Fraxinus angustifolia ‘Raywood’ (syn F. oxycarpa ‘Raywood’) claret ash

There seem to be both the narrow leafed ash and the claret ash on campus, the latter colouring to rich claret, oranges and yellow tones in autumn. Leaves are pinnately compound to 250mm long with 7-13 lanceolate leaflets.

Fraxinus angustifolia ‘Raywood’ (Claret ash) near Centennial Hall

F. angustifolia (narrow leafed ash) n.w. Southland Hall

pinnately compound leaves F. angustifolia

Fraxinus angustifolia ‘Raywood’ (Claret ash) near Centennial Hall
Fraxinus excelsior ‘Aurea’ (golden ash)

This ash is growing as a lawn specimen to the north eastern end of the Commerce Building. This particular tree unfortunately had a very large branch removed in order that a footpath could be put in close to the trunk. There are other good examples such as that to the north west of Hudson Hall near Ellesmere Junction Road and a smaller tree west of the Lodge. Ash trees are good shade trees, many grown for their colourful leaves, notably the golden ash and claret ash. Ash trees are generally late coming into leaf and amongst the earliest of all deciduous trees to lose them in the autumn. Most are round headed trees, with golden ash especially suited as a lawn specimen tree. The Fraxinus genus is represented at Lincoln by the common ash Fraxinus excelsior, (seedlings of the common ash pop up in the grounds from time to time and can become a nuisance), golden ash and in more recent years a number of the claret ash have been planted (Fraxinus oxycarpa ‘Raywood’). There is also one example of the manna ash Fraxinus ornus (near the eastern entrance on the north east side of Hudson from Ellesmere Junction Road. (The manna ash has become quite a popular street tree in Christchurch, chiefly because of its smaller stature). There is also just one example of Fraxinus velutina that is in decline near the main entrance to Forbes from Ellesmere Junction Road.
Fraxinus ornus  (manna ash)

This is a small deciduous ash species with a rounded form. The flowers of most ash species are visually insignificant, but not for this species. The leaves are pinnately compound to about 200mm long with 5-9 oblong to ovate leaflets. Like most ash this species colours up well in the autumn.
Fraxinus pennsylvanica  (green ash, red ash)

There are a number of young trees planted to both the north and south side of the Hadlee-Watts Cricket Academy. These are deciduous trees, probably planted about 1999-2000. The leaves are opposite, pinnately compound to about 30cm with 5-9 lanceolate leaflets.
Fraxinus velutina (Arizona ash)

This is a small to medium sized deciduous tree on the western side near the eastern entrance in the front of Forbes. This tree is in decline and is the only example of its type on campus.

existing tree form near main gates (east) at entrance to Forbes

opposite, pinnately compound leaves with 7 leaflets, somewhat chewed in this example.
Garrya elliptica ‘James Roof’ (silk tree, tassel tree)

This is a small evergreen tree or large shrub that is not usually noticed until late autumn and winter when the drooping tassel like flowers become obvious. Examples of this species can be seen at the north side of the Computer Centre, at the southern entrance to the Rose Garden and on the eastern side of Stevens Hall. The species is dioecious, male trees are usually propagated vegetatively. This species is hardy at Lincoln and does not need the re-radiated heat of a north facing wall to do well. Leaves are grey – green, opposite and entire.
*Ginkgo biloba* (ginkgo, maidenhair tree)

This specimen can be seen at the south end of Hilgendorf wing. *Ginkgo biloba* commonly called the maidenhair tree can be found in a number of different areas on the Lincoln campus. The largest group planting of this species can be seen at the north end of the main rugby fields, other isolated specimens can be seen in the eastern end of the Betula border, to the north west of Forbes and to the south of Hilgendorf wing. The common name maidenhair tree is presumably related to the bilobed leaf form, similar to that of the maidenhair fern. This species is one of the few deciduous gymnosperms, in autumn trees colour up to shades of yellow. It is a hardy species that grows well at Lincoln, although it has a relatively slow growth rate. Ginkgo is a dioecious species, the female tree produces a yellowish plum like fruit which can best be described as having the fragrance of vomit. For that reason trees sold through nurseries tend to have been propagated from male plants. Lincoln trees are a mixture of both males and females and appear to have been grown from seed. *Ginkgo biloba* is sometimes referred to as a ‘living fossil’ and has been found growing wild in only two places within China. Fossil evidence suggests this species existed in the same form up to 200 million years. *Ginkgo biloba* is the only remaining species in the Ginkgoaceae family.
Gleditsia triacanthos  (honey locust)

The honey locust is a relatively fast growing medium to large sized, broad spreading deciduous tree that is well represented on campus either as this species or as a yellow leafed cultivar called 'Sunburst'. There was until relatively recently a thornless cultivar called 'Inermis' at the western entrance to Burns wing near the lifts. This particular tree is growing near the southern end of Stewart building facing east. The species is native of mid western North America. The trees have pinnately compound leaves and the twigs and branches often contain sharp stipular thorns. (Sometimes bipinnately compound leaves also appear on new shoots). The leaves are large up to 20cm or so long and alternately arranged, leaflets tend to be slightly toothed toward the tips. The leaves are green over the summer and become yellow before falling in the autumn. Honey locusts flower about mid November, the flowers are small yellow - green and dioecious (with separate male or female flowers on the same tree). Unlike other legumes in the sub family Caesalpinioideae the petals tend to be equal in size. The fruits produced by the female flowers are long, flat brown, somewhat twisted pods up to 250mm long by 35mm wide containing about five flat ellipsoidal shaped seeds. The pods often remain on the tree well into the winter.
Gymnocladus dioica  (Kentucky coffee bean tree)

This tree was shifted to its current position from the formal garden in the early 1990’s to make way for the Commerce Building. This is the only example of this species on campus and one of the less common trees in Canterbury growing on campus. The Kentucky coffee bean tree is a medium sized deciduous broadleaf tree belonging to the legume family. This species is native to Central and Eastern United States of America and grows best on good soils. At Lincoln this tree has been very slow growing in this position, another example that previously grew further to the west seemed to grow better as a lawn specimen. The species has large alternately arranged, bipinnately compound leaves that turn yellow in the autumn. The Kentucky coffee bean tree does not flower very well in its current position and only rarely produces some of the long pods that contribute to its common name. The pods are large brown, leathery pods, rarely with seeds and are about 20cm in length. The name Kentucky coffee bean tree relates to the fact that seeds of this species have apparently been used as a coffee substitute. This particular species appears to have been wind affected after transplanting to this position, efforts should now be made to propagate from this tree and replace in another area with more space to grow.
Hoheria angustifolia (hungere)

*Hoheria angustifolia* is a fast growing evergreen tree with an upright form that eventually becomes quite large, possibly 12-15m or so. It has a very distinct adult and juvenile growth habit. The juvenile form has a strongly divaricating habit with fine wiry branches intertwining. The leaves in the juvenile stage of growth may last for five to ten years or so, are small and variable in size and shape. Over time a mixture of adult and juvenile leaves are seen on the tree, the adult leaves are slender, more or less lanceolate to oblanceolate and to about 50mm long by 10-12mm across with a petiole of about 5mm. The adult leaves are also irregularly dentate to spinulose or serrate, whilst the juvenile leaves are often only serrate at the apex. Young twigs, buds and leaves have a covering of fine stellate hair that rapidly disappears as the leaf ages. Flowers are white, hermaphrodite, about 8mm across and produced in large quantities in mid summer. Fruit is a schizocarp, winged mericarps from an ovary of five carpels.

mixture of adult and juvenile foliage, including a divaricating stage. Trees can be seen south of Burns, Amenity area and various other places on campus
adult foliage
*Hoheria glabrata* (houhi, mountain ribbonwood)

There are two examples of mountain ribbonwood on campus that I am aware of. The tree below is located in the border to the north of the Lodge and south of Hilgendorf wing between two purple leafed myrobalan plum trees, with some thrip affected *Viburnum tinus* in front to the north. This is an upright small semi-deciduous trees growing between about 4 and 6m in height, it is somewhat crowded out in its current position. The leaves and branchlets of mountain ribbonwood are more or less glabrous. The leaves are bright green-grey above and paler below, leaves colour up to a pale yellow before falling in the autumn. Leaves are simple, alternately arranged, broadly ovate with deeply incised, doubly or trebly crenate or lobed margins, the base is cordate. Leaf blades are between 3 and 10cm in length and are attached to branches by a petiole of about 4cm.

A second and younger example is planted on the south facing wall of the Grounds Dept.
*Hoheria populnea*  (houhere, lacebark)

This is a small to medium sized evergreen New Zealand native tree growing among a host of other trees by the footpath in the border to the north of the eastern end of the Commerce Building as you walk toward Burns wing. *Hoheria populnea* is one of five endemic species found growing naturally only in New Zealand. This species is fast growing, tends to be have an erect habit of growth and its leaves present a fresh green appearance. This species and *H. sextylosa* are known to hybridise freely. Lacebarks or houhere have simple leaves, alternately arranged on ascending branches. The leaves are variable in shape and size, with adult leaves generally broad ovate and distinctly dentate or serrated, the upper surface is a darker colour than beneath. The flowers are white and produced in late summer and early autumn at a time of the year when not much else is in flower. Flowers are produced in copious quantities. Individual flowers are about 20-25mm across. There are a number of cultivars of *Hoheria populnea* in cultivation.
**Hoheria sexstylosa**

Fast growing evergreen tree in flower in late summer – early autumn, probably planted in the early 1990’s. *Hoheria sexstylosa* is very similar to *H. populnea*, but generally has narrower leaves and 2-5 flowers in a cyme compared with 5-10 flowers in a cyme for *H. populnea*. The two species are thought to freely hybridise.

![Tree north of Centennial Halls near Farm Rd](image1)

![Simple, alternately arranged leaves, white flowers](image2)
*Ilex aquifolium* (English holly)

*Ilex aquifolium* is an evergreen large shrub or small tree. The species are dioecious and the female is usually propagated vegetatively if fruit is an important reason for growing the plant. The leaf form of hollies changes from juvenile which is a prickly form to adult leaves with entire margins. The plant in the top two pictures is close to the southern end of Hilgendorf wing. There are a number of small seedlings in shady areas east of the Lodge, presumably spread by birds from this plant.

Prickly juvenile leaves

fruit and the less prickly margin of the adult

variegated cultivar in the Betula Border
Iochroma cyaneum

This is a soft wooded evergreen shrub growing to about four or five metres on the east wall of Memorial Hall just south of the main entrance. This plant has been here for at least forty years and does well against the warm wall. It would not probably survive if planted further away from the wall, so it has been well sited. The leaves are showing some slight herbicide damage and as is typical of plants of this family (Solanaceae) it is very sensitive to herbicide, particularly hormone based weed killers.

The leaves are simple, alternately arranged, pubescent leaves and pendent, tubular blue flowers – summer and autumn.
Juglans regia  (English walnut)

There are a few survivors from the original row of English walnuts at the south eastern end remaining after the Commerce Building was erected. These trees are flanked to the south by some large hazel nuts. English walnuts of this age tend to have been grown in the past from seeds and produce fruit of variable quality. The walnuts and hazelnuts are remnant plantings of an earlier time when Lincoln students were largely resident on campus and growing produce for consumption was part of the package. After the Commerce Building was built, two of the walnut trees slowly died after a car parking area was sealed, close too, or placed over the trees roots. Walnuts are deciduous, round headed trees of a medium size at maturity, capable of growing to thirty metres or so. They originate from South eastern Europe to Himalaya and China. Whilst they are primarily grown for fruit, they are good shade trees with some autumn colour values. Walnuts are monoecious (male and female flowers separate on the same tree) and the flowers on walnuts are of little significance visually. More commonly now grafted walnuts are grown commercially and by discerning home gardeners as the type and quality of fruit can be guaranteed. Grafted walnuts tend to be expensive trees as they are difficult subjects to graft.
*Juglans nigra* (black walnut)

Black walnuts are highly valued for their timber qualities, they are not known for edible nut as the English walnuts (*Juglans regia*) are. There are two examples of this species on campus that I am aware of, one is in the border opposite Hudson Hall on the western side, the other is at the north western end of the main sports field next to the large row of holm oak. A third tree was removed from the lawn south of the Lodge when the new Commerce Block was built.