

Summary of Cut Flower Centre (CFC) trial results for a new range of Breanthus annual dianthus from Hilverda Kooji (2012)

Lyndon Mason, CFC Project Manager, December 2012

Introduction

Hilverda Kooji has recently introduced Breanthus which is a new range of annual dianthus. The varieties trialed in 2012 were 'Duke', 'Earl', 'King' and 'Queen'. The cutting raised plants are marketed as having good uniformity and

spherical flower heads. The main purpose of the trial was to assess the market potential of the product, but some direct assessments such as overall stem counts were also undertaken.

Cultural and cropping information

Planting date and spacing

The crop was delivered as rooted plugs in week 14 but owing to the very wet weather these could not be planted immediately so the decision was taken to transplant them into 9cm pots. These were then planted into a Spanish tunnel in week 18 and outside in week 21. The crop was planted through 20cm x 17cm wires with 1 plant per square giving a density of 30 plants/m². Half the plants of each variety were pinched three weeks after planting in week 21 for the tunnel crop and week 23 for the outdoor crop.

General cultural information

A fertiliser base dressing was applied to bring the soil nutrient indices up to standard levels for cut flowers (aiming for index 2 for N, index 4 for K, index 5 plus for P and index 4 for Mg) following which the crop was fed weekly with a liquid feed of 15:30:25 N:P:K at 2% of the stock solution. The crop was initially watered with a hand lance immediately after planting, but once established most of the irrigation was applied through three trickle irrigation pipes per bed.

Cropping time and yield

The first flower flush for all the varieties began in mid to late July with the second flush beginning in early September (except for the variety 'Duke'). There was considerable variation between the varieties in terms of yield, stem strength and vigour of the second flush. For example, the variety 'Duke' produced a good quality first flush with strong stems but this variety then failed to produce a marketable second flush.

Owing to the very wet weather, the outdoor crop performed very poorly and was therefore not assessed for performance. The yields from the 2012 trial are shown in the following table:

Variety	Flower colour	Total stem count	Stems/plant	Stems/m ²
'Duke'	White	116	1.7	50
'Earl'	Pink	168	2.3	70
'King'	Bicolour	328	4.8	143
'Queen'	Crimson	221	3.9	116

These results should only be taken as a guide as they are based on single 'look see' plots and some stems failed to mature owing to the poor weather and very late season. However, the propagator quotes that they would expect between 100 and 130 stems/m² and as can be seen some of the CFC figures attained are of this order.

The price per plant has been quoted at about 40 Eurocents per plant ex nursery (this could be cheaper for larger volumes of plant material).

Vase life

Initial studies of samples taken from the CFC crop have shown that vase life is very good with average values being 7 days at the consumer stage and 13 days for the total vase life, including transport etc.

Summary

The Breanthus crop has received a positive market response from retailers and growers alike and the tight, spherical head form was especially appealing. However, more work is required before the CFC is able to give firm recommendations for this crop. In 2013, the CFC will therefore continue to investigate

this crop further to include staggered planting dates in order to improve continuity. As well as new plantings in 2013, the 2012 crop will also be overwintered and assessed further in 2013 (if it survives the winter). Detailed yield records of each flush will be made in 2013 of both the pinched and unpinched crops.

Images of the 2012 trial



Breanthus 'Duke'



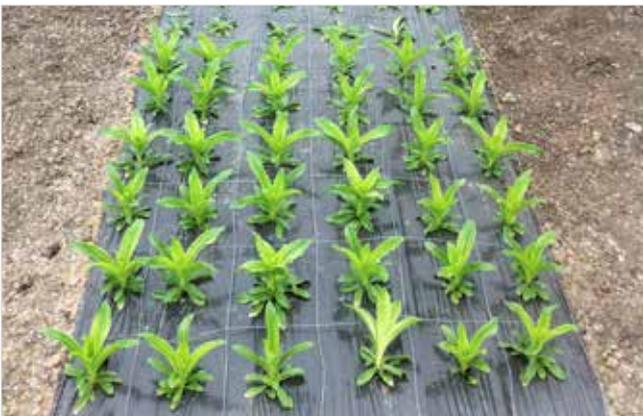
Breanthus 'Earl'



Breanthus 'King'



Breanthus 'Queen'



Young Breanthus crop



Breanthus pinched versus unpinched

While the Agriculture and Horticulture Development Board, operating through its HDC division, seeks to ensure that the information contained within this document is accurate at the time of printing, no warranty is given in respect thereof and, to the maximum extent permitted by law, the Agriculture and Horticulture Development Board accepts no liability for loss, damage or injury howsoever caused (including that caused by negligence) or suffered directly or indirectly in relation to information and opinions contained in or omitted from this document.

© Agriculture and Horticulture Development Board 2012. No part of this publication may be reproduced in any material form (including by photocopy or storage in any medium by electronic means) or any copy or adaptation stored, published or distributed (by physical, electronic or other means) without the prior permission in writing of the Agriculture and Horticulture Development Board, other than by reproduction in an unmodified form for the sole purpose of use as an information resource when the Agriculture and Horticulture Development Board or the HDC is clearly acknowledged as the source, or in accordance with the provisions of the Copyright, Designs and Patents Act 1988. All rights reserved.