unique, no longer having any living relatives; as such it has features that are distinctive and unusual.

The leaves are curiously fan shaped, with two leaf blades, appearing in spring a bright green colour. The Common name for this tree, Maidenhair Tree, is derived from the leaf shape, which resemble some of the pinnae of the Maidenhair Fern.

In autumn time, these wonderfully shaped leaves turn a clear and bright yellow.

Ginkgo biloba forms a large specimen with a conical shape at maturity and will remain relatively upright if the central leader is retained.

It has a deep root system and as it survived the radiation and devastation following the comet strike which fell to end the reign of the dinosaurs, it is more than tough enough to cope with 21st Century urban life. Air pollution and reflected heat and light are no match for this tough contender. It is recorded to have been reintroduced in to the UK from prehistoric times in 1754.

There is just one cautionary note to herald when considering planting this tree; after 35 years female plants produce fruits which bear a distinctive smell. It is impossible to determine the gender until this point unfortunately! Ginkgo biloba is a fantastic choice for parks and avenues where it will have the space and time to develop into a historic specimen that will stand the test of time.

The notable bright yellow autumn colour is distinctive and works well planted in contrast with other species that will give red autumn colour.

Mature height: 20m+



Catalpa bignonioides



Catalpa bignonioides, also known as the Indian Bean Tree, was introduced from the South East US in 1726.

This tree is an interesting specimen that produces very large, bright green fleshy leaves late in the spring and an exotic, orchid like, trumpet shaped pink-white flower in midsummer.

It is one of the very last trees to come into leaf in the spring, so do beware not to panic if your tree is not showing too much signs of life when all other trees are well advanced!

In the autumn time, as the common name suggests, the Indian Bean Tree produces large, dark “beans” which are similar in look to vanilla pods. These beans remain on the tree for most of the winter months, giving it a slightly angry looking appearance!

Catalpa bignonioides will thrive on most soil conditions, however it is best avoided in windy or hard paved areas, as the fleshy leaves can become damaged if subjected to excessive wind or heat.

The Indian Bean Tree is a common garden favourite in the UK and whilst it can be produced as both a multi-stem or single trunk specimen.

Acer cappadocicum



Acer cappadocicum is a native of Western Asia to Himalaya. They have five to seven-lobed green glossy leaves that turn a glorious yellow in the Autumn. The bark is veined with a hint of yellow when young. Mature height: 12-17m
Introduced into the UK in 1838.

Fraxinus excelesior Jaspidia



A cultivar of the common Ash (*Fraxinus excelsior*). It is described as having yellow leaves when young and becoming tinged again with yellow in the autumn. An Ash under the name of *Fraxinus excelsior jaspidea aurea* was being marketed and distributed by Veitch's Coombe Wood Nursery and references to the tree were being made as early as 1432. The bark is yellowish in colour when the tree is young giving it a distinctive appearance on the nursery. The colouring fades as the tree matures but yellow winter wood is visible.

Tetradium daniellii



A small genus and a must for any collector with an arboretum.

Others list this as *Euodium huphensis* but it is the same tree, caught up in a botanical debate to confuse everyone.

Native of China and Korea, it was introduced into the UK in 1905 and won the First Class Certificate in 1976.

Its compound leaves and panicles of small white flowers make this an attractive specimen tree that is excellent for shallow chalk soils. Bright red fruits are borne on female trees in the autumn.

The flowers are characterised by lovely yellow anthers and are pleasingly fragrant. Autumn colour is a pale yellow.

Mature height: 12-17m



Populus canadensis serotina Aurea



A hybrid of *Populus canadensis serotina*. 'Serotina' is probably the oldest of the hybrids which arose, probably in France, early in the 18th century. It is a large tree, always male, which has the potential to reach 30 metres or more. 'Serotina aurea' has very yellow leaves in the spring which become a yellowish green as they mature. The variety originated in the nursery of van Geert at Kalmthout, Belgium as a branch sport and was put into commercial production in 1876.

Carpinus japonicus



Carpinus japonica is a very beautiful, wide-spreading, small tree or large shrub with corrugated leaves appear burgundy before turning darker green. The conspicuous fruiting catkins turn purple brown with maturity. A very elegant, slow-growing and worthy small garden tree. Very hardy variety! Introduced in Japan in 1985. Received an Award of Garden Merit from the Royal Horticultural Society.

Suitable grown in heavy, wet or chalky soils. Prefer to be planted in a full sun or partial shade position.

Height and Spread (after 10 years) :6m x 2m

Tilia peteolaris



The Weeping Silver Lime is perhaps the most graceful of all large weeping trees.

Often referred to as Tilia tomentosa Petiolaris it has been recently separated to its own species but in my opinion this is too close to call so doesn't really matter anyway.

There is a particularly good specimen to be seen at The RHS garden at Wisley. Introduced in the early 1840s it won the Award of Garden Merit in 2002.

It is fast growing and aphid resistant and is an excellent subject for parks.

The flowers are richly scented but narcotic to bees while its dark green leaves have white felt-like undersides.

Autumn colour is a striking and rich yellow. It thrives on most soils.

Mature height: 20m+

Mature spread: 10-15m

Acer platanoides Crimson King



Acer platanoides Crimson King is a purple leaved cultivar of the Norway Maple, *Acer platanoides*. Like the species, this tree has discrete yellow flowers that appear in spring and contrast fantastically with the dark purple foliage which gradually turns to maroon over the growing season then on to red in the autumn. *Acer platanoides* Crimson King is a vigorous tree that tolerates most soil types, air pollution and resists the perils of drought.

This large tree makes a super choice for avenue planting and should be planted at a minimum of 10m centres as the large and dark leaves have the potential to gobble up light, creating a sombre environment below the canopy. It is therefore far better to give this tree space to use the accessible light to explode the beauty in its dark foliage.

Calocedrus decurrens



Calocedrus decurrens (or Libocedrus decurrens), known as the Incense Cedar, was introduced from the west of America into the UK in the 1850s.

Its narrow evergreen habit makes it a fine tree for a garden with free draining soil. At maturity the bark cracks to produce an attractive patchwork effect on the brown trunk.

The foliage of Calocedrus decurrens resembles Thuja but its formal columnar shape defines it over most other conifers. It requires no maintenance!

Mature height: 12-17m

Fagus sylvatica laciniata



Fagus sylvatica 'Laciniata' (syn. *F. s. heterophylla*) has a spreading, round crown and attains a height of 20 - 25 m.

The green leaf is irregularly pinnately dissected and has a yellow to red-brown autumn colour. It is less deeply dissected than 'Asplenifolia', but deeper dissected than 'Grandidentata'.

The tree has an inflorescence with small, inconspicuous flower catkins. These are followed by nutlets.

'Laciniata' is a specimen tree. It prefers a well-drained soil that is not too wet and is rich in humus content. Moderately wind resistant.

Phellodendron amurense



Phellodendron amurense is a beautiful, medium sized, tree that was introduced into the UK in 1885 from East Asia.

The Amur Cork Tree is widely recognised for its medicinal properties and is listed as one of the 50 fundamental herbs used in traditional Chinese medicine.

Phellodendron amurense has foliage that resembles that of Ailanthus, with large leaves that are around 25cm in length and consist of a collection of smaller, leaflets.

The leaves emerge bright green and turn a clear lemon yellow in the autumn time to contrast well with the small deep purple red fruits.

In winter buds are silver and hairy and coupled with the very corky bark, make this tree very distinctive.

This unusual tree does not thrive in urban environments, preferring the protective natural environments of the countryside and a well-drained soil.

It is a great selection for arboretums and collections.

Cercis canadensis Forest Pansy



A large deciduous shrub or small, often multi-stemmed, tree.

Leaves to 12cm in width, broadly heart-shaped, deep red-purple turning shades of orange, bronze and red-purple in autumn.

Small, bright-pink flowers appear in clusters on bare stems before the leaves in spring.

Grown mainly for striking foliage effects



Koelreuteria paniculata



Koelreuteria paniculata, known as Pride of India, is sometimes referred to as the Golden Rain Tree which is confusing as Laburnum Vossi also takes this common name.

Introduced from China in the 1760s, it thrives best on free draining soils with a sunny aspect.

Profuse small yellow flowers develop in late spring and these form lantern shaped fruits that turn red in the autumn.

Koelreuteria paniculata forms a rounded crown and is a lovely tree for a large garden or arboretum.

Its green leaves turn a rich yellow in the Autumn.

Mature height: 7-12m

Fraxinus ornus



Fraxinus ornus has a spreading oval to round, irregular crown. Mature specimen can attain a height of 15 m, but usually they do not grow higher than circa 10 m.

The grey bark is smooth. The odd-pinnate leaf is blue green to mat green, becomes 20 - 25 cm and consists of 7 leaflets that have a finely serrated margin. In contrast with *F. excelsior* *F. ornus* has brown to purplish, velvety grey leaf buds. Inflorescence shows white to creamy-white very fragrant flowers in conspicuous, upright and terminal panicles.

These appear after the leaf in May/June. *F. ornus* forms winged nuts of circa 3 cm, which appear in clusters. The tree can be used as a park tree and is suitable for industrial estates. Tolerates drier, calcareous soils. Well resistant to wind.

Parrotia persica



This tree has large round leaves which are thick and slightly heart shaped, it is most notable for its fantastic display of autumn colour which ranges from crimson, to red, to yellow, to orange and golden.

The dark red flowers are displayed on the bare stem during the winter time, they are similar to Hamamelis flowers; incidentally this tree was formally classified as a species of Hamamelis.

The bark becomes more and more mottled yellow as the tree matures, being grey-brown when the tree is young. Parrotia persica is native to Iran and the cultivar 'Vanessa' produces a regular shaped broadly pyramidal tree at maturity.

It is a reliable tree which will thrive on most soils, including chalk.

Despite being small in stature, this tree is perfect for planting as a feature tree in gardens and parklands and will produce a reliable display of a spectrum of colour in the autumn each year.

If the planting scheme requires an injection of colour in the autumn, this is one not to be missed!

Mature height: 3-7m

Chameacyparis lawsoniana inteatexta



The species with a strongly ascending habit, yet with gracefully weeping outer branches. The branchlets are widely spaced, drooping, with large flattened fans of glaucous-green foliage. Like so many fine conifers, this has been largely forgotten and is only usually seen in arboreta and the collections of tree buffs. A potentially tall hardy tree, easy, tough and tolerant of most soils and sites.

Corylus colurna



Corylus colurna, also known as the Turkish Hazel, is a stately and imposing tree at maturity that almost looks as though it should be on the native tree list. It is actually from South East Europe and West Asia, having been introduced into the UK in 1582.

The leaves of this tree are a bright green and are broadly heart shaped, resembling that of Lime. During the early spring long, yellow catkins are produced, followed by clusters of nuts that are contained in frilly looking husks in the autumn time.

The Turkish Hazels crowning feature is its rough, corky bark that becomes more distinguished as it matures.

Corylus colurna is a tough contender, performing well on all soils; including chalk and clay. It has a wonderfully symmetrical pyramidal shape, starting upright and broadening with age.

In recent years, Turkish Hazel has been selected as the tree of choice for avenues, parkland and urban areas over Lime trees, as it does not suffer the aphid drip associated with some of the *Tilia* species and produces a wonderfully regular crown which is desirable for mass planting.

Mature Height: 20m+

Toona sinensis



This spectacular deciduous tree starts the spring with a flush of vivid pink foliage which softens to a pale salmon colour and then green by early summer.

Hardy down to about -10c, it is suitable for most aspects of the UK.

Toona sinensis can reach up to 10-15m in ideal situations with its columnar crown producing white flowers in June/July when older.

The wood is widely used in East Asia for burning to infuse its sweet scent around the house.

Suitable for most free draining soil, this tree is certainly a show stopper in the spring!

Styphnolobium japonicum



Styphnolobium japonica is a delightful and interesting specimen of deciduous tree that, despite its common name, is native to China, although is widely planted in Japan.

It was introduced into the UK in 1753 and won the Award of Garden Merit in 2002. The foliage of the Japanese Pagoda Tree is bright green, with compound leaves that have very small leaflets that give the tree a light and airy appearance. Once mature, the tree produces yellow-white, pea like flowers that hang in racemes, they are similar to False Acacia flowers, with just slightly smaller petals. In the autumn long grey seed pods are borne that are held on the tree throughout the winter.

Like a few trees native to China and Japan, this tree also has interesting bark, it is a dark green colour and exhibits small white flecks/lines up all the way up the stem. At maturity *Sophora japonica* forms a rounded crown of medium size. It is a tree that particularly enjoys the sunshine and is thus best planted in south facing sites in the warmer part of Southern England.

In conjunction with enjoying a sunny and sheltered position, this tree will prefer to be planted in nutrient rich, well drained soil.

The Japanese Pagoda Tree is an intriguing specimen that is perfectly suited to gardens with a warm, sunny aspect.

It has much Chinese folklore associated with it, with its Chinese name actually being composed of the words “wood” and “demon”, so its potentially not a tree for the light hearted!

Mature Height: 12-17m



Keith Sacre 10.09.23.

keith@barchamtrees.co.uk