n 20 years of regular visits to RHS London Shows, I have enjoyed many displays of new and exciting plants. But few have been more impressive than the early-flowering bulbous Iris shown in February 2015 by Middlesex bulb grower Jacques Amand International, with selections from Canadian breeder Alan McMurtrie. In 2014 Alan whetted the appetite with a pan of beautiful Iris 'Eye Catcher' (see News, April 2014, p17), but that was but a precursor to the display of many superb new cultivars, some with dramatic colours and patterns not seen in these bulbs before.

Early Iris compete with Galanthus and Crocus for the honour of producing the year's earliest displays in our gardens. For sheer showiness, Iris are clear winners. Most are hybrids of species such as Iris reticulata, I. histrioides and I. danfordiae, native to Turkey, the Caucasus mountains and parts of the Middle East.

Selections such as purple I. 'George', blue and yellow I. 'Cantab' and blue and white I. histrioides 'Lady Beatrix Stanley' have long been popular but, lovely as they are, the colour range is, in truth, relatively limited. A more serious drawback is that many kinds have a reputation for being short lived, although in well-drained soil some will slowly build up into clumps. Among the trickiest to keep is lemon-yellow I. danfordiae which, while easy to flower in its first year, seldom repeats the ravishing display again.



Breeding new iris

A trained electrical engineer, Alan McMurtrie became fascinated by *Iris* on a trip to Switzerland in 1979, after seeing displays of bearded iris. He joined various iris societies, which opened his eyes to the diversity within Iris and introduced him to early-flowering kinds. Growing and breeding soon became a hobby, which has developed into a full-time occupation since he retired in 2008.

Alan particularly admired Iris 'Katharine Hodgkin', with its bewitching flowers of grey-blue and yellow. It was bred in 1955 by EB Anderson (1885–1971; a founder member of the RHS Joint Rock Garden Plant Committee) from blue I. histrioides and pale yellow I. winogradowii. Sadly it is sterile and of no use in breeding, but it got him wondering about possibilities of using yellow I. danfordiae to create

new selections. Annoyingly the clone in commerce is triploid (having three sets of chromosomes). This characteristic manifests itself in plants having large showy flowers, but these flowers do not set viable seed.

In 1985 Alan went to Turkey to (legally) collect Iris reticulata and widen the genetic range of plants in cultivation. He successfully met his trip's primary objective by finding diploid Iris danfordiae (where cells contain two complete sets of chromosomes) which could potentially be used to breed new cultivars. This was part of a major breakthrough a couple of years later, when he crossed this diploid I. danfordiae with seldom-grown I. histrioides var. sophenensis eventually to create whiteflowered hybrids with blue markings.

These Iris take five years from seed to flower - white and

blue selections needing at least two generations to develop - so it would be at least 10 years before he saw the first of these new flowers, which was 'Starlight', with dainty white blooms warmed by soft blue and primrose-yellow.

Flowering, however, is just the start. Thereafter follow the lengthy processes of refinement and bulking up stocks. Breeding these iris is a lifelong preoccupation: it has taken Alan 30 years to get to where he is now, and his first selections are just becoming available.

Producing good 'whites' turned out to be fairly easy – he now has many different seedlings with blue accents and some others with green. Along with Iris 'Eye Catcher', among the first of these pale selections named and made available is gorgeous 'White Caucasus' with alabasterwhite flowers and falls (lower petals) marked with yellow. Alan encouragingly describes it as a 'good doer'.

Rainbow of colours

Even in more predictable hues, Alan has made huge strides. One of the most dramatic at the London Show was a gorgeous selection with shimmering two-tone flowers of turquoise and jade-green, the falls enlivened with yellow. He has aptly named it Iris 'Sea Green' and hopes it will soon be available commercially. Another held me spellbound: sultry, almost sinister I. 'Storm', its flowers of inky purple, shot with jade-green and

Eyeing up new iris

Among the loveliest and earliest of garden flowers, bulbous Iris are undergoing something of a transformation, thanks to the efforts of Canadian breeder Alan McMurtrie Author: Phil Clayton, Assistant Editor, The Garden



AVAILABILITY

Iris featured here

available now are:

'Scent Sational'*.

'Velvet Smile'* and

'White Caucasus'*

Plant Finder 2015.

Seedling number

00-KV-3 (pictured)

will also be named

and available soon.

*Listed in RHS

'Eve Catcher'.

'Spot On'*

'Sunshine'

marked with vellow and brown; almost like something from a dark fairy tale. It is being bulked up for sale soon.

There are other beauties, too: lovely Iris 'Spot On' with standards of violet and dark purple-tipped falls heavily spotted and striped; 'Scent Sational' with sweetly perfumed purple blooms. Both are available now. Beautiful 'Velvet Smile' is superb as its flowers open with a vivid cream flash to the purple petal undersides, and 'Regal' in rich purple with contrasting yellow markings.

Early on, Alan became interested in developing hybrids with yellow flowers (rather than the lemon-yellow of Iris danfordiae) which he succeeded in doing. One of the best of these is I. 'Sunshine', its flowers clear yellow, touched with green on opening, with light spotting on the falls.

Alan is now striving for orange selections. Among his best so far is startling I. 'Orange Glow' with bright volky-orange falls marked with dark brown. Another un-named seedling. which first bloomed in 2015, is a stronger orange. And so he continues; brown flowers, red flowers with yellow marks, yellow flowers with purple marks – possibilities seem endless. Alan has yet to put his efforts towards elusive pink flowers, but he is building stocks of a pale mauve and is keen to develop a 'white with cherry accents', which is 'just a matter of finding the right genetic switches', he tells me.

Critics (especially Dutch growers) complain that some of Alan's flowers are too small; largely due to using diploid I. danfordiae with its small flowers. 'A really special selection can be made tetraploid through laboratory techniques (which should give it larger, sturdier flowers) but takes yet more time,' he says. Another alleged shortcoming is that the flowers of some selections created with I. danfordiae do not have proper standards (upper petals) – a characteristic I hardly noticed, so dazzling are their colours and patterns.

RHS London Early Spring Show

16-17 Feb, RHS Lawrence Hall (see p80)

- ❖ Display of early bulbous *Iris* from Jacques Amand featuring cultivars developed by Alan McMurtrie.
- * Exhibits of early-flowering plants, many for sale. A wide range of seed potatoes and onion sets on
- offer, in time for chitting and planting. Previews of designs for gardens at RHS Chelsea Flower Show 2016.
- Gardening advice from a range of experts. For more, visit www.rhs.org.uk/londonshows

The challenges of introducing commercially successful iris have proved many and varied, from issues around Plant Breeders Rights to convincing commercial growers to choose to grow his new selections over tried-and-tested cultivars. As Alan says, 'it's a matter of luck, understanding science, a bit of intuition, plus lots of patience'. Patience is a virtue perhaps, but I can't wait to see more of his irises at the show (see above) this month.

❖ Visit Alan McMurtrie's website: www.reticulatas.com

www.rhs.org.uk The March issue

of The Plantsman has more details of Alan McMurtrie and his irises, as well as articles on Adonis and red magnolias. Tel: 020 3176 5820; www.rhs.org.uk/theplantsman



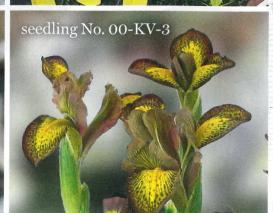














Field horsetail

Equisetum arvense

With upright, slender, fir tree-like foliage, horsetail is deep rooted and fast growing. The creeping rhizomes can go down as deep as 2m (61/2ft), making them near impossible to dig out of the ground.



Hedge bindweed

Calystegia sepium

Its silky white trumpet flowers do little to redeem the thuggish qualities of bindweed. Strong, scrambling stems smother innocent victims. Hedge bindweed rarely produces seed; when it does, seeds can remain dormant in the soil for years before germinating.



Ground elder

Aegopodium podagraria

Lobed leaves create a carpet of foliage, which can quickly spread to gardens from neighbouring plots while suppressing plants that are not as vigorous. In early summer 1m (39in) tall stems produce several heads of lacy white umbels.

In spring, light brown stems appear with cone-like, spore-producing receptacles (sporangiums) at the end of stems. The fine leaves develop in summer, growing up to 60cm (2ft) tall.

Grows rapidly from spring to autumn. Rhizomes can penetrate at least 5m (16ft) deep and the outward spreading roots can extend 2m (61/2ft) or more in one season.

New leaves appear in spring and summer, reaching up to 30cm (12in) in height. Usually spreads via rhizomes, but it also produces viable seed.

Cultural: occasional weeding may make the problem worse. Shallow rhizomes can be forked out; deeper roots need considerable excavation. Removing shoots as they appear can reduce an infestation over a number of years.

Chemical: use systemic weedkiller (pictured, below right) in late summer. Bruise foliage with a rake to improve weedkiller absorption before applying.

Cultural: continuously digging out new growth can keep on top of the weed. Inserting solid barriers 45cm (18in) deep into the soil can help stop roots spreading.

Chemical: in spring insert bamboo canes (pictured, below) and allow it to climb up them. You can then accurately apply gel formulation weedkillers, or lay the vines across bare soil and spray with a glyphosatebased weedkiller.

Cultural: lift cultivated plants and tease out any ground elder rhizomes. Cover the affected area with black polythene to starve remaining weeds of light - this may take several seasons.

Chemical: midsummer is the best time to apply systemic weedkiller: reapply later in the season if needed. With all weeds. more of the chemical will be absorbed if sprayed in the evening.



diquat, fatty acids or acetic acid - used in contact weedkillers - so that changes can be seen in 24 hours. It may be tempting to dig up weeds as soon as they start to wilt, but the chemicals need time to reach the roots - especially as perennial weeds can regrow from the smallest section of living root left in the soil.

* Before applying weedkillers, always read the dosing, application and healthand-safety instructions on the packaging.





MORE ADVICE FROM www.rhs.org.uk

- · For further information on non-chemical weed control search 'Weeds cultural control'.
- Search 'Broad-scale weedkillers' for details on applying spot and broad-scale weedkillers.
- Search 'Chemical sprayer' for tips on applying controls.

