



photograph © Timothy Shaw

*Prunus 'Shujaku'*

## Prunus

A weekend studying flowering cherries was held at Arboretum Kalmthout on 13 and 14 April 2019. **HARRY BALDWIN** and **TIMOTHY SHAW** report on what they learned and some of the highlights.

Almonds, apricots, cherries, gages, peaches and plums are just some of the important food commodities that are associated with the genus *Prunus*. There are over 300 accepted species, most of which occur in the northern hemisphere, yet surprisingly many occur in Central and South America, as well as in parts of Africa. While many are used for culinary purposes, it is undoubtedly the Japanese flowering cherries (Sato-Sakura) that are highly prized worldwide for their spring and autumn attributes.

Some members of the IDS were lucky enough to attend a study weekend on the genus *Prunus*, kindly organised by Abraham Rammeloo, Director of Arboretum Kalmthout, a world-renowned arboretum in Belgium, which is well known for not only its famous history and its rare and unusual plants, but also for its large collection of flowering cherries.

The weekend was a nice balance of informed lectures, practical tours as well as social evenings which allowed old friends to reunite. We were greeted with three lectures on Saturday morning; first, Anthony Aiello discussed the history of Japanese cherries in the US; second, Arie Peterse examined the history and taxonomy of *Prunus serrulata*; and lastly Chris Lane reviewed some of his favourite cultivars originally from Belgium. Due to the hot early

spring many of the early flowering cherries had gone over, but there were still plenty to see which were pointed out on the afternoon tour. On Sunday, we had the treat of attending the annual spring plant fair held in the arboretum, which was packed full of nurseries, visitors and of course... plenty of rare and unusual plants.

**Anthony Aiello** – *Flowering cherries in the United States: past, present and future*  
Tony is the Director of Horticulture at the Morris Arboretum in Philadelphia, USA. A recent project he undertook at the arboretum was to expand, diversify and lengthen the season of bloom within the *Prunus* collection. The desire to honour the Japanese culture combined with his many years of experience at the Morris, gave him a strong foundation to research the history of Japanese flowering cherries in the USA. His research took us through the past, present and future of America's love affair with cherries.

In the late 1800s the first introductions began arriving at the Arnold Arboretum. New exciting species such as *Prunus sargentii* and *P. × subhirtella* were greatly admired, encouraging more shipments in order to test their hardiness and ornamental display in the US. At the beginning of the twentieth century, a large donation of flowering cherries was sent to Washington from Tokyo, but was found to be heavily infested with insects and disease. All 2,000 trees were burned and, as can be imagined, created a diplomatic incident. Fortunately this was overcome and a shipment of 6,000 plants, this time free of insects, arrived in 1912. Many were dispersed to various large parks and public spaces, whilst 3,000 trees were planted around the Tidal Basin in Washington DC. These original plants consisted of *P. serrulata*, *P. serrulata* 'Kanzan', *P. × subhirtella* and *P. × yedoensis*. Interestingly, despite the small number of varieties, Tony explained that at the time this small selection would have been highly variable due the stock being seed raised.

Shipments of new cherry varieties into the US continued due to the likes of E. H. Wilson whose investigation of Japanese flowering cherries was compiled into a comprehensive monograph, *Cherries of Japan*; Paul Russell the botanist who authored the USDA circular, *Oriental Flowering Cherries* in 1934; and Collingwood Ingram who dedicated his life to importing, growing and hybridising flowering cherries. Many original plantings and introductions can be seen today in public collections, such as the Arnold and Morris arboreta.

At the Morris, the *Prunus* collection represents a wide variety of flowering cherries, many of which are venerable specimens dating back to the 1930s. Despite popular opinion that cherries are short-lived surviving no more than 50 to 60 years, Tony explained that with specific tree management and arboricultural practices, their life can be greatly extended. He added that this form of management came about almost by accident. In the 1980s they began to rejuvenate the collection by removing older trees and planting new and worthwhile varieties. It was noted that a 1940s accession of *Prunus × yedoensis*

'Day Break', thought to be nearing the end of its life, was pruned hard to make room for new plantings. Astonishingly, new vigorous growth formed, which replaced old stems, allowing a new canopy framework to develop. What began as a trial has now evolved into a regular restoration pruning program which takes place on a five- or seven-year cycle. This enables the historic specimens to essentially never reach the stage of maturity, therefore prolonging their life and ensuring a place in the collection for years to come. Tony endeavours to continue expanding the collection by surveying other public gardens in the north-eastern US in order to determine if any unique cultivars need propagating.

The flowering cherries at the Morris Arboretum are a great example of how a botanical collection can fulfil its mission by promoting education, research and preserving its heritage. A detailed article by Anthony Aiello can be found in *Arnoldia*, April 2012, 'Japanese Flowering Cherries a 100 Year Love Affair'.

#### Arie Peterse – *Prunus serrulata*

Arie is a dedicated plant breeder and researcher of Japanese flowering cherries. He is recognised for producing many famous garden hybrids and for assisting Wybe Kuitert in the publication: *Japanese Flowering Cherries*. In this lecture, Arie focussed on the taxonomy and identification of *Prunus serrulata* and its varieties, as well as asking the question, is it really native to Japan?

The richness of cherry species, varieties, forms, cultivars, and clones is due to the intricate geology of the Japanese archipelago and its isolated primary forests. In addition, cherries interbreed easily; hybrids and their hybrids are usually fertile and even triploid cherries produce fertile seeds, therefore promising new forms. These were widely used even before the horticultural development of Japan, as these forms have been selected and planted for historical celebrations for hundreds of years. Determining the ancestry of the Japanese flowering cherries is problematic due to the propensity of their natural hybridisation; furthermore, historically, many have been used ethnobotanically and shared between other neighbouring countries. The proposal of Jefferson and Wain<sup>1</sup> to refer to the Japanese flowering cherries to the group name Sato-Sakura (from the Japanese for village cherries) is now widely followed. Arie reminded us poignantly that it would take a lifetime or two to even attempt to fix the nomenclatural problems of Japanese flowering cherries.

*Prunus serrulata* var. *pubescens*, as the epithet suggests, 'hairy', is widely found across Japan, into Korea and north-eastern China. A beautiful selection was made from Kalmthout in 1988 known as *P.* 'Sunset Boulevard'. It makes a striking upright tree with coppery young foliage becoming green then yellow-orange in autumn. The single flowers are white with a pink flush. Due to



*Prunus* 'Jacqueline'



*Prunus* 'Sunset Boulevard'

its neat, upright crown and that it doesn't produce any fruit, this tree is an excellent choice for streets and is used a lot in the Netherlands. This botanic species is easily identified due to the hairs found on its flower stalks, petiole and often the undersides of the leaf. The young foliage is usually green or sometimes brown, never deep red as in *P. serrulata* var. *spontanea*.

*Prunus serrulata* var. *spontanea* grows widely in the southern parts of Japan, bordering the northern species, *P. sargentii*. Arie told us that it was one of his favourite botanic species, as he remembers it clearly from when he was a student of taxonomy in Japan. It has bright red foliage that appears with the pinkish buds that expand to white flowers. The spring show of contrasting red and white is magnificent, and without equal among other flowering cherries in Japan. It is questionable why this botanical variety is barely cultivated in the West, despite receiving an Award of Garden Merit in 1936.

*Prunus serrulata* var. *speciosa* is confined to the Oshima peninsula and the neighbouring Izu Islands. Here the Oshima cherry is perfectly adapted to the volcanic geology of the region, as well as the salt laden air from the nearby coastline. Arie stated that this species has been key for many horticultural hybrids for a variety of reasons, but most notably for its scent. Its fragrance is present in popular selections such as 'Jo-nioi' and 'Taki-nioi', two of Arie's favourites. Typical Oshima cherry has bristled leaves with aristate serration, and its flowers resemble those of *P. serrulata* var. *spontanea*, but are larger and sweetly scented.

#### Chris Lane – A love affair with Belgium, its people and plants

A well-known plantsman, Chris holds four United Kingdom National Plant Collections; *Amelanchier*, *Hamamelis*, *Parrotia* and *Wisteria* at Witch Hazel Nursery in Kent. His passion for flowering cherries arose from his frequent visits to Kalmthout Arboretum. Whilst initially searching for *Hamamelis* to add to his collection, he discovered a newfound love, the flowering cherry. In his

<sup>1</sup> Jefferson, Roland M., and Kay Kazue Wain. 1984. *The Nomenclature of Cultivated Japanese Flowering Cherries* (Prunus): The Sato-zakura Group. US Department of Agriculture, National Arboretum Contribution No.5, Washington, DC.



lecture, Chris listed some of his favourite varieties selected by the de Belders, whilst discussing their ornamental attributes.

*Prunus* 'Jacqueline' is a small tree producing large pink flowers that are borne in dense cup-shaped clusters before the leaves emerge. It is also one of the more reliable cherries for autumn colour. It is thought to be a hybrid of *P. sargentii* and the foliage develops a bright orange-red hue, making a dramatic display for any sized garden. It reaches a height of 3 to 4 m in ten years. Like many other selections, it is adaptable and will grow in most fertile and well-drained soils. It is a hardy selection, but like most flowering cherries growing it in a protected site will prolong flowering.

*Prunus* 'The Bride' is a small, rounded tree bearing pure white single flowers, with a deep red central flush. These are borne in abundance along the bare branches and provide a breathtaking display as well as being a magnet for bees. It adds further interest in autumn with its leaf canopy warming up to brilliant shades of orange and red. Its habit and form make it ideal for a fine lawn specimen, growing to a maximum height and spread of 4 to 8 metres. It is arguably one of the de Belders' most popular and well-known selections.

*Prunus* 'Sweetheart' is a small tree producing a delicate raceme of small white flowers in late April–May when leaves are just turning from a coppery red to a light green. This selection is better known for its sweet crop of dark red fruit that is produced in abundance in late summer. As it is self-fertile it fruits every year allowing this specimen to be grown as a stand-alone tree or even trained against a south-facing wall. Its upright habit reaches a height and spread of 2 to 4 m, it is hardy and prefers a sheltered well drained position. It is a great ornamental and edible addition to a garden, awarded an Award of Garden Merit (AGM) in 2014.

These are just three of many de Belder selections that Chris strongly



A general view of Kalmthout Arboretum with flowering prunus among the many different taxa that attracted members during the visit.

highlighted as some of his favourites and most ornamental. Others such as; *Prunus* 'Beatrice', *P.* 'Pink Favourite' and *P.* 'Tom' are also worthwhile varieties. Despite not having a National Collection, Chris certainly has one of the largest collections of flowering cherries in Europe, making it a valuable living library for study and trials, and certainly worth a visit.

#### Tour of the arboretum

We were all willing to put our new knowledge into practice, and set off for the arboretum. Sadly the cherries had not only flowered early due to one of the warmest springs on record but that morning had been subjected to a crisp frost. Despite the less than ideal conditions the group's enthusiasm was in no way dampened as there was still plenty to see.

We gathered on the main lawn to admire a beautiful old glade of *Acer palmatum* which had just broken bud. It was evident that they had been planted in formal lines and Abraham pointed out that the arboretum was previously a tree nursery which dated back to 1856. In 1952 George and Robert de Belder bought the land and transformed it into one of the most prestigious botanical collections in the world. We were surrounded by an incredible selection of not only rare and unusual trees, but also many special selections and hybrids that were raised by the de Belder family. One of the most notable and popular selections that we saw was *Prunus* 'Jacqueline'. Sadly, flowering was over, but it is notable for its large rose-tinted blooms and its 'sargentii' parentage autumn



*Prunus* 'The Bride'



colour, (also mentioned as one of Chris Lane's favourites). Two other sister trees, *Prunus* 'Rosa Traum' and *P.* 'Rosy Vale' also derived from the same mother tree were in a small group which flower consecutively one after another.

We turned to find ourselves on the main lawn which was woven with beds and specimen trees meandering down the main vista. The tall conifers gave a dark background for the flowering cherries which allowed them to shine like beacons—an unusual companion but certainly a great idea to accentuate colour. Many large trees captured everyone's attention, but not quite as much as the champion *Betula nigra* which is an astonishing 24 m high and has a circumference of 282 cm. The specimen soars into the sky, it was not quite in leaf but this allowed us all to appreciate its elegance and architecture. Smaller trees also made a standout



*Prunus serrulata* 'Alboplena'

impression, such as *Acer palmatum* 'Coral Pink', a small neat shrub with delicate coral tinted foliage; one of three maple introductions by the de Belders. Not far away, stood a small unusual species, *Prunus transarisanensis*, endemic to Taiwan where it is found at high elevation growing in rocky ground, which is probably why it appears to have a bonsai-like appearance. It had just come to the end of flowering and would make a nice addition to a small garden or a rockery.

Despite there being such a huge number of described cherry varieties at Kalmthout, there are still plenty unnamed that have many ornamental attributes; such as one with an arching pendular habit and others with a sweet strong scent. Abraham noted that seedlings are abundant and before you realise it, they are not far from flowering and he is 'feeling too



*Prunus* 'Pandora'



Visitors scrutinising the wealth of plants available at the Kalmthout annual spring plant fair which is held in the grounds of the arboretum.

guilty to remove them in case they are anything special!' He added, if you wish to trial seedlings yourself, *Prunus* 'Pandora' will produce a wealth of unusual seedlings as it seems to hybridise with practically anything. It produces several flowers, light pink in bud, opening to shell pink that gradually fade to white, and in autumn produces a glorious display of bronze-red foliage; one that has retained its AGM since 1939. Two further floriferous selections that were particularly noticeable were *P.* 'Shujaku' and *P. serrulata* 'Alboplena'. Both are double flowering and stood out beautifully against the bright blue sky. At the back of the garden we saw a monster specimen of the well-known cultivar 'Kanzan', that was in flower from head to toe. Abraham said that it is probably the champion as everyone cuts them down! Yet, you can understand why it has won so many horticultural accolades since 1900, as without fail, it is one of the hardiest and most floriferous varieties still found on the market today.

As the tour came to a close, the IDS gathered to present Abraham with the traditional gift, this time a recollection of his IDS tour to Chile: *Drimys andina*. It was clear that Abraham and Eva D'haenens had invested a huge amount of time and effort to make this weekend a success. From organising the speakers, itinerary, tours and the plant fair amongst many other things, the excitement on people's faces was evidence that the weekend was highly enjoyable. The study period concluded with the bustling Kalmthout spring plant fair and members were able to take back a growing souvenir, a sentimental gift.