





The National Cut Flower Centre (CFC) and Cut Flower Growers' Association

The National Cut Flower Centre (CFC) is based at Rookery Farm, Holbeach St Johns, Lincolnshire. Its aim, with funding from the Horticultural Development Company (HDC), is to offer independent trialling of a range of cut flowers crops, evaluate new production methodologies and examine new cultural techniques in the UK. The CFC's remit includes annual, perennial and bulbous flowers, 'fillers', foliage and woody branches grown in the field, in polythene tunnels and under 'cold glass'.



China asters

Column stocks

The UK imports a huge quantity of cut flowers, but has limited home production. The CFC provides a show area where growers, packers and retailers can see products that are currently imported, yet which could be grown in the UK closer to markets. By carrying out an objective trials programme, the CFC provides know-how that will help build cut flower production in the UK.

CFC aims

- To identify novel cut flower crops that provide opportunities for UK growers.
- To improve product quality through new genetics and improved husbandry.
- To evaluate new cut flower production methodologies.

CFC activities

- Information gathering.
- Trials programme.
- Technology and knowledge transfer.



CFC open day



Published output from the CFC

Cut Flower Growers' Association

The CFC is developing a Growers' Association role to raise awareness of UK grown cut flowers and to encourage and assess new research proposals for the sector.

Successes

The long-term success of the project will be judged by the industry's uptake of new product opportunities demonstrated at the CFC, such as:

• Lisianthus - this crop has been widely used in bouquets, but generally the

imported product has not fared too well used as a straight line; but in 2013 four UK production businesses grew lisianthus during the summer and the home grown product did extremely well on the supermarket shelves.

- Antirrhinum (snapdragons) UK grown crops reached the supermarket shelves in 2012 and 2013 as a straight line and, although meeting with only limited success, succeeded in lifting the profile of the crop, which as a consequence has increased its presence in bouquets.
- Sedum as a result of the trial plots at the CFC and samples that were sent to interested packers and retailers, significant commercial plantings of this crop have been undertaken.
- **Hardy foliage** substantial commercial plantings of *Hypericum*, *Symphoricarpos* and other hardy foliage species have been made on local nurseries.



Lisianthus



Trumpet antirrhinum

Trials programme 2014 onwards

The CFC's programme currently includes:

- Novel cut flower evaluation: basil (Ocimum basilicum), Cosmos bipinnatus, Dicentra spectabilis, Eremurus cultivars, Gentiana species, Gomphrena globosa, Helleborus niger, Leonotis leonurus, lupin (Lupinus species), ornamental pepper (Capsicum annuum), Phytostegia virginianum, Ranunculus asiaticus, Spirea cantonensis and Trachelium caeruleum.
- Alstroemeria aurantiaca: evaluation of older high yielding cultivars as a natural season spot-crop in polythene tunnels.
- New annual dianthus 'Breanthus' and spray carnation 'Star' and 'Solomio' (*Dianthus* species): examination of crop performance and the potential to get two flower flushes per year.
- New range of double cultivars of Aster ericoides: field- and tunnel-grown crop evaluation and examination of season extension using blackout covers.
- Cultivars of large-headed China asters (Callistephus chinensis): trials to find alternatives to the cultivar 'Krallen' and examination of growth manipulation using chemical plant growth regulators.
- Column stocks (*Matthiola incana*): continuation of trials to find control measures for fusarium wilt.



Lilies in the growing media trial

- New *Eryngium* cultivar evaluation: for field production.
- 'Seed-raised fillers': Bupleurum griffithii, Saponaria officinalis and various herbs.
- Gladiolus grandiflorum: evaluation of cultivars for white and dark-coloured blooms.
- Hardy foliage production: demonstration of a range of species.
- Lily (*Lilium* cultivars): production in alternative growing media.
- Ornamental brassicas (Brassica oleracea): examination of the causes of crop failures and economic production systems.
- New dwarf and double sunflowers (Helianthus annuus cultivars): examination of cultivars grown in the field, in polythene tunnels and under cold glass.
- Zinnia 'Benary's Giant' strain (Zinnia elegans): evaluation of cultivars with improved stem strength and enhanced shelf-life.
- Sweet william (*Dianthus barbatus*) and larkspur (*Consolida ajacis*): trials to identify replacement herbicides.
- **Spectral filters:** manipulation of cut flower crops using plastic spectral filters.



Hardy foliage trials area

Other activities

The CFC holds an Open Day each year in August or September. This usually combines a visit to an off-site trial at a commercial nursery with a chance to view the on-going trials at the CFC.

In addition visitors can be seen by prior appointment. Please contact us if you need small samples of blooms from the CFC for your own promotion or evaluation.

Other crop specific technical events are also staged throughout the year, recent and planned afternoon sessions include: lily production, tulip forcing (including a study tour to the Netherlands) and biomass heating systems.

Reports, pesticide news and links are available on the CFC website, and more are being added.

Crops previously grown

The wide range of cut flower crops previously demonstrated or investigated by the CFC are listed below, those indicated by * showed particular promise for increased commercialisation in the UK:

- Amaranthus caudatus
- Aster pringlei
- Celosia cristata
- Column stocks (Matthiola incana)*
- Delphinium (Delphinium elatum)
- Larkspur (Consolida ajacis)
- Lisianthus (Eustoma grandiflorum)*
- Rudbeckia species
- Snapdragon (Antirrhinum majus)*
- Spray carnations (Dianthus caryophyllus)
- Sweet pea (Lathryus odoratus)

A little bit of history

Field-grown cut flowers have long been grown in the UK on a small scale, traditionally crops such as natural-season chrysanthemums, pinks and sweet williams. By the late-1990s, UK *per capita* expenditure on cut flowers was increasing, along with a demand for greater variety in the flowers available. Today peonies and sunflowers are widely grown, while many typical 'cottage garden' flowers are popular and grow well outdoors. The wide availability of 'Spanish tunnels' now gives possibilities for seasonal extension of flower production.

Previously growers, packers and retailers had to rely on their own *ad-hoc* trials or on trials conducted in other countries where growing conditions might be very different. In 2007, with funding from the HDC and the Lincolnshire Fenlands LEADER+ Programme, trials were set up at Kirton Research Centre, Lincolnshire.



Sunflowers



Ornamental brassicas

Project manager Lyndon Mason obtained further funding from the HDC, and in 2009 the CFC moved to a dedicated site at Rookery Farm, Holbeach St Johns, Lincolnshire, where expert support is provided by the owner, David Robinson, and his staff. Trials are carried out in field plots and in 'Haygrove' and 'Pro-Tech' polythene tunnels. Where appropriate, larger scale evaluations are carried out at local commercial nurseries. Vase-life testing, an essential part of any research on cut flowers, is carried out in specialist facilities locally.



Trial crops under polythene tunnels



In 2013, the CFC received HDC funding for a five year period.

Throughout its existence the CFC has operated through a Management Group representing growers, packers and retailers. The project is run 'by the industry, for the industry'.

Further information

Trial reports, grower summary or full reports, from 2007 onwards are available from the HDC website: www.hdc.org.uk.

News, reports and other documents are available from the CFC website: www.thecutflowercentre.co.uk.

HDC/CFC information sheets on annual dianthus production, evaluation of annual dianthus and spray carnation varieties, the susceptibility of column stocks varieties to fusarium wilt and antirrhinum and lisianthus production under polythene tunnels and a report on novel plant subjects which may hold potential as UK cut flower crops are also available from the above websites.

Information on new Extension of Authorisation for Minor Use (EAMUs) for pesticides suitable for use on cut flower crops are also published by the HDC and are available on the CFC website.

What can you do?

The Cut Flower Centre exists for the benefit of the UK's cut flower industry. If you have any ideas for novel crops or varieties that might have potential for creating new business opportunities in the UK, let us know – we will do our best to initiate demonstrations or trials!

We also need your ideas on new research needs or flower growing problems that are holding back production.

Contact Lyndon Mason, CFC project manager at Ir-mason@msn.com, Debbie Wilson, HDC research manager at debbie.wilson@hdc.ahdb.org.uk or Wayne Brough, HDC knowledge transfer manager at wayne.brough@hdc.ahdb. org.uk.

How to find and contact the CFC

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