



# Poinsettia Study Tour to Germany November 2013

# Report

07.30 - Thursday 7th November

Versuchszentrum Gartenbau Straelen/Auweiler, Hans-Tenhaeff-Straße 40/42, 47638 Straelen: Peter Tiede-Arlt

# 'Low temperature poinsettia variety trials'.

Peter explained to us that the station was one of 15 in Germany with varying regional responsibilities and crop specialisations. We were surprised that there are still so many and this is supported by the German federal structure where each land has its own government and financial budget for research. In addition there is a turnover related levy on businesses. Growers are involved in an advisory council governing the station's activity. They also manage private research projects for the agrichemical industry. Due to the importance of ornamental horticulture in the Niederrhein area of Nordrhein-Westfalen, there is a great concentration of production locally. In protected ornamentals there are trials on-going in Ericaceae, Hydrangea, new perennials and Poinsettia as well as cut flowers and salads.

Peter has worked for 16 years in ornamental plants having previously been involved in the Plant Health service; his family business was in vegetables; followed by cut flowers and then pot plants. The station has around 1ha of glass which is 50:50 split between ornamentals and fruit.

#### Poinsettia trials

The volume of poinsettia is reducing in Germany due to the high cost of fuel therefore there is a great interest in low temperature growing. This year's trial involved 12 varieties in 2 temperature regimes.

Pot week 30	House 1	House 2
Early crop	20°C venting at 22°C	18°C for 2 weeks then
		16°C venting 20°C
Short day period	18°C venting 20°C	16°C venting 18°C



Variety trials in Straelen



Trial 'Ouverture Bright Red'

In a very warm season such as this it had been impossible to get the lower set points in August but there were some observable differences between the treatments even at this point. They had recorded the number of CCC applications (Stabilan720 applied at 0.075%) and there were 10 treatments for Bella Italia in the cool treatment against 17 in the warm treatment. The trial varieties had been taken from Dümmen, Lazzeri and Syngenta.

Peter drew our attention to a new variety from Dümmen which was flowering early and performing well- Ouverture Dark Red, a six week variety.

http://www.gartenbauzentrum.de/versuche/index.htm

09.30 - Thursday 7th November Dümmen GmbH,
Dammweg 18-20, Eversael, 47495 Rheinberg Viewing new poinsettia varieties.
Perry Wismans

Having welcomed the group to Rheinberg, Perry announced that, in addition to their own varieties, the company's stock production in Kenya would also produce PLA varieties from the Ecke breeding programme for the European market. Initially, this will mean that there is stock availability of Ecke novelties as unrooted cuttings to licensee propagators. Ecke has a production of around 50M cuttings in America From the new stock in Kenya they will also supply 15M unrooted cuttings in Europe as well as the American market. It is understood that Dümmen currently supplies around 2.5M plants (mostly rooted) of the 3.0M grown annually in the UK.

Perry gave the group a tour of the breeding unit and the propagation which was filled with 6cm minis and other small poinsettia plants. He explained that the pollination for new poinsettia takes place in Ethiopia now where conditions support better seed development. The grafting operation is done in Rheinberg on very small samples of plants and after selection, stock is returned to Ethiopia for cuttings production. Overall, it takes 5-6 years to bring a new poinsettia variety to the market.

They are making variety selection for the grower and consumer but the grower's needs are at the forefront of their considerations. The recently introduced concept of the 'nano' bract, epitomised by 'Prima' and now developed with 'Prima Donna', has proven to be well accepted in the market and allows the consumer to see more heads when the plants are sleeved. This results also in better shipping quality for the grower.

In the propagation area Perry noted that the geranium production was around 3.5M per week (using the 21 cutting Targa strip) with 7-8.0M cutting raised annuals, showing their dramatic increase in demand in recent years. The Regal pelargoniums have also increased in interest with the interspecific hybrids and Dümmen are also able to offer now the varieties from Oglevee breeding as part of their new cooperation. http://www.redfox.de/patweb/Default.aspx?

bID=62&DirectLink=POINS~SERIE~GATTUNG&MarktID=1&Sprache=en-GB



New 'nano' variety 'Prima Donna'



In the 'prop'

12.30 - Thursday 7th November Overlöper Gartenbaubetrieb, Bergerstr. 551, 46539 Dinslaken.

# Norbert Overlöper

#### Tour of the production nursery.

We were welcomed to the nurseries by Mr Norbert Overlöper. This nursery of 16,500m<sup>2</sup> of twin-skinned plastic houses made from a Japanese material called F-CLEAN® which has very high light transmission, extremely robust and does not have static charge therefore staying very dust free compared with conventional PE films. You can see some more specific information in this presentation:

 $\frac{http://www.slideshare.net/AGCAmericas/f-clean-presentation}{-sv2011-wjf}$ 

Mr Overlöper commented that they had installed PE film when The group dis the houses were built in 2000 and after they were replaced in 2007 the F-CLEAN® film was installed and has been performing well ever since. Due to its different spectral transmission qualities, it produces smaller leaves in their Elatior Begonia crops which they find a distinct advantage. He has another nursery nearer to the town centre but this has been reduced in production due to the weak market in recent times. The group was impressed by the very high quality of the plants produced especially the 17cm for which Norbert had selected 'Matinee', a relatively new variety from Dümmen which he had trialled last year. His varieties are selected from Beekenkamp ('Saturnus') and Dümmen with a few trial varieties from Lazzeri. 70% of his product is sold via the auction and 30% via wholesalers and Landgard. He has been selling the 13cm plants at around €1.30 as the market has not really aot aoina vet.

The growth control is handled using CCC 720 mostly. 17cm are potted in week 26 with the 13's planted in weeks 29 & 30. He has had a little problem with Bemisia this year and chooses chemical methods to control pest as he could not work with biological control.





Overlöper has a wide range of varieties for all markets.

14.00- Thursday 7th November Magic Stars at Christoph Schönges, Schlich 1a, 41352 Korschenbroich

#### Ton de Bresser - Selecta

Schönges is a Selecta rooting station of 20,000m<sup>2</sup> built up over 7 years with the last part installed being twin skinned plastic.

They are producing around 250,000 poinsettia plants with some 6cm as well as 11's and 13's. The 13's were potted relatively early in week 28 & 30 growing at 18/20°C after potting. The crop was generally small by UK standards. 'Christmas Eve' grown here had been given CCC 15x at a low rate. 'Glory' had been given hardly any regulant and 'Feelings' about 10-11x. There was also a display of Selecta varieties in arrangements and value added packing illustrating the possibilities of several novelties eg 'Valentino'.

One item of interest, not on the original agenda as often happens on grower visits, was the ornamental grass *'Ficinia Ice'* which was seen in combination with poinsettia plants and can be used in a variety of ways in planters etc. 3



Ficinia Ice with mini point

08.00 - Friday 8th November LVG Heidelberg, Diebsweg 2, 69123 Heidelberg: 'Poinsettia energy and variety trials'.

# **Ute Ruttensperger & Rainer Koch**

The group was welcomed on arrival and presented with a brochure (read the report) in English about the work of the research department. This was followed by two presentations on the poinsettia crop; the first with temperature strategies using the 'near-surface geothermal energy' and 'dynamic outside temperature correction' control programme and the second concerning Thigmotropism. The latter study shows plant responses to 'touch' which may be mediated by fans blowing directly on the plants of by a moving belt of vileda cloths turning over and contacting the tops of the plants. These treatments are repeated either 40 or 80 times a day. The growth response is measured in comparison with conventional growth regulant treatments and is quite significant though some plant damage occurs in certain treatments. These trials also measure the levels of hormone and ethylene production in the plant.

The final results of their poinsettia variety scoring should be made available shortly.

The station is also engaged upon private research on downy mildew in Impatiens and late planted Helianthus (for oil) and primrose new variety trialling for Sakata which allows the staff to maintain their knowledge of a range of crops, the conclusions of research being the property of the commissioning company.

The HDC report on the previous visit to this project with details of the geothermal installation may be read here.

For general information regarding the Heidelberg Research Station please see their website which is also available in English: <a href="http://landwirtschaft-bw.de/pb/MLR.LVG,Lde/LVG+Heidelberg/Die+LVG+stellt+sich+vor/">http://landwirtschaft-bw.de/pb/MLR.LVG,Lde/LVG+Heidelberg/Die+LVG+stellt+sich+vor/</a>

State+Horticultural+College+and+Research+Institute+Heidelberg\_ \_+Germany

13.00 - Friday 8th November Selecta Klemm Co KG, Hanfacker 10, 70378 Stuttgart <u>View new poinsettia varieties</u>.

#### **Dr Ulrich Sanders**

Ulrich gave the group an introduction to their poinsettia breeding programme and told us that they have a market share of 40% in Europe. Asked what their breeding focus was he said that the profitability and success of the grower was paramount and the key for them was to produce 'profitable' varieties. In that sense, the 'Christmas Feelings' series was the most successful as it had very low wastage, good transport characteristics and long shelf life to that he added good root quality as an important feature. He introduced Stefan, product manager who guided us through the trials and Guido, breeding department who had grown the trials.

The large and comprehensive trials were laid out in one concrete flood floor and contained over a hundred varieties with



Inside the geothermal house



Ute shows the ground from which the heat is extracted.



Thigmotropism trials v control



Stefan describes the qualities for the group 3 vigour varieties

their current commercial selection, new numbers and competitor varieties. A neighbouring house held clonal selection trials.

The trial was planted in week 30 for 13cm plants with compact varieties in week 28 and some taller varieties in week 32. The trials were split into 4 vigour groups to aid control and variety comparison.

Points of particular interest was the 'Glory' which did well in the LTO trial last year and needed very little growth regulant; this year it has some colour mutants available. 'SK117' which is similar to Feelings with a little more vigour.

'Christmas Day' which now has a brighter red sport called Happy Day' in its second year. Day grows slowly but continues to make height and needs some CCC after week 40. New bright colours in the 'Christmas Cookie' series.

'Christmas Bells' in the taller series also has 'SK106' as a comparison variety which is developing well.

They also showed that the popular variety 'Eve' is being improved by further clonal selection.

After the poinsettia trials there was a tour of the remainder of the nursery showing some *Dianthus* rooting; early geraniums (limited quantities here as they focus on rooting on stations around the country and in Holland), *Arctotis* (newly bred product from the old favourite for early low temperature flowering); and their new 'low tech' house for spring crop trials. You can see details of the Selecta variety selection here:

http://www.selectaworld.com/en/selecta-klemm-products/products/poinsettia.html



The group views the new trials house with a dianthus crop.



Ulrich shows the oil and coal and woodchip fuelled heating plant.



Princettia.