

# RHS PLANT TRIALS BULLETIN

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## Open-centred Dahlias

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[www.rhs.org.uk](http://www.rhs.org.uk)

# The RHS Trial of Dahlias

## History of the Trial

**Brent Elliott, Historian, RHS Lindley Library**

Dahlias were just being introduced into England at the time when the Horticultural Society (later to become the RHS) was founded. John Wedgwood, one of the Society's founders, was an enthusiastic grower of dahlias, and published an article on them in the first volume of the Society's *Transactions*. When the regular sequence of flower shows was begun at the Society's garden at Chiswick in 1831, there were seven competitions set for their respective seasons, with the dahlia competition taking place in September.

After the founding of the Floral Committee in 1859, a programme of plant trials was begun, the trials taking place at the Society's garden at Chiswick. The first trial results to be published were for Pompon dahlias; the trials took place in 1862, and the report was published in 1863. Dahlias were included in a trial of bedding plants and annuals in 1868.

Trials specifically of dahlias did not recur until the 1890s. In 1895 a trial of Cactus dahlias was held at Chiswick. Another trial of Pompon dahlias took place in 1899, and further Cactus dahlia trials in 1900 and 1903. After the move to Wisley the trials resumed, with Cactus dahlias in 1905.

RHS Lindley Library



Reginald Cory

All these trials had been for dahlias in their decorative roles, as flowers for the greenhouse and table decoration, not as flowers for the garden. Reginald Cory, a Welsh coal millionaire and horticultural enthusiast (and future President of the National *Dahlia* Society), undertook to stage the first trials of dahlias as garden plants, and used his own garden at The Dyffryn, Glamorgan, for the purpose.

Virtually all the beds in his garden were turned over to dahlias for the 1913 trial, which was judged by a Joint Committee of the RHS and the National *Dahlia* Society. More than a thousand species and cultivars were submitted, and the *RHS Journal* published details of the uniform treatment each plant received to ensure that they were being judged to a common standard. The *Gardeners' Chronicle* reported: 'The Dyffryn gardens comprise upwards of 40 acres and the provision of flower beds and borders is so liberal that immense numbers of dahlias can be cultivated with ease, but this fact notwithstanding, the ground was planted up to the very last foot.' Cory was given a Gold Medal for his work.

Cory staged a further trial in 1914 but then came the First World War. As a precedent had been set for trialling dahlias as garden flowers, the process was resumed in the 1920s. Dahlias have been the subject of a standing trial ever since, with cultivars selected for trial by the *Dahlia* Sub-Committee, and reports published regularly.

Front cover: *Dahlia* 'Moonfire' (Photo Sue Drew)

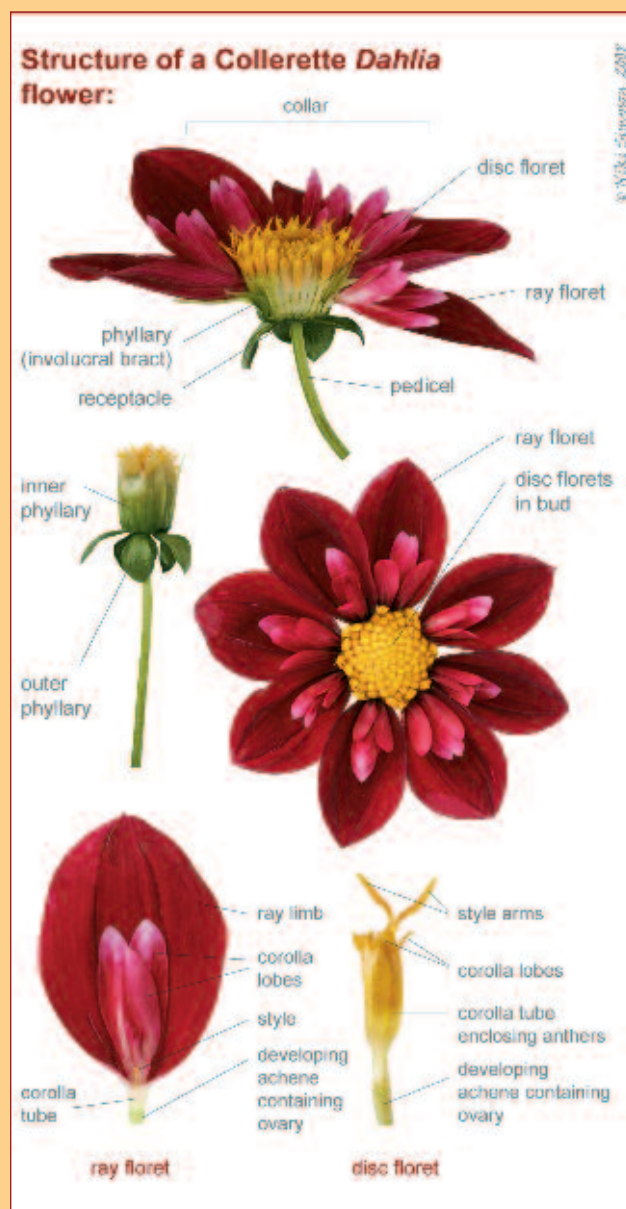
## Trial Objectives

Trials are conducted as part of the RHS's charitable mission to inform, educate, and inspire gardeners. The aim of the *Dahlia* Trial is to compare, demonstrate and evaluate a range of cultivars submitted by individuals and nurserymen. The Trial also allows for plants to be correctly named, described, photographed, and mounted in the herbarium, providing an archive for the future. Cultivars are referred for further assessment in the Trial. Following assessment in trial, those meeting the required standard receive the RHS Award of Garden Merit 🏆 (AGM).

## The Award of Garden Merit 🏆

The Award of Garden Merit is only awarded to plants that are:

- Excellent for ordinary garden use
- Available
- Of good constitution
- Essentially stable in form and colour
- Reasonably resistant to pests and diseases
- Reasonably easy to grow





# Dahlia Classifications

There are 13 different classification groups for dahlias. Only those with open centres (groups 1, 3, 10, 12) are featured in this publication.



D. 'Moonfire'

## Group 1: Single-flowered

Single outer ring of florets, which may overlap, the centre forming a disc.



D. 'Blyton Softer Gleam'

## Group 6: Ball

Fully double blooms, ball shaped or slightly flattened. The ray florets are blunt or rounded at the tips, spirally arranged, with margins involute for at least 75% of the length of the florets.



D. 'Anna Cozens'

## Group 11: Fimbriated

Ray florets evenly split or notched into two or more divisions, uniformly throughout the bloom creating a fringed effect. Petals may be flat, involute, revolute, straight, incurving or twisted.



D. 'Ryecroft Marge'

## Group 2: Anemone-flowered

One or more outer rings of generally flattened ray florets surrounding a dense group of tubular florets, which are longer than the disc florets in single dahlias, and showing no disc.



D. 'Will's Ringwood Rosie'

## Group 7: Pompon

Fully double, spherical blooms of miniature size, not exceeding 50mm in diameter, with florets involute for the whole of their length.



D. 'Juul's Allstar'

## Group 12: Single-Orchid

Single outer ring of florets surrounding the disc. Ray florets are uniformly either involute or revolute.



D. 'Don Hill'

## Group 3: Collerette

A single outer ring of generally flat ray florets, which may overlap, with a ring of small florets (the collar), the centre forming a disc.



D. 'Lakeland Sunset'

## Group 8: Cactus

Fully double blooms, the ray florets are usually pointed, the majority narrow and revolute for 50% or more of their length and either straight or incurving.



D. 'Mayan Pearl'

## Group 13: Double-Orchid

Fully double blooms, showing no disc. Ray florets are narrowly lanceolate and either involute or revolute.



D. 'Charlie Dimmock'

## Group 4: Waterlily

Fully double blooms characterised by broad, generally sparse ray florets, either straight or slightly involute along their length giving a shallow appearance. Depth should be less than half the diameter of the bloom.



D. 'Julie's Delight'

## Group 9: Semi-Cactus

Fully double blooms, ray florets usually pointed, and revolute for more than 25% of their length and less than 50% of their length (longitudinal axis), broad at base and either straight or incurving.



D. 'Dikara Midnight'

## Group 5: Decorative

Fully double blooms showing no disc. The ray florets are generally broad and flat, or slightly twisted and usually bluntly pointed, and may be involute for no more than 75% of their length.



D. 'Bishop of Llandaff'

## Group 10: Miscellaneous

Any dahlias which do not fall into one of the listed groups e.g. Peony-flowered dahlias.

### Lilliput dahlias

A low-growing type of dahlia usually no more than 30cm in height having single, semi-double or double florets attaining 2.6cm or so in diameter. Especially suitable for borders or display in containers on patios.

### Dwarf bedding dahlias

The use of 'Dw.B' after the classification of a cultivar indicates that these are dwarf bedding dahlias, not usually exceeding 60cm in height.

Source: Nineteenth Supplement to The Tentative Classified List and International Register of Dahlia Names 1969 (2007)

# Selection guide

AGM = Award of Garden Merit  
(H3) = hardy outside in some regions or particular situations or which, while usually grown outside in summer, needs frost-free protection in winter.

This selection guide includes AGM dahlias from a number of trials and those of particular interest in the 2008 trial.



**'Ann Breckenfelder'**

AGM (H3) 2004 **Group 3**

**H:** 140cm **FD:** 10cm

Flower vivid red, streaked yellow on reverse; collar green-yellow flushed vivid red at base. Yellow-orange disc. Raised by C Geerlings.

**1**



**'Bishop of Llandaff'**

AGM (H3) 1995 **Group 10**

**H:** 100cm **FD:** 10cm

Flower brilliant red, semi-double. Disc black and bright yellow. Deep blackish red foliage. Raised by Treseder.

**1**



**'Brookfield Delight'**

AGM (H3) 1999 **Group 1**

**H:** 70cm **FD:** 4.5cm

Flower orange-red. Disc red-brown with golden yellow. Dark foliage and stems. Raised by D G Rowlands.

**12, 14**



**CANDY EYES ('Zone 10')**

**Group 1**

**H:** 95cm **FD:** 8cm

Flower deep purplish pink with white at margins and reddish orange at base. Disc orange-yellow with dark orange. Raised by K Hammett.

**1**



**'Carreg Cyril's Girl'**

**Group 3**

**H:** 123cm **FD:** 10.5cm

Flower apricot-orange, collar touched yellow with pale tips. Disc orange-yellow. Raised by C Bright.

**11**

**'Cascade Ken'**

AGM (H3) 2006 **Group 3**

**H:** 170cm **FD:** 12cm

Velvety, dark red flower. Golden yellow disc. Raised by J Thompson.

**4**



**'Chessy'**

AGM (H3) 2002 **Group 1**

**H:** 40cm **FD:** 5cm

Flower yellow. Disc lime-yellow. Raised by Topsvoort.

**12**



Zebina Rendall / RHS Herbarium

**'Clair de Lune'**

AGM (H3) 1995 **Group 3**

**H:** 130cm **FD:** 12.5cm

Light to creamy yellow flower, collar paler. Deep yellow disc. Raised by J Maarse.

**1**



RHS Herbarium

**'Collette Princess'**

AGM (H3) 2006 **Group 3**

**H:** 154cm **FD:** 7.5cm

Flower bright pink with a central band of dark red, white tips. Collar white. Yellow disc. Raised by C Geerlings.

**5**



Caroline Beck

**'Don Hill'**

AGM (H3) 2005 **Group 3**

**H:** 139cm **FD:** 10cm

Burgundy flower, collar red with white tips and flecks. Yellow disc. Raised by D A Reid.

**6, 11**





## Key

**H:** Plant height  
**FD:** Flower diameter

Measurements given are taken from the plants in trial.



Green foliage



Bronze foliage



Suitable for containers

## Key to suppliers

**1** Widely available, see *RHS Plant Finder*  
**2** Aylett Nurseries Ltd  
**3** Binny Plants  
**4** Dan's Dahlias (USA)  
**5** Geerlings Dahlias

**6** Halls of Heddon  
**7** JRG Dahlias  
**8** Rose Cottage Plants  
**9** Sampford Shrubs  
**10** Southon Plants  
**11** Station House Nurseries

**12** The National Collection of Dahlias  
**13** Todd's Botanics  
**14** Usual & Unusual Plants



### 'Dovegrove'

#### Group 1

**H:** 140cm **FD:** 11cm

Rich velvety red flower. Disc black with golden yellow. Reddish purple flower stems and dark green foliage. Raised by K Hammett.

**9, 12**

### 'Harvest Inflammation'

AGM (H3) 1996

#### Group 1

**H:** 55cm **FD:** 5cm

Flower strong orange, streaked with vivid reddish orange. Disc vivid orange-yellow. Raised by I Butterfield.

**12**

Caroline Beck



### 'Exotic Dwarf'

#### Group 1 Dw.B

**H:** 60cm **FD:** 5cm

Pale pink-purple flower with deep purplish red at base. Vivid yellow disc. Raised by Nuyens.

**1**

### 'Hillcrest Regal'

AGM (H3) 2003

#### Group 3

**H:** 130cm **FD:** 10cm

Flower dark red, collar dark red with lighter blends. Yellow disc. Raised by L Jackson.

**12**

Caroline Beck



### 'Fascination'

AGM (H3) 1994

#### Group 10

**H:** 110cm **FD:** 16cm

Flower purplish pink, semi-double. Disc red-brown with orange-yellow. Raised by Elsdon.

**1**

### 'Honka'

AGM (H3) 2000

#### Group 12

**H:** 120cm **FD:** 12cm

Flower greenish yellow. Disc orange-yellow. Raised by J A Kieffer.

**1**



RHS Herbarium

### 'Freya's Thalia'

AGM (H3) 1996

#### Group 1

**H:** 75cm **FD:** 6cm

Flower deep red. Strong orange disc. Raiser unknown.

**12**

### HAPPY SINGLE FLAME ('HS Flame')

#### Group 1

**H:** 79cm **FD:** 8cm

Flower vivid red flushed with brilliant yellow at base. Disc dark red with brilliant yellow. Raised by Verwer-Dahlias B.V.

**12**



RHS Herbarium

### 'Harvest Amanda'

AGM (H3) 1997

#### Group 1

**H:** 60cm **FD:** 5cm

Flower reddish orange flushed with vivid reddish orange at base, semi-double. Disc greenish yellow with red-brown. Raised by I Butterfield.

**12**

### HAPPY SINGLE PARTY ('HS Party')

#### Group 1

**H:** 88cm **FD:** 8cm

Flower brilliant greenish yellow to brilliant yellow. Disc deep red and vivid yellow. Raised by Verwer-Dahlias B.V.

**8, 10, 12**



# Selection guide



**'Keith's Pet'**

Group 1 Dw.B

**H:** 52cm **FD:** 5.5cm 

Flower white with pale yellow-green at the base. Disc vivid yellow. Flowers contrast well with the bronze stems and flower buds. Raised by K Hammett.

**12, 14**



RHS Herbarium

**'Little Dorrit'**

AGM (H3) 1996 Group 1 Lil

**H:** 73cm **FD:** 5.5cm 

Flower deep purplish red with a small black spot at the base. Vivid yellow disc. Raised by I Butterfield.

**12**



**'Magenta Star'**

AGM (H3) 2008 Group 1

**H:** 130cm **FD:** 13cm

Strong magenta-pink flower. Disc dark red with golden-orange. Very dark, almost black, foliage. Raised by K Hammett.

**3, 12**



Caroline Beck

**'Marie Schnugg'**

AGM (H3) 2000 Group 12

**H:** 130cm **FD:** 13cm

Flower vivid red. Disc vivid yellow. Raised by T McNulty.

**12**



**'Moonfire'**

AGM (H3) 1998 Group 1

**H:** 85cm **FD:** 8cm 

Flower orange-yellow flushed with vivid reddish orange at the base. Vivid orange-yellow disc. Raiser unknown.

**1**

**'Northwest Cosmos'**

AGM (H3) 2006 Group 1

**H:** 180cm **FD:** 14cm

Purple-pink flower with deep red at base. Disc orange-yellow. Tall and airy plant. Raised by N Ellison.

**12**



**'Omo'**

AGM (H3) 1996 Group 1 Lil

**H:** 70cm **FD:** 6cm 

Flower white. Disc strong orange-yellow. Raised by I Butterfield.

**12**



RHS Herbarium

**'Orange Pathfinder'**

Group 10

**H:** 72cm **FD:** 10.5cm 

Flower orange-yellow, flushed vivid red at base. Disc dark red and vivid yellow. Raised by J R Gott.

**7**



**'Pooh – Swan Island'**

Group 3

**H:** 135cm **FD:** 9cm

Flower red-orange with yellow at the tip, collar yellow. Disc golden yellow. Sometimes called 'Pooh'. Raised by Swan Island Dahlias.

**2, 5, 6, 11, 12**



**'Preston Park'**

AGM (H3) 1994 Group 1 Dw.B

**H:** 80cm **FD:** 6cm 

Flower deep scarlet flecked with yellow. Disc dark red with golden yellow. Raiser unknown.

**2, 6, 9, 12**



Caroline Beck



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RHS Herbarium

### 'Tally Ho'

AGM (H3) 1998 **Group 1**

**H:** 120cm **FD:** 9cm

Bright red flower. Disc dark red with yellow-orange. Raiser unknown.

**1**

### 'Twynning's Candy'

AGM (H3) 2004 **Group 1**

**H:** 110cm **FD:** 9cm

Flower white with dark red at margins. Orange-yellow disc. Raised by M Twynning, Winchester Growers Ltd.

**12**



### 'Teesbrooke Red Eye'

AGM (H3) 2005 **Group 3**

**H:** 153cm **FD:** 9cm

Flower pink-purple, collar pale pink merging to yellow-orange towards the centre. Dark orange disc. Raised by P Orley.

**6, 11, 12**

### 'Twynning's Chocolate'

AGM (H3) 2005 **Group 1**

**H:** 133cm **FD:** 10cm

Chocolate coloured flower. Disc red-orange with bright yellow. Raised by M Twynning, Winchester Growers Ltd.

**9, 12, 13**



### 'Topmix Yellow'

**Group 1 Dw.B**

**H:** 49cm **FD:** 5cm

Flower greenish yellow. Disc brilliant orange-yellow. Raised by Ballego.

**4, 7**

### 'Twynning's Pink Fish'

AGM (H3) 2005 **Group 3**

**H:** 139cm **FD:** 10cm

Flower pink, deepening to burgundy at base. Collar pink with orange at base. Yellow-orange disc. Raised by M Twynning, Winchester Growers Ltd.

**12, 13**



### 'Trelyn Daisy'

AGM (H3) 2008 **Group 3**

**H:** 140cm **FD:** 10cm

Flower pure white with a golden yellow disc. Raised by R G Tudor.

**12**

### 'Twynning's Smartie'

AGM (H3) 2005 **Group 1**

**H:** 178cm **FD:** 8cm

Flower cerise and white with a yellow disc. Raised by M Twynning, Winchester Growers Ltd.

**12**



### 'Twynning's After Eight'

AGM (H3) 2004 **Group 1**

**H:** 120cm **FD:** 8cm

Flower white, lightly veined with deep magenta. Yellow-orange disc. Very dark, almost black, foliage. Raised by M Twynning, Winchester Growers Ltd.

**1**

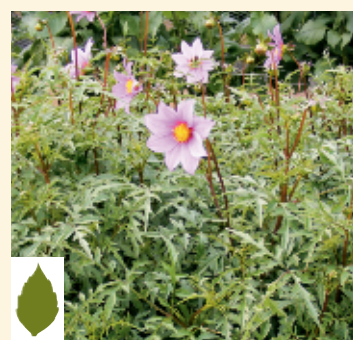
### 'Woodbridge'

AGM (H3) 2008 **Group 1**

**H:** 110cm **FD:** 10cm

Received the AGM as a foliage plant. Wonderful finely cut foliage with the added benefit of light purple flowers. Raised by K Hammett.

**12**



# Background information

## Cultivation summary

- Grow in any soil but best in fertile, humus-rich, well-drained soil
- Best in full sun
- Plant out when all danger of frost has passed (usually the end of May in southern England and early June further north)
- Taller cultivars need staking
- Deadhead to prolong flowering
- Plants benefit from liquid feeding
- Water regularly for the best results
- Dahlias are not fully hardy so the tubers should be lifted. Although they can be left in the ground over winter in mild areas, they can rot in heavy soils
- In the autumn when foliage has been blackened by the first frost, cut back the stems, lift the tubers and store in a dry, frost-free place over winter. More information on overwintering dahlias can be found at [www.rhs.org.uk/advicesearch/Profile.aspx?pid=337](http://www.rhs.org.uk/advicesearch/Profile.aspx?pid=337)

## Growing from seed, tuber and cutting

Although most dahlias will not come true from seed, interesting new plants can result. *Dahlia* seeds should be sown in early spring and will germinate if kept in a heated propagator at a minimum of 16°C. The resulting seedlings should be grown on and hardened off before being planted out.

In mild areas, tubers should be planted in the ground 10–15cm deep when frosts have passed with the growing point upwards.

Tubers can also be started off in late January or early February in a heated greenhouse or propagator kept above 10°C. Such tubers should be planted in compost with the crown above the surface and watered well. If more plants are required, then once shoots reach 2–3cm in length, the tubers can be split; each piece with its own growing point. Each piece should be potted on separately and planted out once the frosts have passed. It is also possible to take cuttings when the shoots are around 5cm long.

## Trial cultivation notes

To maintain entries in Trial for successive years, cuttings are taken in September. These are grown on in a glasshouse to produce mother plants that provide the spring cutting material. Cuttings are kept under mist until they are rooted, usually within 14 to 21 days, and then potted up individually in 9cm pots. These are kept in a warm glasshouse and, if required, under supplementary lighting. Later they are moved on into 2 litre pots and grown under glass. The plants are 'stopped' by removing the main growing tip to promote bushy growth and are hardened off for 1–2 weeks before planting.

The 2008 *Dahlia* Trial was grown on a south-facing slope on the Portsmouth Field at Wisley. Manure was dug into

the planting bed in autumn 2007 using a tractor-mounted spader. The plot was subsequently rotovated prior to planting. The soil on the site was analysed in mid March and fertiliser was applied in accordance with the RHS Soil Scientist's recommendations.

Much of the material for the trial was produced from cuttings taken from the previous trial. Additional material was submitted in the form of tubers at the beginning of January 2008 (from which cuttings were taken for the trial) or as well-rooted cuttings by the end of April. The trial was planted out in early June.

The shorter entries, also suitable for planting in patio containers, were planted in blocks of four plants, 50cm apart each way. Support frames were put in place for the larger growing entries and these were planted side by side, approximately 60cm apart, through wire mesh. The mesh was gradually raised to provide support to the plants as they grew.

A drip irrigation system was used, providing water on planting and when necessary through the season.

The plants were 'stopped' again in early July to encourage them to bush out and hasten the development of the side branches that would bear the flowers. The open-centred dahlias were not disbudded. Partial disbudding (removing some of the side buds from the flowering stems) was carried out on most other classifications to produce larger flowers with an adequate length of stem.

## Problems which can affect dahlias

Dahlias are generally healthy plants but can sometimes be affected by the following:

### Aphids

These can be removed by hand. Ladybirds, hoverfly larvae and lacewing larvae can act as a biological control. Alternatively insecticide can be used.

### Earwigs

Feeding at night, earwigs will hide during the day and can be caught using upturned flower pots filled with straw placed on canes amongst the plants. Insecticide can be used if damage is excessive.

### Slugs and snails

Barriers can be used to protect plants from slugs and snails. These include copper tape around patio containers and placing moisture-absorbent minerals or gel repellents around plants. Creatures which eat slugs/snails such as frogs, toads, hedgehogs, slow-worms, ground beetles and birds such as thrushes can also be encouraged into the garden. Traps are available to kill slugs and snails or the pests can be removed by hand on a mild, preferably damp, evening. They could either be moved to somewhere they will not be problematic or killed in hot water or a strong salt solution. Nematodes, a biological control, can also be used to kill slugs. Alternatively chemical controls such as slug pellets can be used against both slugs and snails.

### Other pests

At Wisley predatory mites, *Phytoseiulus persimilis* (up to 22°C) and *Amblyseius californicus* (21–30°C dry conditions),



are used as biological controls for glasshouse red spider mite. Alternatively insecticides can be used to control these pests and capsid bugs. Caterpillars sometimes cause damage to dahlias and can be removed if necessary.

#### **Powdery mildews**

Preventative measures include keeping the plants well watered and mulched so that the roots do not dry out. At Wisley affected plant material is removed and destroyed to help stop any further spread but fungicidal sprays can also be used.

#### **Viruses**

Dahlias are susceptible to several viruses including tomato spotted wilt virus, tobacco streak virus, dahlia mosaic virus and cucumber mosaic virus. Symptoms include ringspots, flower breaking, vein banding and mottling of the leaves. Plants may be stunted. Sometimes no symptoms are seen. There are no cures for viruses and any infected plants should be destroyed. If the virus is known, control of the vector may reduce disease spread.

#### **Dahlia flower-balling**

Flowers with hard green centres can develop if the roots and foliage are not well established before flowering begins. This problem will correct itself once the plants are fully established. To avoid flower-balling add organic matter to the soil and wait until the soil is warm before planting out.

### **Dahlias for bees**

**Andrew Halstead, Principal Entomologist, RHS Garden Wisley**

Honey bees, and also some bumblebees and species of solitary bee, have declined in abundance in recent years. In the case of bumblebees and solitary bees, it is species that have fairly specific requirements in the types of flowers that they forage from that are most likely to be affected. These are generally species that are not capable of utilising garden flowers. The honey bee and the more common species of bumblebee use a wide range of both cultivated and wild flowers and are generally not likely to be short of suitable plants from which they can feed.

Not all dahlias are of value to bees and other flower-visiting insects. Multi-petalled dahlias, such as the Cactus and Pompon cultivars, are generally of less benefit as the extra petals impair access to the pollen-bearing parts of the flower head. It is the dahlias with open-centred flowers that are most likely to attract bees.



*D. 'Topmix Yellow'*



*D. 'Pooh – Swan Island'*

### **Dahlia species and the breeding work of Dr Keith Hammett**

**James Armitage, Botanist, RHS Garden Wisley**

For variety of colour and form few garden plants compare with, and none surpass, dahlias. It is perhaps surprising then that almost all this variation, from the daintiest Dwarf Bedder to the largest Giant-flowered Decorative, is thought to have been produced from only two species.

There are thought to be approximately 35 species of *Dahlia*, most of which can be found in the mountains of Mexico. They range from small herbaceous perennials to scrambling vines and tree-like plants 9 metres tall. It is believed that for nearly 200 years after their introduction only two of these species, *D. coccinea* and *D. sorensenii*, were involved in the breeding of our garden dahlias. All that changed when Dr Keith Hammett, a plant breeder in New Zealand, decided to try and utilise the genetic resources of some of the other species by crossing them with one another and with their cultivated relatives. By careful and deliberate breeding he has raised and introduced a range of exciting dahlias that combine the grace and simplicity of the wild plants with the intense colour displays of existing cultivars.

#### **A new generation of singles**

Dr Hammett's breeding programme has provided some of the most remarkable single-flowered introductions of recent years. Perhaps foremost among them is the sumptuous 'Magenta Star' with magenta-pink ray florets and bluish red leaves. This has been joined by other striking cultivars such as 'Tapestry' with a red-orange central zone of coloration, 'Danneverke' with bright pink flowers tipped white and 'Dovegrove' with chocolate red blooms. 'Home Run' a dark-flowered plant, has *D. australis* in its lineage. New plants are being perfected and selected all the time and the range of colour, form and garden usage ever expanded.

#### **Tree dahlias**

Three species of *Dahlia* have become collectively known as the tree dahlias for their large size and arborescent habit. The biggest and best known of these is *D. imperialis* which is sometimes grown for exotic effect in British gardens and occasionally produces its lilac flowers around Christmas in almost frost-free regions. Hammett has been able to use a slightly smaller tree dahlia, *D. tenuicaulis*, crossed with other species, to produce the cultivar 'Timothy Hammett'. This is a fine, shrubby, mauve-flowered plant used as a spectacular flowering hedge in parts of New Zealand. It has given rise to a yellow-flowered seedling named 'Conundrum' and further tree dahlia crosses are soon to be introduced.

#### **Breeding for foliage**

In recent years there has been an explosion in the number of dark-leaved dahlia cultivars available, bred using the perennially popular 'Bishop of Llandaff' as a parent. Hammett, by introducing species such as *D. dissecta* and *D. apiculata* into his breeding programmes, has been able to develop a range of cultivars with not only dark, but also

# Background information

beautifully cut, foliage. These selections were originally given names such as 'Scarlet Fern' and 'Knockout' but are now often sold under names bearing the prefix MYSTIC. One of the finest foliage dahlias currently available is 'Woodbridge', a delicate and graceful Hammett introduction which exhibits the influence of *D. tenuicaulis* in its filigree leaves.

## Future breeding

In 2009 the RHS awarded Dr Keith Hammett the Reginald Cory Memorial Cup for his innovative hybridisation work with *Dahlia*. The beauty and novelty of his introductions has inspired others and 2009 saw the introduction of 'Joe Swift' and 'Perfect Partner', products of a cross between 'Magenta Star' and *D. sorensenii* made by Jon Wheatley. The potential of *Dahlia* species as a resource in the production of ornamental plants has only begun to be explored. The interfertility and diversity of these species means that the coming years should provide many more exciting introductions to populate our gardens.

## Dahlias in the garden

**Fergus Garrett, Head Gardener, Great Dixter**

Dahlias are one of the most joyous and generous of garden flowers. Bold and bright in clean tones from pastel pink to darkest purple, they have the ability to produce a riot of colour from July to October.

Judging them is a joy but be aware that any good garden dahlia must be well proportioned and not dominated by coarse leaves. Their flowers have to be presented above the body of foliage on stems stiff enough to carry their plentiful bounty. The best ones are free-flowering right into October, dazzling us with sensational colour.

**David Jewell, Superintendent, RHS Garden Wisley**

As Floral Superintendent at Wisley I've always been keen to promote the use of dahlias in many of our high profile display areas. They provide an invaluable contribution when used in the mixed borders, sub-tropical borders, bedding schemes and half-hardy border areas. Their rich colour range will suit most tastes coupled with mixed heights, flower shapes and sizes ranging from Singles and Collerettes, through to Pompons, Cactus, and Orchid dahlias.

This summer Wisley will feature two *Dahlia* borders each with a pastel or hot colour theme and will showcase 60 *Dahlia* cultivars. These have been grown purely as a demonstration to educate and inspire our visitors. Equally importantly it will highlight their garden suitability and value as ornamental plants.

## Perfect Plant Partners – David Jewell's suggestions

*Dahlia* 'Bishop of Llandaff' or *D. 'Tally Ho'*, both with bronze foliage, create strong contrast among marmalade-shaded heleniums (*Helenium* 'Waltraut' and *H. 'Bruno'*) with a diminutive foreground planting of the annual cigar plant, *Cuphea ignea*.

*D. 'Honka'* often invites comments with its spidery yellow flowers amidst soft blue *Amsonia tabernaemontana* and background pink hybrid musk *Rosa 'Cornelia'*.



*D. 'Bishop of Llandaff'* in the Exotic Garden at Great Dixter



*D. 'Twynning's After Eight'* at RHS Garden Wisley

White is the strongest colour in the garden and will always draw your eye and command attention, never more so than with *D. 'After Eight'*, which with its almost black foliage and white flowers blends effectively with deep blue *Agapanthus* and the tall purple spires of *Salvia 'Purple Majesty'*.

*D. 'Fascination'* (purplish-pink semi-double flowers) combines well with white *Phlox* and soft yellow *Euryops pectinatus*.

## Herbarium

**Susan Grayer, Herbarium Researcher, RHS Garden Wisley**

A standard specimen provides the definitive reference for a named cultivar. It may take the form of a dried pressed plant (herbarium specimen), an illustration or a description. The standard portfolio should include where the cultivar name was first published and described, and any supporting information which may help in the identification of the taxon, such as photographs and other associated data. Dahlias are well represented by standard specimens at Wisley, many being obtained through registration, and some via the trial. Dahlias make effective herbarium specimens, particularly the Collerettes and Singles. There are currently 183 herbarium specimens and 568 standard specimens of dahlias in the RHS Herbarium.



*D. 'Juul's Allstar'*



*D. 'Don Hill'*



## Dahlia Sub-Committee

Responsible for assessing and judging the trial in 2008, the *Dahlia* Sub-Committee was made up of plantsmen, nurserymen, experts and dahlia enthusiasts who gave their time voluntarily to promote dahlias as garden plants.

**Chairman:** Graham Carey

**Vice Chairman:** Jon Wheatley

### Members:

Bill Boardman	David Brown	Alan Buller
Eric Carter	Ted Collins	Paul Dalby
Ron Dewberry	Fergus Garrett	Carl Hamnett
Andy Jamieson	David Kent	Robin Pearce

**Secretary:** Sharon McDonald

**Trials Recorder:** Sue Drew

Anna Stankiewicz



## Registration of *Dahlia* cultivar names

The Royal Horticultural Society (RHS) is the International Cultivar Registration Authority (ICRA) for dahlias. It is recommended that all new cultivars are registered before plants are released or catalogued. No RHS award for any dahlia cultivar can be confirmed unless the name has been accepted by the ICRA. Applications to register dahlias can be made through: Ms Sharon McDonald, International *Dahlia* Registrar, RHS Garden Wisley, Woking, Surrey, GU23 6QB, England.

## Dahlia suppliers

See *RHS Plant Finder* for widely available cultivars

[www.rhs.org.uk/rhsplantfinder/plantfinder.asp](http://www.rhs.org.uk/rhsplantfinder/plantfinder.asp)

Aylett Nurseries Ltd, North Orbital Road, St Albans, Hertfordshire, AL2 1DH [www.aylettnurseries.co.uk](http://www.aylettnurseries.co.uk)

Binny Plants, West Lodge, Binny Estate, Ecclesmachan Road, Nr Broxbourn, West Lothian, EH52 6NL [www.binnyplants.co.uk](http://www.binnyplants.co.uk)

Dan's Dahlias, 994 South Bank Road, Oakville, WA 98568, USA [www.dansdahlias.com](http://www.dansdahlias.com)

Geerlings Dahlias, Kadijk 38, 2104AA Heemstede, Holland, The Netherlands [www.geerlings-dahlia.nl](http://www.geerlings-dahlia.nl)

Halls of Heddon, West Heddon Nurseries, Heddon-on-the-

Wall, Northumberland, NE15 0JS [www.hallsofheddon.co.uk](http://www.hallsofheddon.co.uk)

JRG Dahlias, 22 Summerville Road, Milnthorpe, Cumbria, LA7 7DF [www.jrg-dahlias.co.uk](http://www.jrg-dahlias.co.uk)

Rose Cottage Plants, Bay Tree Farm, Epping Green, Essex, CM16 6PU, [www.rosecottageplants.co.uk](http://www.rosecottageplants.co.uk)

Sampford Shrubs, Sampford Peverell, Tiverton, Devon, EX16 7EN [www.samshrub.co.uk](http://www.samshrub.co.uk)

Southon Plants, Mutton Hill, Dormansland, Lingfield, Surrey, RH7 6NP [www.southonplants.com](http://www.southonplants.com)

Station House Nurseries, Station Road, Burton, South Wirral, Cheshire CH64 5SD [www.eurodahlia.com](http://www.eurodahlia.com)

The National Collection of Dahlias, Winchester Growers Limited, Varfell Farm, Long Rock, Penzance, Cornwall, TR20 8AQ [www.national-dahlia-collection.co.uk](http://www.national-dahlia-collection.co.uk)

Todd's Botanics, West Street, Coggeshall, Colchester, Essex, CO6 1NT [www.toddsbotanics.co.uk](http://www.toddsbotanics.co.uk)

Usual & Unusual Plants, Onslow House, Magham Down, Hailsham, East Sussex, BN27 1PL [www.uuplants.co.uk](http://www.uuplants.co.uk)

## Acknowledgements

Senders of plants to the *Dahlia* Trials

The Trials Curatorial Team, RHS Garden Wisley

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Helen Bostock, Horticultural Advisory Services, RHS Garden Wisley

Ron Hedge, Honorary Assistant *Dahlia* Registrar, RHS Garden Wisley

Béatrice Henricot, Plant Pathology, RHS Garden Wisley

Sharon McDonald, International *Dahlia* Registrar, RHS Garden Wisley

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Photographs by Sue Drew unless otherwise indicated

## Further reading

*Classified Directory & Judging Rules*. 30th edition, 2009.

National *Dahlia* Society, UK

Collins, T. 2003. *Dahlias: a colour guide*. The Crowood Press, Marlborough, Wiltshire, UK

Elliott, B. 2004. *The Royal Horticultural Society, A History 1804–2004*. Philimore & Co. Ltd, Chichester, West Sussex, UK

McClaren, B. 2004. *Encyclopedia of Dahlias*. Timber Press, Cambridge, UK, Timber Press Inc., Portland, Oregon, USA

Rowlands, G. 1999. *The Gardener's Guide to Growing Dahlias*. David & Charles Publishers, Newton Abbot, Devon, UK, Timber Press Inc., Portland, Oregon, USA

*The Tentative Classified List and International Register of Dahlia Names 1969*. The Royal Horticultural Society, London, UK

## Useful websites

American *Dahlia* Society [www.dahlia.org](http://www.dahlia.org)

German *Dahlia* Society [www.dahlie.net/en/index.html](http://www.dahlie.net/en/index.html)

National *Dahlia* Society [www.dahlia-nds.co.uk](http://www.dahlia-nds.co.uk)

Registration of dahlias

[www.rhs.org.uk/plants/registration\\_dahlia.asp](http://www.rhs.org.uk/plants/registration_dahlia.asp)

The Growing World of Dahlias [www.dahliaworld.co.uk](http://www.dahliaworld.co.uk)

The RHS Herbarium

[www.rhs.org.uk/learning/research/herbarium.asp](http://www.rhs.org.uk/learning/research/herbarium.asp)

### RHS Gardening Advice on growing dahlias

[www.rhs.org.uk/advice/profiles0406/aphids.asp](http://www.rhs.org.uk/advice/profiles0406/aphids.asp)

[www.rhs.org.uk/advice/profiles0800/earwigs.asp](http://www.rhs.org.uk/advice/profiles0800/earwigs.asp)

[www.rhs.org.uk/advice/profiles0700/slugs.asp](http://www.rhs.org.uk/advice/profiles0700/slugs.asp)

[www.rhs.org.uk/advice/profiles0700/snails.asp](http://www.rhs.org.uk/advice/profiles0700/snails.asp)


[www.rhs.org.uk/advice/profiles0601/red\\_spider\\_mite.asp](http://www.rhs.org.uk/advice/profiles0601/red_spider_mite.asp)

[www.rhs.org.uk/advice/profiles0600/capsid\\_bug.asp](http://www.rhs.org.uk/advice/profiles0600/capsid_bug.asp)

[www.rhs.org.uk/Advice/profiles0800/powdery\\_mildews.asp](http://www.rhs.org.uk/Advice/profiles0800/powdery_mildews.asp)

[www.rhs.org.uk/advice/profiles0804/dahlia\\_flower\\_balling.asp](http://www.rhs.org.uk/advice/profiles0804/dahlia_flower_balling.asp)

## RHS Plant Trials

With so many different types of gardener and so many different cultivars available to them in each group of plants, it is important that a system of recommendation is in place to help with selection at point of sale. These recommendations must be clear and reliable to ensure that of the thousands of plants available in the UK, a proportion are known to be excellent garden plants. The RHS provides this information through its extensive programme of plant trials held at RHS gardens in the UK. The RHS Award of Garden Merit  signifies the selection of the best cultivars for general garden use.

RHS plant trials serve the professional gardener who wants to know the range of plants available, including the latest breeding and selection programmes, with their distinctive characteristics and provenance. They also serve the amateur who wants to know which plants will grow and perform well in a particular garden situation.

The RHS has an unrivalled resource of knowledge and expertise and is therefore best placed to conduct plant trials for the UK gardening market.

## RHS Trials Bulletins

**Begonia** Rex Cultorum Group: Number 16  
**Canna**: Number 3  
**Chilli Peppers**: Number 22  
**Clematis alpina** & **C. macropetala**: Number 21  
**Dahlias** (open centred): Number 24  
**Daisies** (yellow perennial): Number 6  
**Delphinium**: Number 5  
**Fuchsia** (hardy): Number 12  
**Geranium** (hardy) Stage 1: Number 10  
**Geranium** (hardy) Stage 2: Number 14  
**Geranium** (hardy) Stage 3: Number 18  
**Hyacinthaceae** (little blue bulbs): Number 11  
**Hydrangea paniculata**: Number 23  
**Iris** (bearded): Number 17  
**Lavenders** (hardy): Number 2  
**Miscanthus**: Number 7  
**Peppers** (sweet): Number 15  
**Potatoes** (salad): Number 8  
**Potentilla** (shrubby): Number 1  
**Rhododendron yakushimanum** and hybrids: Number 13  
**Runner Beans**: Number 19  
**Saxifrages** (silver): Number 9  
**Sedums** (herbaceous): Number 20  
**Spiraea japonica** (with coloured leaves): Number 4

These bulletins can be viewed at a larger size on the RHS Website: [www.rhs.org.uk/plants/trials\\_bulletins.asp](http://www.rhs.org.uk/plants/trials_bulletins.asp)

## RHS Plant Trials and Assessments

Online publications, to complement the RHS Plant Trials Bulletins series

**Caryopteris**: Number 2  
**Perovskia**: Number 3  
**Pittosporum tenuifolium** hybrids and cultivars: Number 1

Trials indexes can be obtained from The Trials Office, RHS Garden Wisley, Woking, Surrey GU23 6QB, Email: [trials@rhs.org.uk](mailto:trials@rhs.org.uk)  
Trials reports on the web at [www.rhs.org.uk/plants/award\\_plants.asp](http://www.rhs.org.uk/plants/award_plants.asp)

## The Royal Horticultural Society

The RHS is the UK's leading gardening charity dedicated to advancing horticulture and promoting good gardening. Its charitable work includes providing expert advice and information, advancing horticulture, training the next generation of gardeners, helping school children learn about plants, and conducting research into plants, pests and environmental issues affecting gardeners. The RHS AGM plant trial scheme is an important part of this work.

The RHS receives no government grants and for every pound received from members' subscriptions we need to raise more than twice as much again to fund our charitable work. We also rely on donations and sponsorship to supplement income from our garden operations, flower shows, shops and plant centres.

## RHS Herbarium

The RHS Herbarium keeps a record of trial cultivars as dried specimens with detailed descriptions and photographic images. This forms an important reference for the horticultural industry. Any new cultivars are highlighted and a nomenclatural standard specimen is preserved and described.

The RHS Herbarium, stored at RHS Garden Wisley, is the largest active horticultural herbarium in the world. At present the collection contains about 80,000 herbarium specimens and over 40,000 images of plants. Material is actively collected from a wide spectrum of sources including RHS plant trials.

## The RHS, the UK's leading gardening charity

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