

grower solutions

cucumber update



February 2006

New appointment

NICKERSON -ZWAAN'S NEW MAN SUPPORTING LEFROY VALLEY IN AUSTRALIA

Sebastien Benon (pictured right in a greenhouse in Virginia SA), has been appointed by Nickerson-Zwaan to support Lefroy Valley in the Australian market.

Sebastien has been the Area Sales Manager for the Middle East for the past 4 years, where Lebanese cucumber is a Nickerson Zwaan's number 1 crop. In a short period of time Sebastien had a major impact on that market with Nickerson's outstanding cucumber range.

"Cucumber breeding is a major focus for Nickerson-Zwaan, and since the late 80's in the Middle East we have been synonymous with outstanding fruit quality and plant balance combined with the latest resistances available" says Sebastien.

Sebastien says he is looking forward to following the development of new varieties in the Australian market and can't wait to work with Australian growers and the Lefroy Valley team.

From Lefroy Valley we offer a hearty Aussie welcome to Sebastien, and to the growers, we will see you in the greenhouse!



Sebastien Benon from Nickerson-Zwaan

Continental cucumbers

Mini cucumbers



Saroya

Saroya is suited to autumn seeding and winter production in unheated greenhouses. Saroya demonstrates strong cold tolerance, with good cool season vigour and ability to maintain fruit length under cool conditions. Good cool season vigour, vigorous main stem, medium sized leaves & some side-shoot development. Fruit is cylindrical in shape, with short or absent neck, dark green and slightly ribbed and 34-39 cm in length. Mono-pistillate (single flower per node). Intermediately resistant to CVYV. Highly resistant to Ccu and Cca.



Polaris

Polaris is suited to autumn seeding and winter production in unheated greenhouses. Polaris demonstrates strong cold tolerance, with good cool season vigour and the ability to maintain fruit length under cool conditions, without becoming too long under warmer conditions. Fruit are cylindrical, well filled, medium green and slightly ribbed and 35-36 cm long. Single fruit per node. Highly resistant to Ccu and Cca, intermediately resistant to Sf.



Cormoran

Cormoran is a mini-cucumber for cool season growing in unheated greenhouse. Fruit are attractive and smooth with high yield potential. Cormoran has good recovery ability in spring after low winter temperatures. Well filled and cylindrical fruit - smooth skinned and medium to dark green, 15 - 17 cm in length in winter and mono-pistillate (single fruit per node) on the mainstem. Highly resistant to Ccu & intermediately resistant to Sf.



Neptune

Neptune has good main-stem vigour under cool conditions and strong side-shoot development. Medium sized leaves and open plant. Well filled & cylindrical fruit, attractive dark green with moderate ribbing, 15-17 cm in length in winter-mono-pistillate (single fruit per node) on mainstem but may be bi-pistillate on sideshoots, good shelf life. Highly resistant to Ccu & Sf.

Key: CVYV - Cucumber Vein Yellowing Virus Ccu - Scab (*Cladysporium*) Cca - Leaf Target spot (*Corynespora*)
Sf - Powdery Mildew (*Sphaerotheca fuliginea*) - Cucumber



Fruit of the highly productive Rubens

LV team visits Almeria

Lefroy Valley's Allan Mackinley, WA Sales Manager, Greenhouse specialist and Peter Mullins, Product Development Manager attended a Nickerson-Zwaan seminar in Spain in the intensive greenhouse area Almeria in November 05.

The seminar was also attended by delegates from New Zealand, South Africa, Greece, Bulgaria, Hungary, Spain and France. The delegates were updated on the latest growing techniques and swapped information on the performance of varieties in the different markets.

The Almeria area constitutes an incredible 35000 ha of greenhouse production. Tomato, capsicum and cucumber are grown in the cool months whilst watermelon, rockmelons are grown in the heat. The average sized operation is 3ha but there are operations of up to 50 ha. The greenhouses are quite low tech. and most crops are grown in the ground in compost covered with a layer of washed river sand.

The selection of varieties in Almeria has been affected by the advent of Cucumber Yellow Veining Virus (CVYV), followed by a second virus Cucumber Yellow Stunting Disorder Virus (CYSDV). Neither of these viruses have been reported in Australia to date but were highly damaging to the Spanish cucumber industry.

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Polaris was an outstanding winter performer for Nickerson before CVYV became a problem. This virus quickly spread throughout the whole area leading to breeding for new varieties with resistance. **Saroya** and **Rubens** are two of the varieties which have been developed with CVYV resistance. **Saroya** has more cold tolerance but **Rubens** is highly productive.

Average yield in the area are 9-10kg per plant but growers expect to harvest 12-14kg from **Rubens**.

It was interesting to note that density in the greenhouses is one plant per metre, allowing for maximum light penetration into the foliage.



Delegates at Nickerson - Zwaan seminar



Typical greenhouse in Almeria – note the wide spacing

WA update on cucumbers

CONTINENTAL

Carmen & **Dalat 40** are still popular summer varieties, with intermediate resistance to powdery mildew (Sf), excellent yields and good fruit quality. Both varieties do well in high and low structures, showing their adaptability.



Carmen

Carmen fruit are generally about 35 - 38cm in length, whilst **Dalat 40** fruit are generally about 38 - 42cm in length.

Dalat 42 and **Polaris** performed well last winter in Perth and Geraldton. **Polaris** was trialled and grown commercially last winter and gave good results, with good vigour, yield and fruit quality. **Dalat 42** performed well in heated and unheated greenhouses, with large fruit of good quality.



Botero

Botero was trialled and performed well in Geraldton, with much improved yield, fruit size and quality over the trial standard.

Growers are encouraged to do commercial trials of both **Polaris** and **Botero**, this autumn and winter.

LEBANESE (short cucumbers)

Luna has continued to produce good yields this summer despite the cool weather conditions experienced till now. Trials of summer varieties are still underway and results will be advised later.

Neptune (was trialled as **CUM 4257** then named **Emblem** - but naming guidelines forced a name change to **Neptune**).



Neptune

Neptune's performance in trials and commercial plantings last winter was outstanding in unheated greenhouses, outperforming the winter standard in both yield and fruit quality.



Cormoran

Neptune does well in heated greenhouses, but the fruit length creeps up to about 17-18cm.

Cormoran performed well in trials last winter with smaller more refined fruit than **Neptune**, but with a very good yield.

Whilst it performs well in unheated houses, it should be the variety of choice in heated greenhouses, with most fruit between 14-16cm.

Cucumber Comparative Chart

	Maturity			Fruit Size (cm)	Fruit/Node	Neck	Sf	Ccu	Cca	CVYV	Comments
	Early	Medium	Late				Resistance				
Continental											
Carmen	✓			35 - 38	1	no	Int				Warm season production with good speed to wire. Spineless, slightly ribbed, very uniform with good shipping quality.
Dalat 40	✓			33 - 42	1	no	Int				Warm season production with outstanding heat tolerance.
Saroya		✓		34 - 39	1	no		High	High	Int	Strong cold tolerance, cool season vigour and maintains fruit length under cool conditions.
Polaris	✓			35 - 36	1	no	Int	High	High		Strong cold tolerance, cool season vigour and maintains fruit length under cool conditions.
Dalat 42		✓		35	1	yes	Int				Strong cold tolerance, cool season vigour and maintains fruit length under cool conditions. Uniform fruit with good setting and finishing ability making it very productive.
Mini											
Luna	✓			18	3 - 4	no	Int	High			Warm season production with most fruit on main stem although some sideshoots may need pruning. Slightly ribbed fruit.
Cormoran		✓		15-17	1	no	Int	High			Vigorous variety with open habit for cool season production. Plant in Autumn to develop strong vine before onset of cold.
Neptune	✓			15-17	1	no	High	High			Vigorous variety for cool season production. Slightly ribbed dark green fruit.

KEY:

Sf = Powdery Mildew

Ccu = Scab

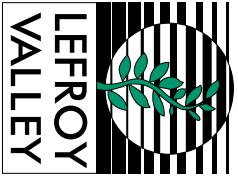
CVYV = Cucumber Vein Yellowing Virus

Cca = Leaf/Target Spot

High = Highly resistant plant varieties highly restrict the growth and development of the specified pest under normal pest pressure when compared to susceptible varieties. These plant varieties may, however, exhibit some symptoms or damage under heavy pest pressure.

Int = Intermediately resistant plant varieties restrict the growth and development of the specified pest, but may exhibit a greater range of symptoms compared to resistant varieties. Intermediately resistant plant varieties will still show less severe symptoms or damage than susceptible plant varieties when grown under similar environmental conditions and/or pest pressure.

Disclaimer: Lefroy Valley carries out stringent trialing throughout Australia/New Zealand prior to releasing varieties into the market place. We strongly recommend that all varieties be trialed under your growing conditions prior to commercial sowings taking place. For details of up to date trial results in your area please contact Lefroy Valley. Above information is valid 12 months from publication date. All cultural and descriptive information is supplied in good faith as a guide only. Varietal performance is influenced by many variables, namely climatic, soil conditions, cultural and management practices. No liability will be accepted by Lefroy Valley or its representatives as to final performance based on this information.



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