

AGRICULTURAL DEVELOPMENT AND ADVISORY SERVICE

**REPORT OF VARIETY ON GLASSHOUSE
WINTER LETTUCE TRIAL 1994
CHICHESTER**

JANUARY 1994

Report prepared by:

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The Horticultural Development Council
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Breeders' Seeds Ltd
Elsoms Seeds Ltd
Enza Zaden UK Ltd
Pinetree De Ruiters Seeds Ltd
Rijk Zwaan UK Ltd
Samuel Yates Ltd

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STATUS OF WORK : Experimental trial, harvested January 1994

PERIOD COVERED : Financial Year 1993/4

SITE : Provided by courtesy of Norman Lee at
Triple Ash Nursery, 75 Lockgate Road,
Sidlesham, Chichester, West Sussex, PO20 7QQ

OBJECTIVE

To assess and compare the performance of 16 varieties of glasshouse grown butterhead lettuce for cutting in January and grown under commercial conditions in coastal West Sussex.

VARIETIES

<u>Supplier</u>	<u>Variety</u>	<u>Claimed resistance to Bremia races</u>
Breeders' Seeds Ltd	Becky	NL 1-15
	Kylie	NL 1-15
	S3156	NL 1-16
Elsoms Seeds Ltd	Ricardo	NL 1-7, 10, 11, 13-15
	Roald	NL 1-7, 10, 11, 13-15
	William	NL 1-7, 10, 11, 13-15
Enza Zaden UK Ltd	Rachel	NL 1-7, 10, 11, 13 & 15
	E 7798	NL 1-7, 10-16
Pinetree De Ruiter Seeds Ltd	Berlo	NL 1-7, 10, 13-15
	Allegros	NL 1-7, 10, 11, 13-15
	42-81	NL 1-16
Rijk Zwaan UK Ltd	Elmo	NL 1-7, 10, 11, 13-15
	42-53	NL 1-16
Samuel Yates Ltd	Impala	NL 1-15
	Polana	NL 1-15
	378/93	NL 1-7, 10-15

EXPERIMENTAL DESIGN

Randomised Block with 4 replicates
(3 for recording and one for demonstration at an Open Day)

CULTURAL DETAILS

Sown	: 23 September 1993 into peat blocks
Planted	: 19 October 1993
Spacing	: 200mm x 230 mm (8" x 9") equivalent to 21.7 plants/m ²
Glasshouse	: The trial occupied a bay of multispan Venlo glasshouse
Nutrition	: To ADAS recommendations 50g/m ² (1½ oz/yd ²) triple superphosphate fertiliser was added
Pesticides	: Propagation - sprays of thiram, Favour 600 SC and Ambush C Pre-planting - methyl bromide (74 g/m ²) soil fumigation Post-planting - sprays of Favour 600 SC, Rovral WP and Ambush C
Heating/Temperatures	: Frost protection with direct fired paraffin burners to enable 3°C minimum
Harvested	: 13 January 1994

RESULTS

The trial plots were grown to a very high commercial standard with virtually no plant loss and no disease or pest problems.

The trial was harvested by cutting 24 heads from a central portion of each plot. Each head was trimmed to remove yellowed and damaged leaves and then individually weighed. The cutting and trimming was done by very competent and experienced nursery staff. A total of 3 replicates were harvested with one left to provide a demonstration plot of each variety.

Visitors to an Open Day 14 January were asked to score the varieties for overall usefulness on a 1-5 scale (1 = poor, unsuitable; 5 = excellent, no obvious failings) and provide comment. They were able to see a partly cut plot of each variety containing two market boxes.

They were harvested on 13 January 1994.

BERLO (PINETREE DE RUITER)

Mid green, thinnish leaves. A more compact variety. Base not as broad as Rachel but flat and closed. Fairly easy to cut. Very little yellow leaf. Produced the third lowest weight. Just above average score for usefulness assessment at the Open Day.

ELMO (RIJK ZWAAN)

Paler green than Rachel, more of a grey/green tone. Thin leaf, medium frame size, base flat and closed. Heart forming into a conical head shape. Fairly easy to cut and pack. Did not score well though in the overall usefulness assessments.

IMPALA (SAMUEL YATES)

Mid green, thin leaf. Frame considerably more compact than most varieties as the soil was still showing between plants. Very neat symmetrical leaf shape and heart. Base medium in size, flat and closed. Cuts easily, very little yellow leaf.

KYLIE (BREEDERS SEEDS)

Mid green, thin, smooth, upright leaves. Slightly taller variety than most. Base, flat and closed. Required slightly more trimming than most varieties. Second heaviest variety for weight. Rated well in the assessments.

POLANA (SAMUEL YATES)

Mid green, thin reflexed leaves. Base more compact than Rachel, slightly more conical, large butt, closed. Heart starting to form. Not a lot of yellow leaf at harvest. Below average score for usefulness assessment.

RACHEL (ENZA ZADEN)

Mid green, thin leaf, broad frame, base broad, flat and closed. Third heaviest for weight and achieved a good score for overall usefulness at the Open Day. Cuts and packs well.

RICARDO (ELSOMS SEEDS)

Mid green, thicker leaf than most. Broad frame, base flat and closed. Heart forming. Fairly reasonable to cut. Rated reasonably well in the overall assessments.

ROALD (ELSOMS SEEDS)

Darker green than most. Leaf fairly smooth, reasonably thick. Medium frame size (not quite as broad as Rachel). Base medium, flat and closed. Heart well formed. Heaviest variety in the trial. Received a very high score in the overall usefulness assessment. Excellent to cut, only light trimming required.

WILLIAM (ELSOMS SEEDS)

A shade lighter than mid green, thin leaf. Broad frame, "neat" looking lettuce; Base broad, flat and closed. Well hearted. Good to cut and pack. Rated reasonably well at the Open Day.

E7798 (ENZA ZADEN)

Mid green, thin leaf, slightly blistered. Frame medium, with a flat, closed base. Heart forming. Tough to cut.

S3156 (BREEDERS SEEDS)

Mid green, thin leaf. A tall leafy variety with no heart formed. Base reasonably broad but poor, pointed and slightly open. Poor market pack. A low assessment score given.

42-53 (RIJK ZWAAN)

Slightly paler green than mid green, thin leaf, medium frame size, base flat and closed. Easy to cut requiring only light trimming.

42-81 (PINETREE DE RUITER)

Mid green, thin leaf. Smallest frame size. Lettuce somewhat squat in height, base flat and closed. Easy to cut. Lowest weight variety in trial receiving a low usefulness score.

378/93 (SAMUEL YATES)

Darker matt green variety, thin leaf. Tall, narrow frame with a narrow somewhat pointed base. Base of lettuce and mid ribs green. Heart forming. Poor market pack. Received the lowest score for overall usefulness.

CONCLUSIONS

All of the varieties were of an acceptable weight. Roald was significantly heavier than the trial mean and 42-53 and 42-81 were significantly lower. S3156 and 378/93 produced poor market packs. In overall assessments Roald scored the highest figure followed by Kylie and Rachel.

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