

A D A S

REPORT ON  
GLASSHOUSE  
SUMMER LETTUCE VARIETY TRIAL 1992  
HUNTINGDON BUSINESS CENTRE  
AUGUST 1992

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The Horticultural Development Council  
Breeders' Seeds Ltd  
Enza Zaden UK Ltd  
Rijk Zwaan UK Ltd  
Samuel Yates Ltd

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STATUS OF WORK : Experimental trial, harvested August 1992

PERIOD COVERED : Financial Year 1992

SITE : Provided by courtesy of Mr C Cook, 32 South Road,  
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## OBJECTIVE

To assess the performance of 7 varieties of protected butterhead lettuce for cutting in August, grown under commercial conditions in Cambridgeshire.

## VARIETIES

<u>Supplier</u>	<u>Variety</u>
Breeders' Seeds Ltd	SO 256
Enza Zaden UK Ltd	Rebecca Titania
Rijk Zwaan UK Ltd	Diego Sunbeam
Samuel Yates Ltd	2610/91 2621/91

## EXPERIMENTAL DESIGN

Randomised Block with 3 replicates

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CULTURAL DETAILS

Sown : 19 June 1992 into peat blocks

Planted : 7 July 1992

Spacing : 200 mm x 230 mm (8" x 9")

Glasshouse : The trial occupied part of one bay of a twin span N/S orientated Venlo glasshouse.

Nutrition : Soil analysis gave the following results (mg/l)

P <sub>2</sub> O <sub>5</sub>	K <sub>2</sub> O	Mg	NO <sub>3</sub>	Conductivity
140	922	209	51	2460 (microsiemens)

35g/m<sup>2</sup> (1 oz/yd<sup>2</sup>) nitrogen fertiliser was added.

Pesticides : Basilex spray to the soil surface before planting.

Zineb	(1)	
Thiram	(1)	Spray post-planting
Gamma-Col	(1)	
Decis	(1)	

Temperatures : Unheated, ventilated at all times.

Harvested : 6 August 1992

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## RESULTS

The crop was grown to an excellent commercial standard. The trial was harvested on 6 August. Eighteen heads were cut from the centre of each plot, trimmed to a commercial standard and individually weighed.

The "standard deviation" of the head weights within a variety was calculated as a measure of uniformity - viz. the lower the standard deviation the more uniform the variety.

Visitors attending an "Open Day" on 7 August were asked to score each variety for overall usefulness on a scale of:

5 = Excellent

1 = Poor

The visitors had a market pack, growing crop and headweights from harvested plots to assist with their assessments of the varieties.

The weather for a few days before harvest was particularly hot and dry marginal tipburn was beginning to appear on most varieties at harvest. The severity was scored on a scale of:

10 = none visible

1 = unmarketable

Variety	Mean headweight (g)	Standard deviation (g)	Assessment of Tipburn 1=unmarketable 10=none visible	Assessment of Overall Usefulness 1 = poor 5 = excellent
Sunbeam	271	26.2	10	4.4
Diego	263	24.8	8	4.1
2610/91	260	25.3	6	3.1
2621/91	258	26.2	9	3.3
Titania	254	32.5	7	3.8
S0 256	248	23.3	6	2.5
Rebecca	230	26.7	9	2.3
Trial mean	255			
LSD (var. mean)	26.7			
P = 0.05				

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## COMMENTS ON VARIETIES

### SUNBEAM (RIJK ZWAAN)

Shiny, mid green, smooth leaves having a slightly toothed margin. A reasonably compact variety with a well developed and solid heart. The base broad, flat, closed and white.

This variety was easy to cut and bag, was of a good weight and standing ability and was liked by visitors to the Open Day.

### DIEGO (RIJK ZWAAN)

Mid green, smooth, upright small leaves. A compact variety with a well developed heart composed of fairly upright leaves. The base was slightly too narrow to completely fill the market box, flat, slightly open and white.

Again, a variety easy to cut and bag, producing a good headweight and liked by visitors to the Open Day.

### 2610/91 (YATES)

Very slightly paler than 2621/91, with fairly smooth, large leaves surrounding a solid heart. The base broad, slightly conical, reasonably closed, white with a large butt.

### 2621/91 (YATES)

Mid green, fairly smooth, large leaves surrounding a paler, very solid heart. The base broad, slightly conical, reasonably closed, white with a large butt.

This variety was more uniform in appearance and had less tipburn than 2610/91.

### TITANIA (ENZA ZADEN)

Mid green, fairly smooth leaves, reasonably well hearted with a large frame. The base very broad, flat, closed, white with a large butt.

### SO 256 (BREEDERS' SEEDS)

The darkest variety in the trial with fairly smooth, small, reflexed leaves surrounding a solid, rounded heart. The base broad, slightly concave, closed with narrow midribs, green. The large butt discoloured more rapidly than the other varieties.

An easy variety to cut and bag but bottom rotting increased the amount of trimming required.

### REBECCA (ENZA ZADEN)

Darker than average, fairly smooth and spreading leaf habit; the heart solid but small. The base broad, flat, closed with a small butt and narrow midribs. This variety produced lettuce significantly lower in weight than most varieties in the trial.

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## CONCLUSIONS

All of the varieties were of an acceptable weight by 6 August. Harvesting should have been carried out a couple of days earlier as dry marginal tipburn was developing on the older leaves of most varieties.

The widely grown variety TITANIA performed satisfactorily.

The two Rijk Zwaan varieties SUNBEAM and DIEGO showed considerable promise for mid summer production - both produced attractive lettuce of good weight and were easy to cut and bag.

## ACKNOWLEDGEMENTS

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We also wish to thank the Horticultural Development Council; Breeders' Seeds Ltd., Enza Zaden UK Ltd, Rijk Zwaan UK Ltd and Samuel Yates Ltd for supporting this trial.

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