Aesculus x carnea ‘Briotii’ (red horse chestnut)

There are two examples of the red horse chestnut at the south end of Hudson Hall and are in flower from mid October through to about mid November or a little later. The flowers are produced in terminal panicles of about 25cm long by 13cm across. The flowers are a bright pink-red, about 40mm long including style and exserted stamens, the inside of the petals are variously stained yellow or orange and somewhat freckled pink and white. The peduncle and pedicels are red over some green and bloomly. The fruit is a leathery capsule with few spikes, often smooth. The leaves are opposite at each node, palmately compound with green sometimes overlain with some red petioles up to 20cm on large leaves. The leaflets are sessile, but stained red at the base on the upper surface. The leaflets are generally obovate to elliptic, with finely serrate margins with the central leaflet on large leaves to 23cm or so long by 12cm across. Red horse chestnut trees can be distinguished from the horse chestnut by its crimson - red flowers and fruiting capsules which are often almost smooth. The red horse chestnut has a broader dome shaped crown compared with the larger, more upright horse chestnut tree. The red horse chestnut is a garden hybrid between Aesculus hippocastanum (Greece, Albania) and Aesculus pavia (S.E. USA). The cultivar ‘Briotii’ is an improved selection of the hybrid cross.
Aesculus hippocastanum  (horse chestnut)

This example is growing to the north of the Commerce Building about mid-way, it is native to Greece and Albania. The tree is upright with a rounded form and recognisable with its large deciduous, palmately compound leaves of five to seven leaflets. The leaves are opposite at each node, the leaves have an overall wrinkled appearance compared to the other species on campus and tend to have no gloss on the upper leaf surface. The leaves are a medium green above and paler below with clearly obvious pinnate venation. The leaflets are sessile on yellow-green petioles up to 20cm, with the central leaflet up to 25cm long by 10cm across. The margins are doubly serrate to crenate. In October and into early November horse chestnuts produce many white flowers with a reddish centre on spire like stems at the ends of the branches. Flowering occurs in terminal panicles of about 20-30cm long, by about 10cm across. Individual flowers are about 25mm with exserted stamens. Following flowering, spiny fruiting capsules are produced, usually containing one to three large shiny brown seeds (conkers). These seeds are not edible and should not be confused with sweet chestnuts which are. (The edible sweet chestnut tree *Castanea sativa* can be distinguished from the horse chestnut by its simple toothed (not palmately compound leaves).
Aesculus indica  (Indian horse chestnut)

This is a large round headed deciduous tree that is in full flower in early November. The flowers are in terminal panicles of up to 30cm, the peduncle being about one third of that length. Individual flowers are about 30mm long with long exserted stamens. The flowers are mainly a soft lilac-pink to white with some strong yellow, orange and red. This species is in full flowers as the common horse chestnut is nearly finished, both have similar flower colours. Fruit is a leathery sub globose capsule to about 6cm across. The opposite leaves of the Indian horse chestnut are palmately compound on reddish petioles of about 10-18cm and thickened at the base, the petiolules are also red above and up to 15mm or so. There are five to seven leaflets mostly narrowly obovate to 30cm long by about 8-10cm across at the widest point. Leaflets are somewhat glossy above and paler below, appearing slightly glaucous, pinnate venation is clearly evident on both surfaces. The margins of the leaflets are finely serrate. This tree is seen near the boiler chimney at Lincoln Property Services, midway on south side of Farm Road. It has reasonably good autumn colour. Aesculus indica is a native of the North eastern Himalayan region.
Agathis australis  (kauri)

The number of kauri on campus increased greatly in 2004 with the planting of about twenty kauri trees on the lawn between Memorial Hall, Forbes and the Refectory to commemorate the 125th Anniversary of Lincoln University. The oldest kauri on campus is at the western entrance to Gillespie Hall from Calder Drive. This tree was probably planted in the late 1950’s or early 1960 period. It is in amongst a number of other New Zealand native plants in that area including rimu, totara, kahikatea, beech, kowhai and others. A second kauri now about four metres in height was planted in the early 1990’s as part of a collection of Gymnosperm families in the Amenity area, this tree was donated by the Grounds supervisor at Landcare. This tree had very a small amount of fibrous roots and the remains of a tap root when transplanted, but with some surprise and low staking this tree has managed to establish well and is now making rapid growth. The kauri at Lincoln have all been subject to some very significant frosts and are clearly hardy to minus 10°C. Kauri trees are evergreen with a columnar or fastigiate form, ultimately becoming very large trees. The leaves are thick, leathery, lanceolate to oblong and alternate to sub oppositely arranged, with entire margins. Juvenile leaves are up to 10cm long, adult leaves are less than half, leaves are sessile and dull green to olive green in colour. Female cones are globose a bit larger than a golf ball in size and dull green, male cones are cylindrical and up to 4cm long. As kauri grow larger they tend to shed the lower branches, any wounds made to branches or the trunk exude a milky white resin.
Agonis juniperina ‘Florists Star’

This tree was planted by the Grounds Department in April 2004 in the courtyard between Memorial Hall and the Library. This tree was planted to replace an old example of the species in the south east corner that was in a state of decay. The new replacement tree is in the south west corner. It is a fast growing tree from the Myrtaceae family. It is an evergreen tree, native to western Australia and can be expected to grow to 10-12 metres or so in height. It is an upright growing tree with simple leaves of about 10mm or so by 1mm. Flowers are small and white produced in large quantities, clustered towards the tips, followed by small capsules.

Flowers seem to be always present over the growing season

a fast open growing tree in the s.w. corner of the courtyard between Ivey and Memorial Hall
Ailanthus altissima  (tree of heaven)

This is a large rounded broad spreading exotic deciduous tree seen in the lawn opposite the north western corner of Hudson Hall. This tree has given rise to some other trees after some mechanical weeding was carried out in the 1980’s in the western border opposite Hudson Hall. This clearly affected the root system which responded by producing some very rapid growing suckers some considerable distance from the drip line of the tree. This tree while very handsome should be regarded with caution and lawn planting, well away from any borders would be a sensible way of preventing suckering. This tree is a native of Northern China. It has large alternately arranged pinnately compound leaves. The leaves can easily be up to 60cm long, with about 13 to 30 leaflets, each to 12cm long by 5cm across on petiolules up to 15mm long. Each leaflet usually has a few teeth at the base with a gland. A second example can be seen in the Centennial Halls area, it was planted in the mid 1980’s.
Albizia julibrissin (silk tree)

Small to medium sized deciduous tree with bipinnately compound leaves and showy inflorescences made up of lots of tiny flowers with long showy stamens. Courtyard on east side of Hilgendorf wing near lecture room one. The silk tree is somewhat dome shaped and spreading. Flowers are seen over the summer.
Titoki is a small to medium sized evergreen New Zealand native tree. It is marginally hardy at Lincoln, but can be grown amongst other trees that provide some overhead protection from frosts or against a warm wall quite successfully. The largest titoki currently on campus is on the east facing wall of the Winery, adjacent to the Horticultural Teaching laboratory toward the western end of Farm Road, this was planted in the early 1980’s. Others have been planted since at the Amenity area (early 1990’s) and in the native plantings south of Gillespie Hall in the early 2000’s. Titoki have alternately arranged pinnately compound leaves that are approximately 30cm long. The leaves are unevenly pinnate with around eleven leaflets, each of the leaflets have a short petiolule of up to 10mm. Branchlets, petioles, rachis, petiolules and the midrib of the leaflets are usually pubescent. Leaflets are about 11cm long by 3cm across, narrowly ovate to lanceolate with entire or serrate margins. Flowers are bisexual or unisexual, small in branched panicles to 30cm long from October to December. The fruit is a brown woody capsule that ripens to reveal a black seed partly encased by a scarlet fleshy red aril. Titoki and the native ake-ake (*Dodonaea viscosa*) also found on campus are both in the Sapindaceae family. Titoki grows naturally in lowland forest in both the North and South Islands from North Cape as far south as Banks Peninsula in the east and further south in the west.
Alders are commonly planted along river banks and in wetter areas, originating from Europe, Siberia and North Africa. There are a number of isolated alders dotted around the campus, most no more than 10m or so. Alders are deciduous broad leafed trees with rounded tops, capable of growing to 30m or more, although I suspect the drier soils around Lincoln possibly limit this potential. Alders are nitrogen fixing trees and capable of growing in poor soils. They generally appear better in groups and are not particularly suitable as individual specimen trees. Flowers are small and lack petals, with male and female flowers in different catkins on the same tree. The male flowering catkins are pendulous and up to 10cm, while the female flowers are reddish and more or less inconspicuous. Flowering occurs in early spring. Soon after greenish cone shaped fruits appear, often with large numbers of previous years old dark brown cone like remains. These can persist on the tree for a long time. The leaves are broadly rounded to obovate with seven pairs of white veins. The leaves are generally a dark, dull green colour, with little if any autumn colour before falling in late autumn. Examples of this species can be seen on the eastern side of Forbes and in the border north of the Lodge.
Amelanchier canadensis (shad bush)

This is a small to medium sized deciduous tree. It has simple, alternately arranged leaves with white flowers in simple racemes terminating the shoots in spring, followed by fleshy pomes in autumn. This is a good autumn foliage tree suited to small gardens. The species can be seen in the western border opposite Hudson Hall, in the Amenity area and near Centennial Halls.

small round shaped deciduous tree in border opposite Hudson to Calder Drive carpark

autumn colour
Amomyrtus luma (Palomadrona)

This evergreen species belongs to the Myrtaceae family and is native of Chile and Argentina. This example is from seed from the tree in the Christchurch Botanic Gardens, it is growing in the Amenity area to the south west of the pond. It produces large clear white flowers, dark shiny green leaves and has attractive bark. It has all the hallmarks of a good ornamental small garden tree.
Arbutus menziesii  (madrona)

This is a fast growing relative of the more common Irish strawberry tree (Arbutus unedo) which is also growing in a number of sites on campus. This particular tree is located in the Amenity area at the western end of Farm Road, it is a seedling Dieter Steinegg gave me in 1995 from the very large madrona that was originally growing near the Edward Albert oak in the Christchurch Botanic Gardens. This tree has grown exceedingly well in the Amenity area and within eleven years is about seven metres in height. It is an attractive tree with a rounded form at maturity. It has large alternately arranged, simple leaves, they are elliptic to elliptic – ovate to about 15cm in length and 7cm across, with petioles to about 3cm. Leaves are dark green above and glaucous below, margins are entire. The tree is in full flower by mid October and is covered in small white bell shaped flowers, much like those of the lily of the valley shrub (Pieris japonica). Flowers are arranged in erect terminal panicles, each flower is urn shaped, white, about 6-7mm long. The other feature of this species is the flaking cinnamon coloured bark on the younger branches. This tree is relatively rare in Canterbury and this particular tree looks like it could become the best example of any of those others I am aware of. This tree is the only example of this species on campus.
Arbutus unedo  (Irish strawberry tree)

This is a much more common tree than the madrona in Canterbury. It is a spreading tree of small to medium size, it is evergreen and hardy to wind and coastal conditions. It has small white bell shaped flowers followed by strawberry like fruits ripening from green to yellow orange and red shades. When fully ripe the fruit is edible and can be quite sweet, although has a somewhat doughy texture, mixed with some grit cells. This tree can be found to the extreme north of Hudson Hall, to the south of the Horticultural Teaching Lab and opposite the extreme east end of Farm Road, Springs road near Gate 3 etc.
Aristotelia serrata (makomako or wineberry)

This is a small New Zealand native tree or large shrub that has white to deep pink flowers from late October and during November at Lincoln. This tree is on the southern access drive to the Nursery on Farm Road. There are a number of other examples on campus including the Amenity area, the Dairy Farm car park and the western side of the Nursery on Farm Road.
*Athrotaxis cupressoides*  (smooth Tasmanian cedar)

This tree was a donation from Max Visch member of the Friends of the Christchurch Botanic Gardens. It is a member of the Cupressaceae family and was planted in the Amenity area in May 1996. The leaves are opposite and scale like with an overall yellowish-bronze colour. The expected height of this species is around 16 metres. This tree is looking very poor having suffered over the summer of 2007 and 2008. I am not sure what the problem with the tree is although the magnolias and a number of other trees in the Amenity area have been badly affected by the unfortunate use by the Grounds Department of Tordon Gold to kill weeds in the area.
Azara microphylla  (vanilla tree)

These are small upright growing evergreen trees from Chile and Argentina. These particular trees were planted on the west side of the pond in the Amenity area in June 1990. Others have been seen in different places on campus. Some may remember the beautiful vanilla fragrance of the trees planted to the western side of the Commerce Building. These were removed because of the roots interfering with underground services some years ago. There is another example near the southern entrance to Stewart Building, south of Lincoln Ventures workshop and in the western border opposite Hudson. The trees are normally no more than 6 or 7 metres in height and are really only noticed around October when they are covered in tiny yellow flowers that are deliciously fragrant.

Betula papyrifera  (canoe birch paper-bark birch)