TRIALS REPORT

2009

Cauliflower,
including coloured cultivars to crop from
November to January

Trials Office
The Royal Horticultural Society Garden, Wisley, Woking, Surrey, GU23 6QB
Trial of Cauliflower, including coloured cultivars to crop from November to January 2008-2009

Entries receiving The Award of Garden Merit (H4)

'Belot' AGM (H4) 2009, retains AGM (H3) 1993.
Sent by Elsoms Seeds Ltd.
Average head diameter 13cm. Ready to be cut 31 December 2008; last head cut 14 January 2009. All curds cut were of first class quality.
Good crop of deep, solid, white curds. Very well protected by leaf-wrap. Very good standing ability in cold weather.
Widely available.

'Deakin' AGM (H4) 2009.
Sent by and available from Mr Fothergill's Seeds Ltd.
Average head diameter 14cm. Ready to be cut 12 November; last head cut 15 December 2008. 11 of the 16 curds cut were good quality and 3 were of first class quality.
Uniform crop of solid, white curds. Well protected by leaf-wrap.
Available in three retail catalogues.

'Regata' AGM (H4) 2009, reconfirming AGM (H3) 2002.
Sent by and available from D T Brown & Co.
Average head diameter 14cm. Ready to be cut 12 November; last head cut 1 December 2008. 10 of the 18 curds cut were good quality and 4 were of first class quality
Vigorous plants frequently produce side-shoots as well as good quality heads. Very useful for the garden.
Available in one retail catalogue.

'Triomphant' AGM (H4) 2009.
Sent by and available from Dobies of Devon.
Average head diameter 13cm. Ready to be cut 14 January; last head cut 23 January 2009. All curds cut were of first class quality.
Late cropping. Plants have a good frame and withstood the frosts quite well. Well protected heads with white curds that are smaller, but deep and solid.
Available in two retail catalogues.

H4 = plants hardy outside throughout the British Isles.
Sources of seed for these cultivars vary from year to year. Please see the Royal Horticultural Society’s leaflet Award of Garden Merit Vegetables for current stockists.

This leaflet is available on the web at http://www.rhs.org.uk/Plants/Plant-trials-and-awards/Plant-awards/AGM-plants

A copy can also be obtained by sending an A4 sized, self addressed envelope with two first class stamps to: ‘AGM List’, Botany Department, Royal Horticultural Society Garden, Wisley, Woking, Surrey GU23 6QB

A full listing of vegetable seeds suppliers is also available on the RHS website at www.rhs.org.uk/vegseedsuppliers

Trial Notes

Objectives:
- To assess a range of cauliflower cultivars, including those with coloured curds, to crop from November to January.
- To recommend the Award of Garden Merit [AGM] to outstanding cultivars for garden use.
- To demonstrate the cultivation of this crop.

Entries:
There are 28 entries in the Trial submitted by various seed companies in the UK.

Cultivation:
The site was cultivated and raked by hand, no farmyard manure or fertiliser was incorporated. Seed was sown on 12 June into pans using peat-free propagation compost, watered with Revive (a product that contains natural soil micro-organisms which encourage soil fertility and healthy plant growth) and provided with 15-20°C of bottom heat until germinated. The seedlings were pricked out into peat-reduced modular compost, again watered with Revive and grown on under Environmesh. The young plants were treated once a week with SB Plant Invigorator and once a fortnight with Compost Tea.

The site on the Trials Field was cultivated by hand, raked even and marked out into rows 75cm apart prior to transplanting during week commencing 21 July at 60cm spacing. 21 plants of each entry were grown in three rows [3.6m long]. A collar was placed around each plant to provide a physical barrier against cabbage root fly. In addition, netting was erected over the trial to keep off pigeons and this remained in place until the crop was cut. The trial was sprayed once with Hallmark and twice with SB Plant Invigorator against white fly.

Judging:
The Vegetable Trials Assessment Panel inspected the trial at intervals throughout the growing season. They assessed the cut heads and cropping records on 12 November 2008 and on 14 January 2009 for the Award of Garden Merit [AGM].

The Panel considered the following criteria:
- head quality
- size of head
- colour
- depth
- smoothness
- uniformity
- habit
- protection of curds
- frost hardiness

Findings:
The trial had been irrigated twice in July as the weather had been hot and dry, but this had not prevented the loss of some plants due to damaged by cutworms. Keeping the plot well irrigated would normally help to control cutworms, but there was a suggestion
that the pests were sheltering under the disks that have been placed around the stems to keep the root fly off. Members commented that cutworms were the caterpillars of Noctuid moths and that netting placed over plants in the spring could help prevent the moths laying eggs on or near the plants. There were also pheromone traps for the Turnip moth (*Agrotis segetum*), which is the most common Noctuid moth, as well as nematodes that can be used to kill the caterpillars in the soil.

By October there were signs of bacterial infection on the foliage of some entries, so the older leaves were removed to prevent the spread of disease. Panel members thought this likely to be *Xanthomonas campestris* and noted that it could be seed borne, that it would spread through a crop very quickly and that it could be difficult to control. Copper fungicides would slow the spread, but there was no substitute for a really cold winter. The disease could be spread by brushing past the plants and by water droplets. In Germany flood-irrigation was used to water the cauliflower crop and tractor-wide paths were left in the fields so that spraying could be carried out without touching the foliage. As the autumn progressed, mice became a serious pest, causing damage in particular to the coloured and romanesco cultivars.

Many of the cultivars, including most of those with the AGM for other times of the year, either cropped too early for this trial or would not crop until after the end of January. The Panel noted that gardeners would have to buy several different cultivars to achieve year-round cropping of cauliflower.

At the November assessment there was concern that the hollowing of some stems might be due to boron deficiency in the soil, but members identified it as being due to rapid growth, which was also causing the curds in some heads to open out.

There had been a cold snap in late December and early January (27.12.08 - 11.1.09 average daytime temperature 3.8°C, minimum temperature -8.9°C on 7.1.09) and the cauliflower heads had frozen on the plants. Members advised that, providing the heads had a good wrap of leaves, they should not be harmed by this, although it was best to cut them on milder days as they could then be stored in a fridge for up to two weeks. They considered the January to February period to be the most difficult time of the year for cauliflower production.

**Trial Entries:**

<table>
<thead>
<tr>
<th>Awards</th>
<th>Name</th>
<th>Sender</th>
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<tbody>
<tr>
<td>AGM (H4) 2009 [for winter]</td>
<td>'Belot'</td>
<td>Elsoms Seeds</td>
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<tr>
<td>AGM (H3) 1993 [for autumn]</td>
<td>'Deakin'</td>
<td>Mr Fothergill's</td>
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<td>AGM (H4) 2009 [for winter]</td>
<td>'Regata'</td>
<td>D T Brown</td>
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<td>AGM (H4) 2009 [for winter]</td>
<td>'Triomphant'</td>
<td>Dobies of Devon</td>
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<td>AGM (H4) 1997 [for spring]</td>
<td>'Jerome'</td>
<td>S E Marshall</td>
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<td>AGM (H4) 2005 [for spring]</td>
<td>'Needles'</td>
<td>A L Tozer</td>
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<td>AGM (H3) 2006 [for summer]</td>
<td>'Avalanche'</td>
<td>D T Brown</td>
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<td>AGM (H3) 2006 [for summer]</td>
<td>'Aviron'</td>
<td>E W King</td>
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<td>AGM (H3) 2006 [for summer]</td>
<td>'Nessie'</td>
<td>Thompson &amp; Morgan</td>
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<td>AGM (H3) 2005 [for late summer]</td>
<td>'Cheddar'</td>
<td>Thompson &amp; Morgan</td>
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<td>AGM (H3) 2005 [for late summer]</td>
<td>'Emeraude'</td>
<td>Thompson &amp; Morgan</td>
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<td>AGM (H3) 2005 [for late summer]</td>
<td>'Graffiti'</td>
<td>Thompson &amp; Morgan</td>
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<tr>
<td>AGM (H3) 2005 [for late summer]</td>
<td>'Veronica'</td>
<td>Thompson &amp; Morgan</td>
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<tr>
<td>AGM (H3) 2002 [for autumn]</td>
<td>'Moby Dick'</td>
<td>Mr Fothergill's</td>
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AGM (H3) 2002 [for autumn] 'Pavilion' Thompson & Morgan
AGM (H3) 1994 [for autumn] 'Red Lion' A L Tozer
AGM (H3) 2002 [for autumn] 'Skywalker' Elsoms Seeds
AGM (H3) 2002 [for autumn] 'White Excel' Thompson & Morgan
'Clapton' Suttons
'Di Jesi' Seeds of Italy
'Mystique' S E Marshall
Purple Cape V10 03-33/SL474 Thompson & Morgan
Purple Cape V10 03-34/SL476 Thompson & Morgan
'Gitano' Thompson & Morgan
'Sunset' E W King
'Thompson' Johnsons Seeds
'Trevi' E W King
'Verde Di Macerata' Seeds of Italy

Addresses of Senders

D T Brown & Co, Bury Road, Kentford, Newmarket, Suffolk CB8 7PQ.
www.dtbrownseeds.co.uk
Dobies of Devon. Samuel Dobie & Son, Long Road, Paignton, Devon TQ4 7SX.
www.dobies.co.uk
E W King & Co Ltd, Monks Farm, Coggeshall Road, Kelvedon, Essex CO5 9PG.
www.kingsseeds.com
Elsoms Seeds Ltd, Pinchbeck Road, Spalding, Lincs. PE11 1QG.
Johnson's Seeds, Gazeley Road, Kentford, Newmarket, Suffolk CB8 7QB.
www.johnsons-seeds.com
Mr Fothergill's Seeds, Gazeley Road, Kentford, Newmarket, Suffolk CB8 7QB.
www.fothergills.co.uk
S E Marshall, Regal Road, Wisbech PE 13 2RF.
www.marshalls-seeds.co.uk
Seeds of Italy, Phoenix Industrial Est., Unit C3, Rosslyn Crescent, Harrow, Middx. HA1 2SP.
www.seedsofitaly.com
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
Tozer Seeds Ltd, Pyports, Downside Bridge Road, Cobham, Surrey KT11 3EH.
www.tozerseedsdirect.com

Source: Trials Office, The RHS Garden, Wisley, Woking, Surrey GU23 6QB

More information about RHS Trials and other trials reports can be found on the RHS Website: http://www.rhs.org.uk/trials