Komarov from Russia who in 1901 discovered A. triflorum. This maple was ultimately introduced into cultivation in England in 1923. Other famous visitors included Père Urbain Faurie, who was one of the most remarkable but the least known, from the horticultural standpoint, of the French missionaries, and Wilson who arrived in 1917 and travelled there with Takenoshin Nakai. In 1982, I was fortunate to visit Korea and Ullung-do and to collect two endemic maples—A. okamotoanum and A. takesimense.

While maples are still to be discovered in the older countries, especially China, the descendants of the settlers who set out from Europe to find new lands and settle there now share with the descendants of those who stayed in the exploration and exchange of seeds and plants of known species and new forms. The maple has established itself as a plant of great ornamental beauty with increasing popularity.

## MALUS SPECIES AND CULTIVARS

JACK H. SWAN<sup>1</sup>

Jodrell Bank Arboretum

Cheshire

The Arboretum, of approximately 40 acres, was established in 1972 at Jodrell Bank on the eastern edge of the Chesire Plain. The soil is derived from a heavy boulder clay, becoming progressively lighter towards the eastern section of the Arboretum. The consequent poor drainage causes some problems in the establishment of trees with the planting sites more or less acting as sumps in the late winter months. However, this is compensated for during dry springs and summer drought when very few losses occur. The lighter eastern section has few problems and there is better establishment and growth. Early establishment of shelter planting on the eastern side of the arboretum has helped to alleviate any exposure problems and there is little wind damage. The beneficial effects of this shelter are readily seen when the cold easterlies take place in January to March and damage occurs on the more open sections of the arboretum.

Winter temperatures regularly go down to -12°C and in most springs we have a series of late frosts, which have a considerable effect on the fruiting of many of the malus in exposed positions. Malus 'Red Sentinel' is usually a very reliable fruiting crab, yet this year (1987) it has failed to do so due to frost. The beneficial effect of the shelter planting is very obvious this year, with good fruiting in well sheltered positions.

<sup>&</sup>lt;sup>1</sup> Arborist

When the Arboretum was set up in 1972 it was decided that a collection of malus would be established. Following the establishment of the National Council for the Conservation of Plants and Gardens we offered the site for national collections and the malus were accepted. At present we have 73 species and cultivars planted out with a further 36 being grown on for future plantings. Most of the original plants were bought in from various sources, while those to be planted were provided by Long Ashton, and others propagated on behalf of the other national collection of malus at Hyde Hall in Essex.

The Malus × purpurea group and other purple-leaved forms are naturally slower growing but even after 10 years or more their progress has been slow. With odd exceptions they are still disappointing trees. Malus 'Profusion', with its wine red flowers, is a notable exception in this group, whilst 'Chilko', 'Simcoe', 'Hopa' and 'Red Tip' are making some headway.

From the wide range of species and cultivars I have selected a number which show considerable interest. Some are, of course, well known, others less so. Malus floribunda with crimson buds opening to pale blush flowers is a very reliable floriferous small tree. Malus 'Wintergold' has pink-budded white flowers over two to three weeks, followed by clear yellow fruits carried well into winter. Malus 'Golden Gem', also with pink-budded white flowers, is very reliable, followed by yellow fruits, smaller than the better known Malus 'Golden Hornet'. Malus 'Crittenden' has pale pink flowers followed by attractive bright scarlet fruits. Malus 'Red Sentinel' has proved to be a very reliable flowering and fruiting tree with the deep red fruits remaining until well after Christmas.

Malus 'Cashmere' and Malus 'Lady Northcliffe' both flower and fruit consistently. Malus 'Dartmouth', with white flowers followed by red and yellow fruits, is reliable, whilst the more common Malus 'John Downie' is rather an inconsistent fruiter in the arboretum. Malus 'Hillieri' with its bright pink flowers is very attractive. Malus baccata and Malus baccata var. mandshurica are good flowering and fruiting trees. To add a wide range of colour to the plantings we have Malus 'Katherine', semi-double pink flowers, and Malus × magdeburgensis, deep red buds opening to purplish pink.

I am always looking for trees that could be recommended for the smaller garden, for different shapes, and trees to give extra character. Amongst the small malus, Malus sargentii is excellent with its pure white flowers followed by its small red fruits which are quickly eaten by thrushes. Malus sieboldii shows promise with its semi-weeping habit and profuse small white flowers. A new cultivar, Malus 'Evereste', showed early promise as a small tree with large apple blossoms and good-sized fruits, but subsequent growth could prove it too large for a small garden. Malus 'Red Jade' with its

white and pink flowers is a fine, small, weeping tree. The distinctive Malus trilobata, with its erect growth is good for restricted areas with its attractive maple-like leaves and good autumn colour. Malus toringoides and Malus transitoria are also attractive with their maple-like leaf shape. They also produce fine autumn colour, the latter having particularly fine yellow gold tints.

When more space is available, Malus hupehensis with profuse small white flowers is very good, as is the better known Malus 'Van Eseltine' with its scarlet buds opening to pink flowers. Malus kansuensis has good elongated red and yellow fruits, whilst the erect growing Malus prattii and Malus yunnanensis have very good autumn colour. Malus tschonoskii is probably the best known for autumn colour and is a strong growing tree.

Amongst new plantings to be made there are several cultivars of potential interest. Malus 'Dolgo', large single white flowers and 'Basketong', 'Purple Wave' and 'Roberts' Crab' from the Malus × purpurea group with red leaves and reddish-pink flowers show great promise.

## **HOSTAS**

## DIANA GRENFELL<sup>1</sup>

Apple Court, Hordle Lane Lymington, Hampshire

The first hostas to arrive in Britain were H. plantaginea and H. ventricosa imported from China in 1789 and 1790 and still extensively grown today. H. plantaginea, the old August lily, is more at home as a tub or pot plant in gardens in the South of France, but flowers well in southern Britain if grown by a sheltered south-facing wall. Its hybrids 'Royal Standard' and 'Honeybells' were raised in America in the 1950's; with their H. sieboldii parentage, they increase rapidly, making ideal ground cover and landscape plants, with fragrant flowers. Kevin Vaughn, and Mark Zilis, two American plant geneticists, have used them as parents to produce hostas with streaked and variegated leaves and very fragrant flowers. Two recent cultivars are 'Sugar and Cream' and 'Sweet Standard', but 'Summer Fragrance' is the first to have scented purple flowers and variegated margined leaves.

The von Siebold introductions to Holland and Belgium led to nomenclatural confusion when the hostas were later introduced to Britain, with botanists hastening to honour von Siebold. Of these, H. sieboldiana, which must surely be the archetypal hosta, is often

<sup>&</sup>lt;sup>1</sup> British Hosta and Hemerocallis Society