

RHS Plant Trials and Awards

Runner Beans

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Bulletin Number 19 October 2007

www.rhs.org.uk

RHS Trial of Runner Beans

Runner Beans

(Phaseolus coccineus)

In 2006 the Royal Horticultural Society, as part of a continuing assessment of new and established cultivars for cultivation, held a trial of runner beans. RHS vegetable trials are conducted as part of our charitable mission to inform, educate and inspire all gardeners, with good, reliable cultivars identified by the Award of Garden Merit after a period of trial.

Objectives

The trial aimed to compare and evaluate a range of runner bean cultivars, including short-pod and dwarf-growing cultivars, grown in different parts of the country, and to demonstrate the cultivation of this crop. The Vegetable Trials Subcommittee assessed the entries and outstanding cultivars for garden use were given the Award of Garden Merit. Entries were also described and photographed to provide a lasting record in the RHS Herbarium at Wisley.

Entries

There were 48 entries in the trial submitted by various seed companies in the UK, Europe and the USA.

Seeds of all entries were sent to Wisley and grown there. The Trials Office also distributed seeds of 26 currently available cultivars to East Ruston Old Vicarage Garden (Norfolk) and to eleven members of the National Vegetable Society (NVS) for trial in other regions, ranging from Hampshire to central Scotland and westwards to Gwynedd, North Wales. The NVS members each grew a randomly selected five cultivars, plus 'Enorma Elite' as a control. In addition, seeds of a number of the cultivars were sent to BBC Gardeners' World Garden (Berryfields), West Dean Gardens (West Sussex), RHS Garden Rosemoor (Devon) and RHS Garden Harlow Carr (North Yorkshire). Quality and cropping data was requested from all sites and, when made available, was included as part of the assessment by the Vegetable Trials Subcommittee.

Background

Runner beans (*Phaseolus coccineus*) are also known as "scarlet runners", a term that reflects the growth habit and red flowers of early introductions. Perennial, but not frosthardy, they are usually grown as a half-hardy annual. Members of the Fabaceae family, runner beans are native to the cooler, high-altitude regions (around 2000 metres) of central and northern South America, where they have been domesticated for more than 2000 years, although wild, small-podded plants are still found growing in the cool, partially shaded valleys of mixed pine-oak forests in Guatemala and Mexico. The indigenous people of the region developed a system of companion planting runner beans with maize and squash known as "the three sisters" or "a guild of plants": maize provides a natural pole for bean vines to climb; the beans fix nitrogen on their roots, improving soil fertility for the following year's crop and also help to stabilise the maize plants, making them less vulnerable to wind damage; the shallow-rooted squashes act as a living mulch that suppresses weeds and reduces evaporation from the soil.

Records show that the bean was introduced to Spain following Columbus's second voyage to the New World in 1493 and then spread into the eastern Mediterranean. By the seventeenth century it was widely cultivated there and was also being grown in northern Europe as an ornamental, with John Tradescant (gardener to King



Front cover: 'Achievement–Merit' (Photos by Jacquie Gray)

Left: The bean arch at RHS Garden Rosemoor

Opposite: 'Celebration'

Charles I) including a plant that has been identified as *Phaseolus coccineus* in a list of his plants in 1634. A shortday plant, it would not have initiated flowering if the nights were less than 10 hours long, so it is likely that it would not have flowered until late August or September and would have produced very few ripe seeds. Philip Miller, in *The Gardeners Dictionary* (1754), wrote that it was difficult to produce seed in England as "the fruit seldom comes to good".

With time and selection the runner bean became daylength neutral, flowering early enough for pods to develop in Northern Europe and with this its use as a food crop increased. In the wet UK climate runner beans produced pods that were fleshier but still, like those in the wild, short and containing only three to five seeds. For more than 100 years, and especially after the Second World War with an increased interest in exhibiting, breeding was aimed at producing longer pods. Today, with supermarkets looking for uniform, unblemished beans at around 25cm long, breeding programmes are selecting for flavour, better quality and for stringless beans, as well as for self-fertilising cultivars that give a better pod set and for novelties such as a short-podded, mangetout bean. White flowered cultivars are popular with commercial growers because, lacking the anthocyanin that is present in those with red flowers, they suffer less from bruising when transported. The runner bean has become a popular vegetable in Britain, but is also commonly used as an ornamental in other countries. In Germany, Scandinavia and in areas of the USA where high temperatures reduce setting but encourage flower production, gardeners grow them for their showy racemes of red, white and bi-coloured flowers, which attract bees, butterflies and in some parts of the USA, hummingbirds.

Cultivation

Runner beans prefer a position in full sun, although they will tolerate part shade. The sites at both Wisley and at East Ruston Old Vicarage Garden were open, but sheltered from the wind by trees or hedges, as strong winds can damage young leaves and pods or easily blow over the tall, leafy wigwams. The plot at Wisley was cultivated and raked by hand, but no farmyard manure or fertiliser was incorporated. Trials plots at Wisley are very rich from years of cultivation and a soil too rich in nitrogen would have encouraged the plants to produce lots of leafy growth but few beans. Runner beans prefer a soil pH of 6.5 and analysis of soil at both sites confirmed that neither was below this: a more acidic soil might need liming. The beans were grown on wigwams made up of four canes. Three wigwams of each cultivar were grown at Wisley and a single wigwam of each cultivar was grown at East Ruston. Three seeds were sown directly into the soil at the bottom of each cane on 24 May when the soil temperature had warmed enough to enable germination (a minimum of 10°C/50°F) and later the seedlings were thinned to two plants per cane. The wigwams were spaced 60cm apart, in a single row at East Ruston and in rows 90cm apart at Wisley. Trial entries at Rosemoor were grown in single rows either side of a path, producing a decorative arch.



Members of the NVS and the other gardens that participated in the trial were asked to grow the seeds as they would normally and to record their sowing date and methods of cultivation, as well the as cropping and quality details. Dwarf, non-climbing cultivars were grown at the end of the trial plot.

The trial was watered as necessary once flowering had started, by drip irrigation at Wisley and by hose at East Ruston. This was done in the evening to help cool the area around the plants, as the flowers tend to abort if the soil is dry and the night temperature exceeds 14°C. Gardeners are sometimes advised to spray their plants with water to aid pod set as this creates localised cooling by evaporation. The July weather had been dry and hot at Wisley, so the heavy rain on the 27 July (16.6mm falling in a couple of hours at Wisley) was particularly welcome. In total the trial at Wisley was watered about six times during dry spells. At East Ruston cool sea breezes had helped to keep temperatures down to a maximum of 26°C, in comparison with 36.5°C at Wisley.

Pests and Diseases

The plants at Wisley and East Ruston were regularly inspected for signs of pests and diseases. At Wisley the trial was sprayed three times before 9 August for black bean aphids (black fly). At East Ruston the plants were sprayed once early in the season. These large black aphids overwinter on shrubs, migrate to the beans in spring and can do considerable damage if the colonies are not treated as soon as they are seen. Spraying with water will knock them off the plants; or insecticides, either organic or a synthetic containing bifenthrin, could be used. Red spider mite was not a problem in the trials, but it can cause the foliage to turn bright yellow in hot, dry summers. The canes used for the trial were either new or had not been used in the previous year as this prevented overwintering red spider mite from being brought into the crop. If infestation had occurred, insecticides based on fatty acids, soap or plant and fish oil could have been used to save the crop. Where mites are troublesome every year it may be beneficial to use a biological control, introducing predators as soon as the damage is seen.

Runner beans are a popular and relatively easy crop to grow in the UK and with good growing conditions most people find that they are generally disease-free. Some leaf damage was noticed on a plant in the trial, so samples were sent from East Ruston and Wisley to be tested by the RHS pathology department. The samples were found to be clear of disease and the minor leaf-spotting was attributed to weather and/or mechanical damage, probably caused by insects. Runner beans can be infected with bean rust, which causes whitish spots that later turn rusty brown. This fungal disease usually occurs late in the season and does little significant damage, but as there are no remedies a badly affected crop should be removed and beans should not be grown again on that site for several years. Halo spot/blight is a bacterial disease carried on the bean seeds, which causes the leaves to have brownish, water-soaked



spots that are surrounded by a yellow halo. There are no remedies, so infected crops should be destroyed, but using fresh seed from a reputable supplier should avoid the problem. *Sclerotinia* is a fungal disease that can infect a wide range of plants, including runner beans. Signs of this disease are fluffy moulds on rotted stems and large grey and black bodies (*sclerotia*) within the stems. There are no remedies, but gardeners should practise crop rotation and remove and destroy affected plants as the *sclerotia* will persist in the soil.

Runner beans are pollinated by honey bees and longtongued bumblebees. Short-tongued bees do not pollinate the flowers because they cannot reach the nectar from the front and so nip a hole in the base to gain access. While there is no way to prevent this, sufficient bees usually visit the flowers in the conventional way for a good crop to set if other factors, such as water availability and temperatures, are favourable.

Results of the Trial

Award of Garden Merit (AGM) Σ H3 2006

'Achievement-Merit' 'Red Flame' 'White Lady' 'Flare' 'Emergo Stringless' (Subject to availbility)

'Lady Di' 'White Emergo-Snowy' 'Enorma-Elite' 'Saint George'

Previous awards not reconfirmed by this trial 'Liberty' AGM (H3) 1993 'Desiree' AGM (H3) 1999 'White Achievement' 'Celebration' 'Royal Standard'

'Aintree' 'Red Rum' 'Wisley Magic'

TZ 5134 (Subject to naming and availability)

'White Apollo' AGM (H3) 1999

H3 = plants hardy outside in some regions or in particular situations or which, whilst usually grown outside in summer, need frost-free protection in winter.

Findings

Runner beans prefer the cooler, wetter climate that is the usual English summer. High night temperatures and low rainfall in 2006 made this a difficult year, but the trial still cropped very well. The Subcommittee did note that there was much more shading at Wisley where three wigwams of each cultivar were grown, compared to East Ruston where a single row of wigwams were grown. There the conditions were much more open, allowing greater air flow and light to reach the plants. The trial at East Ruston had been outstanding, with the higher water table, cooling sea breezes and more open cultivation of the plants helping to produce very good crops. The foliage on the plants at Rosemoor had not grown as leafy as those at Wisley or East Ruston, but the entries had cropped well and were easy to pick from the path. NVS members reported that, in spite of considerable efforts to irrigate, most had suffered very poor pod set on their beans due to the high night temperatures and that this had resulted in later than usual cropping, with lower yields. Yields from the South Coast sites did not appear as seriously affected as those in central England, which might reflect the cooling effect of night-time breezes from the sea. Further north cropping, although somewhat delayed, followed its normal pattern of peaking towards the end of August. The Edinburgh site, which was described as quite exposed, produced a better crop than usual and may have benefited from higher temperatures. The records and comments produced by NVS members were taken into consideration by the Subcommittee when assessing the trial. It had been hoped that their results would indicate whether different cultivars would perform better in different parts of the country. However, although of great value to the Subcommittee in their overall assessment, the sample was not large enough to allow any conclusions to be drawn about regional suitability.

Five of the entries in the trial had specific ornamental characteristics; red and white bi-coloured flowers for 'Painted Lady Improved' and 'Saint George'; salmon-pink flowers for 'Celebration' and 'Sunset'; golden leaves with red flowers for 'Sunbright'. The Subcommittee found that 'Saint George', with its high yield of fleshy, juicy pods performed better than 'Painted Lady Improved' and noted that although 'Sunbright' was very attractive, it cropped too late (first picked 8 September) to be grown solely for a vegetable crop.



Opposite: 'St George'

Above: 'Sunbright' at Wisley (Photo Alison Cundv)



In general, they considered that the dwarf cultivars, while decorative, were better suited to growing in pots. These cultivars carry a naturally dwarfing gene and have been developed from the tall, climbing beans. They produce runner beans on plants that grow to around 45cm high, but the Subcommittee noted that, when grown directly in the ground, the pods became dusty and muddy from being so close to the soil. They commented that 'Snow White' had performed the best of this type in the trial, producing a reasonable yield (16.98kg) of straight, stringless beans.

The trial also included two heritage cultivars that are not EU-listed, 'Black Emperor' and 'David Chappell', as well as entries submitted by individuals: 'As Long As Your Arm Reselected' (first picked on 11 August), 'Bournville' (very fleshy pods, but slow to crop fully), 'Headway' (exceptionally long, smooth straight pods that would be good for exhibition), an un-named cultivar (said to be similar to 'Scarlet Emperor'; crop to 15 September 10.69kg) and 'Simm's Corsair' (25.36kg, but rather fibrous pods when compared to others).

Harvest and flavour

Regular picking encourages new beans to develop and helps to ensure a continuous crop through to late summer. The trial plants were picked three times per week at the height of the season. A good source of vitamin C, folic acid and fibre, runner beans are at their best when fresh, young and tender. They should be harvested when the pods are less than full length, snap easily and while the seeds are still small and pale in colour. As the pods get older they develop string and the pod-walls become more fibrous, with pronounced bumps on the surface indicating that the seeds are enlarging and that moisture is going into the seed from the pod. The Subcommittee tasted the raw pods as part of their assessment and evaluated them for snap, stringiness, fibrousness and appearance as well as for flavour.

Above: The RHS Vegetable Subcommittee at East Ruston (Photo Alison Cundy) Right: Runner beans in the Model Garden at RHS Wisley



Judging

The trial was assessed for the Award of Garden Merit by the Vegetable Trials Subcommittee uusing the following criteria.

- quality
- taste
- o colour
- straightness of bean
- stringiness
- smoothness
- o yield

Award of Garden Merit Runner Beans



'Achievement-Merit' Sent by A L Tozer Ltd.

Red flowered, late main crop. Attractive, good quality, straight, fleshy pods.

Very straight, long, fleshy, flat, smooth pods average 36cm long, 1.8cm wide. They have little fibre in the sides and are stringless when young. First picked 2 August. Flowers are red; seeds are spotted with black.



'Aintree'

Sent by A L Tozer Ltd.

Mid-season. Red flowered cultivar that produces attractive, good quality, slim, straight, long pods with sweet flavour.

Very straight, fleshy, flat, smooth pods average 31cm long, 1.6cm wide. They have little string or fibre when young. First picked 2 August. Flowers are red; seeds are spotted with black.



'Celebration'

Sent by Suttons Consumer Products Ltd. Also offered by A L Tozer Ltd.

High yield of handsome, straight, smooth, good quality, fleshy pods with good colour and flavour. Flowers are a decorative pink.

Straight, fleshy, flat to oval pods average 30cm long, 2cm wide. They have little string or fibre when young. First picked 27 July. Attractive flowers are salmon-pink; seeds are black, mottled with pink.



'Enorma-Elite'

Sent by A L Tozer Ltd.

Vigorous cultivar with red flowers. Produces nice smooth, straight beans. Sets well and has a reasonable yield.

Straight, flat pods are fairly fleshy and average 31cm long, 1.6cm wide. They have little fibre in the sides and are stringless when young. First picked 2 August. Flowers are red; seeds are spotted with black.



'Flare'

Sent by S E Marshall.

Good yield of attractive, straight, narrow pods that are smooth and have a good colour. Very little string.

Straight, fleshy, flat smooth pods average 29cm long, 1.8cm wide. They have little fibre in the sides and no string in the back when young. First picked 2 August. Flowers are red; seeds are spotted with black.

Award of Garden Merit Runner Beans



'Lady Di'

Sent by D T Brown & Co.

Red flowered cultivar giving a very good crop of stringless, long, fleshy pods.

Very slightly curved, flat, smooth pods average 27cm long, 1.7cm wide. They are truly stringless and have very little fibre in the sides when young. First picked 27 July. Flowers are red; seeds are black, mottled with pink.



'Red Flame'

Sent by Johnsons Seeds. Also offered by A L Tozer Ltd.

A red flowered cultivar that sets well and produces smooth, long, straight pods.

Straight, fleshy, flat, smooth pods average 27cm long, 1.5cm wide. They have little string or fibre when young. First picked 2 August. Flowers are red; seeds are spotted with black.



'Red Rum'

Sent by A L Tozer Ltd.

Red flowered cultivar that produces a very good crop of stringless, fleshy pods with good flavour. Sets well in hotter temperatures.

Straight, smooth, fleshy pods average 22cm long, 1.5cm wide. They have very little fibre in the sides and are stringless when young. First picked 27 July. Flowers are red; seeds are mottled with black.



'Royal Standard'

Sent by A L Tozer Ltd.

Red flowered. Good yield of stringless beans that tend to curl, but are broad and succulent with a good snap and nice flavour.

Fairly straight, broad, flat, fleshy pods average 29cm long, 2cm wide. They are stringless and have little fibre in the sides when young. First picked 27 July. Flowers are red; seeds are spotted with black.



'**Saint George**' Sent by A L Tozer Ltd.

Early, high yield of crisp, juicy pods with good snap. Ornamental cultivar with bi-coloured, red and white flowers. An improved 'Painted Lady'.

Fairly straight, thick, fleshy pods average 25cm long, 2cm wide. They have little string or fibre when young. First picked 27 July. Bi-colour flowers are an attractive red and white; seeds are mottled with black.

* These entries have been recommended for the AGM, but cannot receive the award until named and available to the public in retail catalogues



'White-Achievement'

Sent by A L Tozer Ltd.

Later cropping. White flowered, produces a reasonable yield of dark green, fleshy pods with a strong flavour.

Fairly straight, smooth, fleshy pods average 30cm long, 1.6cm wide. They have little fibre in the sides and no string in the back when young. First picked 2 August. Flowers and seeds are white.



'White Emergo-Snowy' Sent by A L Tozer Ltd.

White flowered. Produces a good crop of straight, fleshy pods with good flavour. It was noted that this cultivar continued to crop well even when the temperature was high.

Long, straight, flat to oval, fleshy pods average 32cm long, 2cm wide. They have little string or fibre when young. First picked 2 August. Flowers and seeds are white.



'White Lady'

Sent by A L Tozer Ltd.

White flowered. Gives a high yield of good quality, smooth pods with little fibre and a good snap.

Long, flat, smooth pods average 34cm long, 2cm wide. They have little fibre in the sides and are stringless when young. First picked 2 August. Flowers and seeds are white.



'Wisley Magic'

Sent by A L Tozer Ltd.

Red flowered. Good yield throughout season of very good quality, long pods with a nice flavour.

Long, smooth, slender pods average 32cm long, 1.7cm wide. They have little string or fibre when young. First picked 2 August. Flowers are red; seeds are spotted with black.

'Emergo Stringless' Subject to availability* Sent by Bakker Brothers.

White flowered cultivar produces a good crop of flat, broad, fleshy pods.

Fairly straight, broad, fleshy pods average 30cm long, 2.5cm wide. They are stringless and have little fibre in the sides when young. First picked 2 August. Flowers and seeds are white.

TZ 5134 Subject to naming and availability*

Sent by A L Tozer Ltd.

Red flowered cultivar. Produces a good yield of attractive, well-shaped beans that are long, stringless and fleshy.

Very long, flat, smooth pods average 35cm long, 1.7cm wide. They have little fibre in the sides and are stringless when young. First picked 2 August. Flowers are red; seeds are spotted with black.

Selection guide

* Yield in kilograms: picked at Wisley up to 15 September 2006.

Subject to availability
Subject to naming & availability

Cultivars	Туре	Bean seed	Yield from 24 plants*	Flower colour	Ŷ
'Achievement-Merit'			20.07		AGM (H3) 2006 and 1999
'Aintree'			17.55		AGM (H3) 2006
'Enorma-Elite'			19.22		AGM (H3) 2006
'Flare'			21.76		AGM (H3) 2006 and 1999
'Lady Di'	stringless		25.85		AGM (H3) 2006 and 1999
'Red Flame'			19.91		AGM (H3) 2006
'Red Rum'			27.50		AGM (H3) 2006 and 1999
'Royal Standard'	stringless		24.50		AGM (H3) 2006
TZ 5134			25.50		AGM (H3) 2006, STN/A ^{††}
'Wisley Magic'			21.51		AGM (H3) 2006 and 1999
'Emergo Stringless'	stringless		24.32		AGM (H3) 2006, STA [†]
'White Achievement'			20.58		AGM (H3) 2006
'White Emergo-Snowy'			24.24		AGM (H3) 2006
'White Lady'			22.46		AGM (H3) 2006 and 1999
'Saint George'			30.62		AGM (H3) 2006
'Celebration'			28.58		AGM (H3) 2006

Vegetable Trials Subcommittee

Chairman: Vice Chairman: Colin Randel Peter Dawson

Members

John Barker Ron Butler Bill Chowings Paul Corfield Mike Day Derrick Fuller Ian Gillott Tony Hewitt David Jeffery Steve Mercer Sarah Wain Ron Watts Tony Wilkie Medwyn Williams



Vegetable Subcommittee at Wisley (Photo: Alison Cundy)

Senders of seed to the trial

A L Tozer Ltd, Cobham, Surrey KT11 3EH. www.tozerseedsdirect.com Bakker Brothers, Oostelÿke Randweg 12, 1723 LH Noord-Scharwoude, Netherlands. Crisp Innovar Ltd., Glebe House, Station Road, Reepham, Norfolk NR10 4NB. D T Brown & Co, Bury Road, Kentford, Newmarket, Suffolk CB8 7PQ. www.dtbrownseeds.co.uk Heritage Seed Library, HDRA, Ryton Organic Garden, Coventry CV8 3LG. www.gardenorganic.org.uk Holland-Select BV, Horn 29, 1619 BT Andijk, 1619 ZG, Netherlands. Johnsons Seeds, Gazeley Road, Kentford, Newmarket, Suffolk CB8 7QB. www.johnsons-seeds.com Mr Fothergill's Seeds, Gazelev Road, Kentford, Newmarket, Suffolk CB8 7QB. www.fothergills.co.uk N L Chrestensen, Erfurter Samen und Pflanzenzucht GmbH, Postfach 854, 99016 Erfurt, Germany. S E Marshall, Regal Road, Wisbech PE 13 2RF. www.marshalls-seeds.co.uk Suttons Consumer Products Ltd, Woodview Road, Paignton, Devon TQ4 7NG. www.suttons.co.uk

Thompson & Morgan Ltd, Poplar Lane, Ipswich, Suffolk IP8 3BU. www.thompson-morgan.com Western Hybrid Seeds Inc, P O Box 1169, Hamilton City, CA 95951, USA. W Robinson & Son (Seeds & Plants) Ltd, Sunny Bank, Forton, Nr Preston, Lancs. PR3 0BN.

www.mammothonion.co.uk

Individuals (can be contacted via RHS Trials Office): Mr D Head; Mr R Rimmer; Mr J M Simm; Mr R Waite; Mr F Webber.

Acknowledgements

Dr Peter Dawson is managing director of A L Tozer Ltd, an independent company that was established in the early 1940's and is now the only UK commercial seed producer currently breeding runner bean cultivars.

Jim England and the curatorial team, RHS Garden Wisley.

Peter Earl, RHS Garden Rosemoor

Alan Gray, East Ruston Old Vicarage Garden

Sarah Wain, West Dean Gardens

Members of the National Vegetable Society

Further reading

Biggs, T. (2003) Growing Vegetables – The RHS Encyclopaedia of Practical Gardening. Mitchell Beazley, London Pollock, M. (2002) RHS Fruit & Vegetable Gardening Dorling Kindersley, London

RHS TRIALS

Stickland, S. *The Garden* **132** (5):302 Dawson, P. *The Garden* **124** (5):336 Virtual runner bean trial 2006 http://www.rhs.org.uk/plants/trials_bean.asp

Useful websites

RHS Gardening Advice on growing Runner Beans www.rhs.org.uk/advice/profiles0800/runner_beans.asp www.rhs.org.uk/advice/profiles0507/beanproblems.asp www.rhs.org.uk/advice/profiles0406/aphids.asp www.rhs.org.uk/advice/profiles0802/pollen_beetle.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 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 \Im 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 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 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 30,000 images of plants. Material is actively collected from a wide spectrum of sources including RHS plant trials.

RHS Bulletins

Begonia Rex Cultorum Group: February 2007 Canna: September 2003 *Carvopteris* Daisies (yellow, perennial): September 2004 Delphinium: June 2004 Fuchsia (hardy): December 2005 Geraniuims (hardy) Stage 1: June 2005 Geraniuims (hardy) Stage 2: June 2006 Geraniuims (hardy) Stage 3: September 2007 *Hyacinthaceae* (little blue bulbs): September 2005 Iris (bearded) May 2007 Lavenders (hardy): July 2003 Miscanthus: October 2004 Peppers (sweet): November 2006 Potatoes (salad): November 2004 *Potentilla* (shrubby): July 2002 Rhododendron yakushimanum & hybrids: May 2006 Saxifrages (silver): May 2005 Spiraea japonica (with coloured leaves): November 2003

These bulletins can be viewed at a larger size on the RHS Website:

www.rhs.org.uk/publications/pubs_bulletins.asp

RHS Plant Assessments

The first of what will become a series of online publications, to compliment the *RHS Plant Trials and Awards* series, was published in July 2006:

Pittosporum tenuifolium hybrids & cultivars

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