

DAHLIAS ARE ONCE AGAIN high in popularity, and Mark Twynning, who looks after the National Plant Collection of *Dahlia* held by Winchester Growers at Varfell Farm in Cornwall, is one of the reasons why. He has bred a host of new dahlias that enthrall gardeners – their small, mainly single flowers fit easily into any garden and give a gentle presence from July until the first frosts. They are poles apart from the dinner-plate-sized monsters gardeners distanced themselves from 30 to 40 years ago.

Mark became interested in breeding dahlias more than 10 years ago, after watching David Brown – a key figure in the dahlia world – at work. David rescued many cultivars in the 1970s when he became alarmed by their declining popularity, and he set up the first National Plant Collection of dahlias (the foundation of the present collection). Without his intervention many good plants would have been lost.

One of Brown's own seedlings, *Dahlia* 'Blewbury First', a muted pink, yellow and peach Waterlily cultivar (see box, p622, for dahlia classifications), inspired Mark to have a go himself. 'It was a bit of fun to start with, I just collected seeds at random from the collection's dahlias and grew them on,' he says. 'Most seedlings come up as singles, as it's the basic form of the wild flower and most easily pollinated.'

New World origins

Dahlias have been known, and grown, as decorative plants for centuries. There are around 35 species of dahlia, found in Mexico, Columbia and Central America. Only a few species have as yet been used in hybridization, so there remains a large gene pool to draw on. The Aztecs grew double dahlias – when Francisco Hernandez, physician to the King of Spain, visited Mexico in 1570 to study medicinal plants he found and drew a double-flowered example.

Their heyday was probably the Victorian and Edwardian eras; in 1970, Paul Sorensen wrote in *Arnoldia* (the bulletin of the Arnold Arboretum, Harvard University) that an average of more than 100 new cultivars were named every year between the 1790s and the 1930s. In the UK, competitive dahlia growing and showing in the 19th and 20th centuries stoked a wave of hybridization.


The natural variability of the plants is part of the attraction for Mark: 'I find dahlias exciting because you can produce many differences from the same head of seed. It's like doing the lottery, you never know what will pop up; genetically they are amazing.'

In addition to the natural variability in flower form, shape and colour exhibited in seedlings raised from the same flower-head, dahlias also show a spontaneous tendency to 'sport', producing shoots

that have flowers with yet more variation. 'You have to grow sports on,' says Mark, 'to make sure that they are stable. Some can revert back to their parent, losing their desirable traits.' Many do prove stable, however, and have been named. Seedlings can be in flower just a few weeks after sowing, making breeding dahlias quick and easy, and most prove easy to 'bulk up' from cuttings when a good selection has been produced.

Twynning's originals

Perhaps the best-known of Mark's cultivars is *Dahlia* 'Twynning's After Eight' , a classy, ivory-white Single dahlia. It is floriferous with wide-open flowers on strong stems held above almost-black foliage. Flowers last well and the plant is a perfect height for the border, reaching 90–120cm (3–4ft). 'Gardeners love it,' says Mark. It arose as a seedling of *D.* 'Clarion', a bright-yellow Single with dark foliage, bred by New Zealander Keith Hammett.

Most of Mark's dahlias are named after chocolate brands, puddings or sweets; the first named was *D.* 'Twynning's Candy' . This pink-and-white-striped Single is a seedling from *D.* 'Asahi Chohje', a red and white Anemone-flowered Japanese cultivar. Eye-catching 'Twynning's Candy' attracted much interest when first displayed at the RHS Hampton Court Palace Flower Show in 2003. ▶

Reinventing the dahlia

From unfashionable to cutting edge in barely a decade, humble dahlias have escaped the show bench to become must-have additions to the late-season garden. **Val Bourne** meets a breeder at the vanguard of their renaissance, Mark Twynning. Photography by Tim Sandall



Mark Twynning has worked with the National Plant Collection of *Dahlia* since it moved to Cornwall in 1998. He developed the "Twynning's" range of dahlia hybrids

Dahlia 'Twynning's Smartie' **4** has bright pink and white flowers, but the proportion of each colour varies randomly, making it appear to shimmer in the border. Reaching an average of 140cm (4½ft), it is a seedling from a miniature Ball dahlia with the same variable colour trait, 'York and Lancaster', but classed as Miscellaneous.

Dark-leaved Twynnings

Mark admires classic *D.* 'Bishop of Llandaff' (bred in 1922 by Treseder Nurseries) for its dark, ferny foliage and warm-red, peony-like flowers. His copper-leaved *D.* 'Twynning's Aniseed' **10** is a seedling from it, with vibrant pink-red single flowers and dark foliage, though not as dark as "the Bishop". It reaches 120cm (4ft).

Dahlia 'Twynning's Black Cherry' **11** is a seedling from butterscotch-orange, miniature Decorative *D.* 'David Howard' (raised in 1958 by the Norfolk nursery owner of that name, and another seedling from 'Bishop of Llandaff'). With dark foliage and fully double, cherry-red flowers, 'Twynning's Black Cherry' can reach 150cm (5ft). It and two interesting sports (one has white-tipped red flowers **7**, the other is deep purple, both still un-named) are classed as Decoratives.

CLASSIFICATION OF DAHLIAS

Dahlias are classified into 13 groups, based on the structure and appearance of the flower:

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| 1 Single-flowered; | 9 Semi-cactus; |
| 2 Anemone-flowered; | 10 Miscellaneous (includes semi-doubles such as 'Bishop of Llandaff'); |
| 3 Collerette; | 11 Fimbriated; |
| 4 Waterlily; | 12 Single Orchid (Star); |
| 5 Decorative; | 13 Double Orchid. |
| 6 Ball; | |
| 7 Pompon; | |
| 8 Cactus; | |

Groups also recognised are Dwarf Bedding and Lilliput. Certain groups are subdivided according to flower size.

● Most of Mark Twynning's cultivars fall into Groups 1, 2, 3 and 10. *Dahlia* 'Twynning's Black Cherry' and its sports are 5E, Decorative, Miniature.

Green-leaved Twynnings

Not all of Mark's plants have dramatically dark foliage, however. *Dahlia* 'Twynning's Chocolate' **12** has lightly bronzed green leaves and dark red flowers, the same sultry reddish-brown as chocolate cosmos (*Cosmos atrosanguineus*) flowers. Of unknown parentage, 'Twynning's Chocolate' will reach 120cm (4ft).

Single, white-flowered *D.* 'Twynning's Peppermint' **5** is a little taller, and can reach 150cm (5ft). Its parentage is also unknown, but its petals have fimbriate edges, possibly indicating a Cactus dahlia was one parent. *Dahlia* 'Twynning's White Chocolate' is a white Collerette grown from seed collected from a creamy yellow Collerette dahlia, *D.* 'Clair de Lune'. The outer petals of Collerette dahlias surround a ring of shorter petals, and 'Twynning's White Chocolate' has a yellow ring around the heart of each flower. Another Collerette, with a name that bucks Mark's confectionery theme, is *D.* 'Twynning's Pink Fish' **3**: pink flowered, it reaches 120cm (4ft).

Deliberate crosses

Having collected seeds and sown them for many years, it was inevitable Mark would start making deliberate crosses by selecting both parents.

Although interested in the science of genetics, he does not keep strict written records, and when crossing two cultivars, he does not bag the flowers to exclude pollinators, so the bees may intervene. Of the hundreds of seedlings grown on, an average of only five or six will be kept. If they prove good enough they are bulked up by cuttings ready for sale.

In 2007, Mark crossed dark-leaved, Single, lilac-purple *D.* 'Magenta Star' with *D.* 'Karma Fuchsiana', a Dutch dark pink and orange Decorative. One seedling became *D.* 'Twynning's Revel' **1**, combining dark, ferny foliage and vibrant pink, orange-centred flowers on plants 120–150cm (4–5ft) tall.

Mark describes his hybridizing process as follows: 'First, decide on your goal then select two parents, making sure, if double or semi-double, that the flowers actually have pollen and stamens. Select a single-flowered dahlia as your pod plant (the seed producer). Wait for the flower

SWEET TREATS

Numbers in the text refer to the following *Dahlia* cultivars, bred by Mark Twynning:

- 1 *Dahlia* 'Twynning's Revel'
- 2 *D.* 'Rachel de Thame'
- 3 *D.* 'Twynning's Pink Fish' AGM
- 4 *D.* 'Twynning's Smartie' AGM
- 5 *D.* 'Twynning's Peppermint'
- 6 *D.* 'Ian Hislop'
- 7 Un-named white-tipped sport from 'Twynning's Black Cherry'
- 8 *D.* 'Twynning's Candy' AGM
- 9 *D.* 'Twynning's After Eight' AGM
- 10 *D.* 'Twynning's Aniseed'
- 11 *D.* 'Twynning's Black Cherry'
- 12 *D.* 'Twynning's Chocolate' AGM

to open on the pod plant, then select an open flower from the pollen parent. Pick it and bring it indoors, remove the petals, then wait until the pollen is dry. Tap it onto the pod plant's stigma. The fertilisation rate is generally high.'

New developments

From hundreds of seedlings planted out in the show garden at Varfell Farm, two new dahlias were released at the RHS Chelsea Flower Show in 2010. *Dahlia* 'Ian Hislop' **6**, a Single with cupped, warm-orange flowers, and *D.* 'Rachel de Thame' **2** a tall, orangy-pink-flowered cultivar from a cross with a species, *D. sorensenii*. For the future, Mark's main ambition is to breed a dark-leaved Cactus dahlia: 'something that has evaded breeders so far,' he says. ■

Val Bourne is an author and garden writer with a special interest in dahlias

i The National Plant Collection of *Dahlia* is held at Winchester Growers, Varfell Farm, Long Rock, Penzance, Cornwall TR20 8AQ; 01736 711271; www.national-dahlia-collection.co.uk. **Open:** Thu, Fri and Sat 1.30–4pm until 28Aug; open day Sun 29Aug 10am–4pm; other times by appt. **Mail order** available 01736 335853.

***** Jon Wheatley, in association with Winchester Growers, will create a central feature based on dahlias at the **RHS London Autumn Harvest Show**, 5–6 Oct (10am–7pm first day, to 5pm on second day). RHS Horticultural Halls, Greycoat Street and Vincent Square, London SW1. Visit www.rhs.org.uk/flowershows or see *RHS Members' handbook 2010*, p30

