Broad Bean

Final Trials Report

2010-2011

Trials Office
The Royal Horticultural Society Garden, Wisley, Woking, Surrey, GU23 6QB
RHS Trial of Broad Bean

Introduction to Broad Bean

Broad beans are a member of the Fabaceae or bean family and are thought to originate from the Middle East. They have a long history of cultivation, evidence of which dates back to 4500 BC. Plants are unusual in that they have square stems and unlike peas, do not have tendrils for climbing. Beans are rich in protein and high in riboflavin and vitamin C.

Objectives

The objectives of the trial were:

- Assess the earliness of a range of Broad Bean cultivars
- Recommend the Award of Garden Merit to outstanding cultivars for garden use
- Demonstrate the cultivation of this crop.

Judging

The trial was assessed for the Award of Garden Merit (AGM) by the Vegetable Trials Assessment Panel on 22 June 2011 using the following criteria:

Yield : appearance : taste : colour : tenderness : uniformity

Entries

There were 37 entries in the Trial submitted by various seed companies from the UK and Europe. Trial material was planted at all four RHS garden – the trial was at the Wisley trial ground.

Cultivation

Seeds were sown direct on 28th February in staggered double half rows 23cm apart with 23cm between each station. A space of 60cm was left between each double half row. Two seeds were planted at each station at a depth of 5cm and covered with fleece to protect from frost and birds. Plants were sown on 28 February. Germination took 3-4 weeks. Stations were thinned to one plant on 25 March, and the fleece removed for the remainder of the trial. Also on 25 March a top dressing of sulphate of potash was applied at 20g/m². No further feeding was carried out. Regular watering was maintained throughout the trial period; especially important because of the exceptionally dry conditions experienced.

Pest and Disease

Insecticide was sprayed 10 May and 7 June for blackfly. Netting was applied on 31 May to prevent bird damage.
Demonstration at Harlow Carr
RHS Harlow Carr supported this trial by demonstrating cultivation of the majority of the same varieties, in order to assess how well they grow in the North of England. Thirty six varieties of broad bean were selected for assessment at Harlow Carr.

The broad beans were assessed at RHS Harlow Carr by three representatives of the RHS Fruit, Vegetable and Herb Committee. The assessment criteria included: yield (based on the number of seeds per pod, and pods per plant), appearance, taste, colour, tenderness and uniformity. There were two assessments for the trial, in early and late June.

The broad beans were planted in three newly created beds in the Kitchen Garden at RHS Harlow Carr. Twelve cultivars were planted per bed. In late Feb / early March a mixture of garden compost, well rotted manure and gravel was rotavated into the beds. Seeds were sown under glass in root trainers (32 cells for each cultivar) on 3rd March. Twenty of each variety were potted on into 9cm 'long tom' pots on 22nd March and moved to an unheated polytunnel to harden off. Fourteen of each variety were planted out on 7th April 23cm apart, in double half rows 23cm apart and 60cm between each double half row.

Rabbit fencing was installed and plants supported with canes and string. One feed was given on 22nd April. Watering using sprinklers was carried out regularly in the hot March and April experienced in 2011. During May and June watering was intermittent when needed.

Pest and Disease at Harlow Carr
All cultivars seem to be mildly affected by pea and bean weevil. This has historically been a common pest at Harlow Carr. Broad bean rust or chocolate spot has been observed on the following cultivars – 2, 5, 6, 9, 13, 14, 15, 16, 18, 24, 26, 30. One plant death was recorded of no. 14 (‘Listra’). This seems to be as a result of the observed fungal infection.

Plants Receiving AGMs During Trial

The following are the plants thought to fulfil the Award of Garden Merit criteria during the trial and to be worthy of receiving the award. The criteria which a plant needs to fulfil in order to receive the award are:

- excellent for ordinary garden use
- available from nurseries
- reasonably resistant to pests and diseases
- of good constitution
- essentially stable in form and colour
- reasonably easy to grow

Hardiness ratings are as follows:
- H3 – hardy outside in some regions; needs frost-free protection in winter
- H4 – hardy throughout the British Isles
Plants Awarded AGM

‘Dreadnought’ AGM (H3) 2011
[Trial No.6] votes 10-0
First Crop: 15 June
Long, slender, bright green pod; length 20cm. Vigorous plant. Good yield.

Sender: Thompson & Morgan

‘Giant Exhibition’ AGM (H3) 2011
[Trial No.8] votes 9-1
First Crop: 15 June
Smooth, slender pods of good length; 25cm

Sender: DT Brown

‘Monica’ AGM (H3) 2011
[Trial No.21] votes 10-0
First Crop: 21 June
Short pods. Well filled. Good ratio of seed to pod. Length 18cm. Excellent cropping.

Sender: Mr Fothergill’s Seeds Ltd

‘Perla’ AGM (H3) 2011
[Trial No.23] votes 10-0
First Crop: 21 June
Bright green seeds. Good yield. Best of the smaller pod cultivars. Good flavour. Short cropping period but ideal for succession sowing.

Sender: Mr Fothergill’s Seeds Ltd

‘Scaiola Verde’ AGM (H3) 2011
[Trial No.25] votes 9-0
First Crop: 15 June
Early cropping. Large seeds of good flavour. Long-podded 35cm – Aquadulce type.

Sender: S. E. Marshall
‘Suprifin’ AGM (H3) 2011
[Trial No.27] votes 7-2
First Crop: 15 June
Pale green pods of mid-size, 13cm. Pleasant taste. Early cropping.
Sender: Mr Fothergill’s Seeds Ltd

‘Turbo’ AGM (H3) 2011
[Trial No.29] votes 9-0
First Crop: 21 June
Bright green, attractive, mid-size pod, 13cm. Sweet flavour.
Sender: Thompson & Morgan

‘Robin Hood’ AGM (H3) 2011
[Trial No. 32] votes 10-0
Green seeded; 3-5 seeds per pod. Good yield. Dwarf cultivar, ideal for containers and small gardens.
Sender: Pro-Veg Seeds

Reconfirmed AGMs

‘Aquadulce Claudia’ AGM (H3) 2011
[Trial No.1] votes 10-0
First Crop: 15 June
Early yield, good crop. One of the most reliable cultivars for overwintering. Good yield.
Sender: Thompson & Morgan

‘Imperial Green Longpod’ AGM (H3) 2011
[Trial No.12] votes 10-0
First Crop: 21 June
Long, smooth pods. Good yield.
Sender: Shelly Seeds
‘Jubilee Hysor’ AGM (H3) 2011
[Trial No.14] votes 10-0
First Crop: 21 June
Long-podded, smooth pods. Good yield.
Sender: S E Marshall

‘Masterpiece Green Longpod’ AGM (H3) 2011
[Trial No.17] votes 10-0
First Crop: 21 June
Stands well.
Sender: Unwins

‘Witkiem Vroma’ AGM (H3) 2011
[Trial No.31] votes 10-0
First Crop: 21 June
Sender: Mr Fothergill’s Seeds Ltd

‘The Sutton’ AGM (H3) 2011
[Trial No.29] votes 9-0
First Crop: 15 June
Dwarf habit. Ideal for small gardens and containers.
Sender: S E Marshall

‘Witkiem Manita’ AGM (H3) 2011
[Trial No.37] votes 10-0
First Crop: 15 June
Traditional Witkiem type. Sets well. Good yield.
Sender: E W King
## Trial Index and Senders Details

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<tr>
<th>No.</th>
<th>Cultivar</th>
<th>Sender</th>
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<tbody>
<tr>
<td>1</td>
<td>Aquadulce Claudia'</td>
<td>Thompson &amp; Morgan Ltd</td>
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<tr>
<td>2</td>
<td>Aquadulce Princess’</td>
<td>Western Hybrid Seeds</td>
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<td>3</td>
<td>Bowland Beauty'</td>
<td>Pennard Plants</td>
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<td>4</td>
<td>Bunyards Exhibition'</td>
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<td>5</td>
<td>Cambridge Scarlet'</td>
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<td>Dreadnought'</td>
<td>Thompson &amp; Morgan Ltd</td>
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<td>8</td>
<td>Giant Exhibition’</td>
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<tr>
<td>9</td>
<td>Gold’</td>
<td>Nickerson Zwaarn Ltd</td>
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<td>Green Windsor’</td>
<td>Thompson &amp; Morgan Ltd</td>
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<td>Greeny'</td>
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<td>Imperial Green Longpod’</td>
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<td>Jade'</td>
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<td>Jubilee Hysor’</td>
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<td>Luz de Otono</td>
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<td>31</td>
<td>Witkiem Vroma’</td>
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### Sender Details

Johnsons Seeds, Gazeley Road, Kentford, Newmarket, Suffolk CB8 7QB  
Mr Fothergill's Seeds, Gazeley Road, Kentford, Newmarket, Suffolk CB8 7QB  
Nickerson Zwaan Ltd, JNRC, Rothwell, Market Rasen, Lincolnshire LN7 6DT  
Pennard Plants, The Walled Gardens, East Pennard, Somerset, BA4 6TU  
Pro-Veg Seeds Ltd, 6 Shingay Lane, Sawston, Cambridge, CB2 4SS  
S E Marshall, Regal Road, Wisbech PE13 2RF  
Thompson & Morgan Ltd, Poplar Lane, Ipswich, Suffolk IP8 3BU  
Unwins Seeds Ltd, Elm House Nurseries, Alconbury Hill, Huntingdon, Cambs, PE28 4HY  
Western Hybrid Seeds Inc, P O Box 1169, Hamilton City, CA 95951, USA

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<td>36</td>
<td>'Stereo'</td>
<td>EW King</td>
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<td>37</td>
<td>'Witkiem Manita'</td>
<td>EW King</td>
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