

Trial of *Echinacea* from plants 2001-2003

An Invited RHS Trial

- Objectives:** To review the genus *Echinacea* which has recently increased in popularity.
To compare and assess a range of species and cultivars and to recommend the Award of Garden Merit to those considered to be excellent garden plants.
To establish correct nomenclature and to obtain herbarium specimens, photographs, and descriptions for the archives held in the RHS Herbarium at Wisley.
- Entries:** 21 entries were submitted in the trial by the National Collection holder and various nurseries in UK, the USA and the Netherlands.
- Cultivation:** The site was rotovated prior to the planting of three plants of each entry on 20 June 2001, with 1m between the plants and 1.25m between the entries. The trial was top dressed in March 2002 and 2003 with Vitax Q4 at 56g per three plants. Plants were fed with a foliar feed seaweed extract ('Maxicrop') containing sequestered iron in July 2002. Plants were sprayed against mildew every fortnight and were sprayed against aphids as required.
- Records:** A record was made of the date when 50% of an entry was flowering.
- Judging:** Members of the Floral Trials Sub-committee inspected the trial on 31 July 2001, 18 July, 30 July, 13 August, 29 August 2002 and 29 July, 12 August, 27 August 2003 and recommended the Award of Garden Merit to 3 cultivars based on the following criteria:
- flower (form and uniformity of shape) : colour : habit : vigour
- Pathology:** In 2002 several entries displayed symptoms characteristic of a virus and cucumber mosaic virus was isolated in one entry.
In 2003 many plants in the trial showed symptoms of attack by leaf and bud nematodes, stunting, leaf distortion and chlorosis (possibly due to a viral infection).
A virus consistent with potyvirus or potyvirus was detected using electron microscopy but could not be identified further.
- Findings:** It was noted that *Echinacea* lends itself well to the currently fashionable naturalistic / prairie style of garden. However as many entries were seed-raised, plants tended to be very variable within entries.

Index of entries into the trial

Name of species / cultivar	Sender	No
<i>E. pallida</i>	North Hill	2
<i>E. paradoxa</i>	Cotswold Garden Flowers	1
<i>E. purpurea</i> 'Abendsonne'	A Brooks	4
<i>E. purpurea</i> 'Augustkönigin'	Coen Jansen	2
<i>E. purpurea</i> 'Augustkönigin'	Coen Jansen	8
<i>E. purpurea</i> Bressingham hybrids	A Brooks	12
<i>E. purpurea</i> 'Elton Knight' AGM (H4) 03	A Brooks	11
<i>E. purpurea</i> 'Greenheart'	Green Farm Plants	20
<i>E. purpurea</i> 'Kim's Knee High'	Coen Jansen	15
<i>E. purpurea</i> 'Kim's Mop Head'	Cotswold Garden Flowers	19
<i>E. purpurea</i> 'Magnus'	Coen Jansen	13
<i>E. purpurea</i> 'Pink Flamingo'	A Brooks	14
<i>E. purpurea</i> 'Robert Bloom'	Green Farm Plants	9
<i>E. purpurea</i> 'Rubinglow'	Cotswold Garden Flowers	5
<i>E. purpurea</i> 'Rubinstern'	Beth Chatto	6
<i>E. purpurea</i> 'Rubinstern' AGM (H4) 03	Green Farm Plants	7
<i>E. purpurea</i> 'Ruby Giant' AGM (H4) 03	RHS Wisley	21
<i>E. purpurea</i> 'The King'	A Brooks	10
<i>E. purpurea</i> 'White Lustre'	Cotswold Garden Flowers	18
<i>E. purpurea</i> 'White Swan'	Beth Chatto	16
<i>E. purpurea</i> 'White Swan'	Waterperry Garden	17
<i>E. tennesseensis</i> Elton hybrids	A Brooks	3



Summary of entries that received the Award of Garden Merit



AGM

AGM

***Echinacea purpurea* 'Elton Knight' AGM (H4) 2003**

Sent by Anthony Brooks. Available from Hilliers Nurseries. Votes (11-0). [Trial No. 11]

Plants 66 cm tall, 80 cm spread. Erect, not airy, much branched. Leaves, 12.2 cm long, 4.8 cm wide, (very slightly) toothed, scabrous, matt, Yellow-Green Group 147A. Flowering stems erect, hairy, stout, stiff, 65 cm long, Yellow-Green Group 144B lightly mottled dark grey green. Free flowering (C. 54 flowers), flowers 10 cm diameter, 3 cm deep, single, flat. Ray florets (c. 21) 3.6 cm long, 1.1 cm wide with pointed tips, Greyed-Purple Group 186C flushed with Red-Purple Group 64C. Cone 3.5 cm wide, 3.5 cm tall, Yellow-Orange Group 21A tipped Orange-Red Group 34A. Flowering from the end of July.

Compact, good for front of the border. Good colour cone with vibrant pink petals. Interesting mix of new and faded flowers as season progresses, but still tidy and neat. Excellent habit. Flowers slightly later. No staking required.

***Echinacea purpurea* 'Rubinstern' AGM (H4) 2003**

Sent by Green Farm plants. Widely available, although buyers should be wary of variation in seed-raised plants. Votes (10-1). [Trial No. 7]

Plants 117 cm tall, 80 cm spread. Erect (when supported), airy, much branched. Leaves 15 cm long, 4.3 cm wide, toothed, hairy, matt, Green Group 137B, underside Green Group 137A/B. Flowering stems erect, hairy, thin, stiff, 115 cm long, Green Group 138C/D heavily mottled with Brown Group 200C. Free flowering (c. 75 flowers), flowers 10 cm diameter, 5 cm deep, single, flat to slightly reflexed. Ray florets 3.9 cm long, 1.2 cm wide with pointed tips, Red-Purple Group 71C. Cone 3.7 cm wide, 2.8 cm tall, Greyed-Purple Group 187A. Flowering from mid July.

Good colour with dark cone. Slight variation in form.

***Echinacea purpurea* 'Ruby Giant' AGM (H4) 2003**

Sent by RHS Wisley. Available (see *RHS Plant Finder*). Votes (12-0). [Trial No. 21]

Plant 105 cm tall, 95 cm spread. Erect (when supported), not particularly airy, little branched. Leaves 17.5 cm long, 6 cm wide, toothed, scabrous, matt, Green Group 137A. Flowering stems, erect, hairy, stout, stiff, 110 cm long, Yellow-Green 145A/B heavily flushed with purplish grey. Free flowering (c. 80 flowers), flowers 10 cm diameter, 8 cm deep, single, flat to slightly reflexed. Ray florets (c. 31) 4.1 cm long, 1.2 cm wide with pointed tips, Red-Purple Group 57C fading to Greyed-Purple Group 186C and becoming dull yellowish green on underside of tips. Cone 5 cm wide, 4.5 cm tall, cone scales Greyed-Purple Group 187A at base, Yellow-Orange Group 23B in middle, Red Group 46A at tip. Flowering from mid July in 2003.

Huge flower, marvellous colour with very large cones. Needs staking. Distinct. Novelty. Very tactile.

H4 Plants hardy throughout the British Isles.

Names and addresses of senders to the trial

Anthony Brooks, Holly Cottage, Elton, Nr Ludlow, Shropshire SY8 2HQ

Beth Chatto Gardens Ltd, Elmstead Market, Colchester, Essex CO7 7DB

Cotswold Garden Flowers, Sands Lane, Badsey, Evesham, Worcestershire WR11 5EZ

Green Farm Plants – Now ceased trading.

Coen Jansen Vaste Planten, Ankummer Es 15, 7722 RD Dalfsen, The Netherlands

North Hill Nurseries, Scotts Grove Road, Chobham, Surrey GU24 8DW

RHS Garden Wisley, Woking, Surrey GU23 6QB

Waterperry Gardens Ltd, Waterperry, Nr Wheatly, Oxfordshire OX33 1JZ

If you would like further information on this trial contact

The Trials Office, The Royal Horticultural Society, Wisley, Woking, Surrey GU23 6QB

Fax No. 01483 211750

Tel No. 01483 212439

E-mail: trials@rhs.org.uk