Michaelmas daisies

Derrick Rooney¹

Aster is a genus of flowering plants in the daisy family, Asteraceae (or Compositae as the family is also known). The genus once contained nearly 600 species in Eurasia and North America, but during the 1990s American taxonomists segregated the North American species to a series of other related genera.

All but one of the 180 or so species remaining in Aster are restricted to Eurasia. A North American species. Aster alpinus subsp. vierhapperi, is the exception.

The European Michaelmas daisy, Aster amellus, once a very popular border plant but no longer seen in nurseries in New Zealand, is the type species of the genus, as well as of the family Asteraceae. The New World species are now reclassified in about 10 genera, of which species from only one, Symphyotrichum, is in general cultivation in this country.

Symphyotrichum embraces the horticulturally significant group of species from which Michaelmas daisies were developed. However, all the species in the Michaelmas daisy group are still referred to in the nursery trade as "asters" and will continue to be so called in the immediate or even in the distant future. As has previously happened with Chrysanthemum and Dendranthema, the invalid but familiar name is likely to be conserved for common usage. For this reason I will continue to use the name aster in this article.

In the "new" genus, Symphyotrichum, more than 80 species, all North American, have been named in several different sections or subgenera, but some of these are almost certainly synonymous and only a handful is of horticultural interest.

Just three species have dominated the development of modern Michaelmas daisies: the New York aster, Aster novi-belgii (Fig. 1), the dwarf aster, A. dumosus, which is treated as a subspecies or variety of New York aster by some taxonomists, and the New England aster, A. novae-



Fig. 1 Aster novi-belgii 'Gayborder Blue'.

angliae. The former was responsible for many famous cultivars, including the post-World War II A. 'Peace', A. 'Prosperity', and A. 'Plenty'. These are large-flowered cultivars which were popular and widely available from nurseries in the 1950s and 1960s until garden fashion swung away from the classic massed colours of herbaceous borders to mixed borders featuring shrubs and roses mingled with herbaceous plants, and more emphasis on foliage than on flowers. The addition of A. dumosus to the mixture enabled breeders in the United States, Britain, and Europe to raise "dwarf" cultivars that grew no more than 50 cm tall and thus needed no staking but had full-sized flowers. New York asters typically have smooth green leaves, often flushed beetroot red on the underside, and grow from 1 m to 1.4 m tall. Flower colours range from white through lilac pinks and lavender to purple or garnet. There are no true reds in Michaelmas daisy flowers. True reds are also lacking in the New England asters, which range from white through shades of pink to amethyst and royal purple. Wellknown pink-flowered cultivars that are still sometimes available include A. novae-angliae 'Barr's Pink' and A. 'Harrington's Pink'. New England asters generally grow to about 1.5 m, and have grey-green leaves.

For gardens in areas where summers are either hot or dry or both, the New York and New England asters have serious drawbacks. In their natural habitat both are plants of damp meadows, bogsides, ditches, and streamsides. They sometimes grow in damp places on woodland margins but do not occur in deep shade. They grow best in cool

summers with regular rainfall, and irrigation as well. They do not thrive in hot, dry weather. Unless they are divided at least every second year and only the youngest pieces are replanted in fresh soil well enriched with organic matter, New York asters are martyrs to powdery mildew, which stunts their growth and inhibits flowering. Some cultivars are resistant to mildew but have rhizomatous roots that quickly spread into extensive clumps, smothering smaller neighbouring plants. New England asters are apparently immune to mildew and have compact, nonspreading rootstocks that need not be divided at less than five-year intervals, but are even less tolerant of dry summer weather.

Fortunately for dry-climate gardeners, this large family of Michaelmas daisies includes small-flowered but attractive species that have not played a role in the major development of the cultivars but have the virtue of immunity to mildew and the ability to pass this trait on to their offspring. Among the best of these are Aster cordifolius. A. ericoides. and A. lateriflorus. All three have been grown in New Zealand for many years without gaining widespread popularity, either because they have small flowers, because they have semi-woody rootstocks and can only be propagated, with difficulty, from early-season basal cuttings, or because they have never been well publicised. None is drought proof, but the latter two are tolerant of long, dry spells of summer weather. Both have compact, semi-woody root systems that can be difficult to divide, and both have branched inflorescences. with the small flowers arising from short, twiggy, side branches on selfsupporting main stems.

The heath aster, A. ericoides, has small linear leaves and either lilac pink or white flowers, opening flat on branchlets that arise at about a 45-degree angle from the main stem. Aster ericoides 'Monte Cassino', with tiny white flowers, is an excellent, free-flowering cultivar.

¹ PO Box 43, Hororata, Canterbury, New Zealand; woodlot@clear.net.nz



Fig. 2 Aster lateriflorus var. lateriflorus.



Fig. 3 Aster 'Hi-Jinks'.



Fig. 4 Aster 'Lo-Jinks'.



Fig. 5 Aster 'Mini-Jinks'.

Aster lateriflorus, usually seen in gardens in its variety lateriflorus (Fig. 2), is known as the calico aster. This distinctive plant has so many very small flowers that sheer numbers compensate for lack of individual size. It too has self-supporting main stems, from which the flowering branchlets sprout at close to right angles. The tiny, reflexed ray florets are white and the disk florets are rosy purple. While calico aster is not completely drought proof, it requires a drier site than either the New York or New England asters.

This ability to tolerate dry summers, coupled with the resistance to mildew, prompted me in the early 1990s to cross calico aster with a "dwarf" Michaelmas daisy, A. 'Peter Harrison', in the hope of producing largerflowered plants able to stay healthy while withstanding the dry summer heat that frequently occurs in my garden in inland Canterbury. A. 'Peter Harrison' was an English cultivar, not connected to the Harrison family who dominated the perennial and bulb trade in New Zealand from the 1950s to the 1980s. It had relatively large soft pink semi-double flowers and grew only about 35 cm tall. I used it as the pollen parent.

The resultant batch of seedlings failed to produce large-flowered plants. Most of them resembled the seed parent, calico aster, but without the distinctive horizontal branching. However, I selected two before discarding the rest. One grows between 70 cm and a metre tall and has flowers about 1.5 cm across, with plum purple disk florets and ray florets that open flat instead of reflexing. The ray florets are white but the disk florets are so strongly coloured that the general effect from a distance is of a mass of light rosy pink. The other selection was a small, densely tufted plant that grows only about 20 cm to 25 cm tall

and in early autumn is smothered by a profusion of flowers, each about the size of a dollar coin. This plant, too, has purple disk florets and white ray florets, but instead of remaining white the ray florets gradually turn rosy purple as they age, giving a plant in full flower a patchwork look. I named them Aster 'Hi-Jinks' (Fig. 3) and A. 'Lo-Jinks' (Fig. 4) respectively. Both appear to be sterile.

A year later a repeat of the cross yielded a second apparently sterile small plant similar to A. 'Lo-Jinks' but with slightly smaller ray florets that remain white as they age. I kept this plant too, and now call it A. 'Mini-Jinks' (Fig. 5). Several plants from the same batch had larger lilac pink or white flowers and more closely resembled the A. dumosus parent. These grew about 40 cm tall, with flowers about 2.5 cm to 3 cm across. These were very floriferous. Initially I thought they showed considerable promise, but within two years I had discarded all but one of them because they proved to be too fertile, producing numerous unwanted inferior seedlings.

The experiment came to an abrupt halt when A. 'Peter Harrison' died in an abnormally dry summer and I was unable to find a replacement for it. Sixteen years on, I still grow the three named "Jinks" plants. All three have continued to be hardy, floriferous, and tolerant of adverse conditions in both summer and winter. I consider A. 'Lo-Jinks' to be the best of them. It has proved its hardiness and adaptability by growing equally well without any special attention in a friend's garden close to sea level, in my own garden at 200 m asl, and my daughter's garden at 695 m asl in the Lake Heron Basin. Some years ago I supplied propagating material of A. 'Lo-Jinks' to a large wholesale nursery, which subsequently sold about 2000 plants

to a chain of hardware stores. More recently it has been catalogued by a well-known mail-order nursery, unfortunately misspelt as A. 'Lo-Jinx'.

None of the three has produced any viable seed in my garden, but the one larger-flowered plant that I kept is fertile and in the last few years has produced a number of seedlings more closely resembling the calico aster. So far, however, none of these has been worth keeping and naming, although I have selected a couple for further trials.

Aster cordifolius also has small flowers on angled branchlets arising from a central stem, but its main distinguishing feature is the cordate basal leaves, dark green on the upper side and beetroot red underneath. Aster cordifolius 'Silver Spray', which was promoted in the 1980s as a "flower arranger's plant", is the best-known cultivar, but the plant I grew under this name did not appear to differ significantly from ordinary seedlings. The plant is fertile but in my garden its seedlings have invariably resembled their parent, so it presumably rarely hybridises spontaneously with other Michaelmas daisy species.

Like the New York asters, A. cordifolius prefers heavy soil and abundant summer moisture, but it appears to be immune to mildew. Its woody rootstock cannot successfully be divided. The only ready means of vegetative propagation is by basal cuttings of the young shoots in late spring or early summer. The strike rate is close to 100 per cent if the cuttings are given bottom heat and kept in a humid atmosphere until they are well rooted, but home gardeners who have no special propagating facilities can strike them in a cold frame, albeit with a lower success rate. Unlike most other Michaelmas daisy species. A. cordifolius does not need, and does not like, regular lifting and replanting.