

South African  
Barley  
Breeding  
Institute

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## **REPORT ON THE BARLEY LINE EVALUATION TRIALS UNDER IRRIGATION / VERSLAG VAN DIE GARS LYNEVALUASIE PROEWE ONDER BESPROEIINGS**

### **SEISOEN 2010 SEASON**

The main objective of the line evaluation program is to plant the best lines from the two different breeding programmes under the exact same conditions (soil, climate and management) in order to ensure that the yield, grading characteristics and malting quality results of the lines from the different breeding programmes could be evaluated on a more comparative basis.



VERSLAG VAN DIE GARS  
LYNEVALUASIE PROEWE  
ONDER BESPROEIINGS

*REPORT ON THE BARLEY LINE  
EVALUATION TRIALS UNDER  
IRRIGATION*

SEISOEN 2010 SEASON



Programme executed by:



**SOUTH AFRICAN BARLEY BREEDING INSTITUTE  
SMALL GRAIN INSTITUTE  
SAB MALTINGS**



# GARS LYN EVALUASIE IN DIE BESPROEIINGS GEBIED BARLEY LINE EVALUATION IN THE IRRIGATION AREA

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## 1. INTRODUCTION

The main objective of the line evaluation program is to plant the best lines from the two different breeding programmes under the exact same conditions (soil, climate and management) in order to ensure that the yield, grading characteristics and malting quality results of the lines from the different breeding programmes could be evaluated on a more comparative basis.

During the 2010 season, six trials were planted under irrigation in the Northern Cape. All the trials were harvested, and used for evaluation of the lines in the trial.

This report will cover all the line evaluation trials as executed by Sabbi, SGI and SABM during the 2010 season. The relevant agronomic data, grading characteristics and yield results will be represented.

## 2. SUMMARY

As a summary **Figure 2-6** shows the long-term relative performance of the 4<sup>th</sup>, 3<sup>rd</sup> and 2<sup>nd</sup> year lines in the LE trials.

## 3. LOCALITIES

The present barley production area (Irrigation area) was divided into two sub areas, namely Northern Irrigation area (Taung, Hartswater and Bull Hill) and Southern Irrigation area (Rietrivier, Douglas 1 and Douglas2). Each of these sub areas was covered by three localities that are representative of the different homogeneous agricultural areas in the respective sub areas.

The different sub areas with their respective localities and some information on the co-workers are listed in **Table 14**.

## 4. MATERIAL AND METHODS

The trial in the Irrigation area consisted of 25 entries (3 replicates) from which three are commercially grown cultivars (controls), two experimental lines (Sabbi), one fourth year line (Sabbi), three third year lines (1 Sabbi, 2 SGI), eight second year lines (Sabbi) and eighth first year lines (Sabbi). All the entries for the Irrigation area are listed in **Table 15**.

All the trials were laid out according to the nearest neighbour design and the data analysed with Agrobase Generation II software. In order to standardise the trials, all were planted by the SGI with a Wintersteiger Plotman trial plot planter. The individual plots consisted of 8 rows with an inter row spacing of 17.5 cm. Plots were planted at 6m in length and just before harvesting trimmed back to a plot of 5m in length. The seeding density of the different lines used in the trials varied according to their thousand-kernel weight. The aim was therefore to establish the same quantity of plants per unit area in a trial for a specific area.

Fertilisation of all the trials was applied according to the area, rotation system and individual recommendations obtained from soil analysis.

Weed, pest and disease control were applied optimally as required in order to ensure a competitive free environment for the barley plants throughout the growing season.

At the end of the growing season all trials were harvested with a Wintergeister or Hege trial plot harvester. The net trial plots consisted of 8 rows of 5 m length (6.8 m<sup>2</sup>). Yield in kg/ha was determined and a complete grading was done on the harvested samples with a Steinecker grading apparatus and nitrogen content of the kernels was determined with an Infratec 1221 whole grain analyser. For the purpose of this report, only yield, percentage plumpness (> 2.5 mm), screenings (< 2.0 mm) and percentage kernel nitrogen will be represented.

## 5. RESULTS

The following set of data will be presented for all the trials:

### 5.1 *Average Yield*

The average yield is expressed in kg/ha. Yield data is presented for each individual trial as well as averages for regions so that evaluation can also be done on a regional basis.

To simplify evaluation all tables will also include the following statistical measurements:

LSD( $T_{0.05}$ ): Least significant difference that is significant at a 5% level

LSD( $T_{0.10}$ ): Least significant difference that is significant at a 10% level

CV: Coefficient of variance

### 5.2 *Grading characteristics*

The following grading characteristics are presented:

Percentage plumpness (kernels > 2.5 mm)

Percentage screenings (kernels < 2.0 mm)

Percentage total kernel nitrogen

The same statistical measurements as mentioned under average yield are also used for these parameters.

### 5.3 *General appearance*

As determined on all trials throughout the season and indicated on a scale of 1 to 9. A figure of 9 indicates line with the best general performance.

### 5.4 *Stage of ripeness*

Determined on a scale of 1 to 5, where 1 indicates the early maturing lines and 5 the late maturing lines.

### 5.5 *Straw length*

Gives an indication of the average straw length as observed throughout all the LE trials. Straw length is expressed in categories ranging from short to long.

### 5.6 *Straw height (cm)*

This is the general height of an individual line measured from at least two points in the plot chosen at random. The measurement is from ground level to the top of the ear, ignoring awns.

### 5.7 *Straw strength*

Determined on a scale of 1 to 5, where 5 indicate total resistance to lodging and 1 no resistance to lodging.

TABEL 1: Gemiddelde opbrengste en opbrengsrangordes van inskrywings in die LE Besproeiingsproef, 2010

TABLE 1: Mean yields and yield rankings of entries in the LE Irrigation trial, 2010

Insk.nr. Entr.no.	Inskrywing Entry	Gem.rel. opb. % van std. Mean rel. yield % of std.	Gemiddelde Mean		Lokaliteite/Localities											
					TAUNG		HARTSWATER		BULL HILL		RIETRIVIER		DOUGLAS 1		DOUGLAS 2	
					Yield	Rk	Yield	Rk	Yield	Rk	Yield	Rk	Yield	Rk	Yield	Rk
1	Puma	100.0	6519	22	7671	16	8061	15	7405	22	4248	21	6381	22	5347	23
2	SSG 585	101.8	6639	20	7432	20	6949	24	7545	21	4723	11	7230	7	5952	18
3	Cocktail	116.7	7607	7	8755	8	9452	3	9277	5	4092	23	6816	14	7252	1
4	Marthe	101.4	6608	21	7178	22	7430	20	7261	23	4619	12	7304	5	5854	19
5	Cristalia	107.1	6984	13	8207	12	8134	14	7914	14	5362	2	6291	23	5994	17
6	Publican	116.8	7612	6	8997	5	9334	6	8519	11	5275	3	6808	16	6738	4
7	B06/04	93.5	6097	25	6963	23	7224	23	6737	25	4497	14	6124	24	5039	24
8	B06/05	102.4	6675	19	7963	14	7265	22	7120	24	4777	9	6525	20	6400	9
9	Snakebite	120.4	7848	1	8720	9	9750	1	9754	2	4871	7	7279	6	6713	5
10	07-900-19	112.8	7355	9	9509	1	9475	2	8524	10	4597	13	5777	25	6249	11
11	07-900-23	117.4	7653	4	9414	2	8855	7	9840	1	4303	17	6995	11	6513	8
12	07-900-25	118.5	7727	2	8918	6	9440	4	9604	3	4255	20	7437	3	6708	6
13	07-900-30	105.0	6843	15	8872	7	7274	21	8297	12	4323	16	6814	15	5476	22
14	01-010-14	110.3	7192	10	7638	18	8376	11	8296	13	4817	8	7028	10	6998	2
15	01-041-02	104.7	6825	16	7888	15	7582	19	7550	19	4889	6	6739	17	6298	10
16	03-059-02	105.6	6882	14	7665	17	8000	16	8850	8	4738	10	7034	8	5003	25
17	03-060-03	98.7	6432	23	6653	25	7812	17	7549	20	4204	22	6849	13	5524	21
18	02-055-02	102.7	6695	17	7554	19	7689	18	7758	15	4448	15	7032	9	5692	20
19	02-055-05	97.8	6376	24	6961	24	6923	25	7703	17	3910	24	6548	19	6214	12
20	09-900-01	109.0	7107	11	8713	10	8389	10	8985	7	3635	25	6884	12	6037	16
21	09-900-02	114.7	7480	8	9141	4	8444	9	8717	9	5200	4	6681	18	6696	7
22	09-900-06	117.3	7649	5	9200	3	9378	5	9422	4	4293	18	7552	2	6047	15
23	03-060-01	108.1	7045	12	8019	13	8279	12	7611	18	4935	5	7357	4	6071	14
24	03-061-01	102.5	6682	18	7209	21	8250	13	7743	16	4269	19	6502	21	6120	13
25	03-066-01	118.3	7712	3	8603	11	8781	8	9054	6	5485	1	7596	1	6750	3
GEMIDD/AVERAGE			7050		8154		8262		8281		4591		6863		6147	
KV/CV			8.2		4.6		7.8		5.9		12.4		11.2		8.0	
KBV/LSD (T0.10)			484		415		687		535		626		842		543	
KBV/LSD (T0.05)			623		536		887		690		808		1087		700	

TABEL 2: Gemiddelde opbrengste en opbrengsrangordes van inskrywings in die LE Besproeiingsproef Noord  
 TABLE 2: Mean yields and yield rankings of entries in the LE Irrigation trial North

Insk.nr. Entr.no.	Inskrywing Entry	Gem.rel. opb. % van std. Mean rel. yield % of std.	Gemiddelde Mean		Lokaliteite/Localities					
			Yield	Rk	TAUNG		HARTSWATER		BULL HILL	
					Yield	Rk	Yield	Rk	Yield	Rk
1	Puma	100.0	7712	17	7671	16	8061	15	7405	22
2	SSG 585	94.8	7309	22	7432	20	6949	24	7545	21
3	Cocktail	118.8	9162	6	8755	8	9452	3	9277	5
4	Marthe	94.5	7290	23	7178	22	7430	20	7261	23
5	Cristalia	104.8	8085	14	8207	12	8134	14	7914	14
6	Publican	116.1	8950	7	8997	5	9334	6	8519	11
7	B06/04	90.4	6975	25	6963	23	7224	23	6737	25
8	B06/05	96.6	7450	20	7963	14	7265	22	7120	24
9	Snakebite	122.0	9408	1	8720	9	9750	1	9754	2
10	07-900-19	118.9	9169	5	9509	1	9475	2	8524	10
11	07-900-23	121.5	9369	2	9414	2	8855	7	9840	1
12	07-900-25	120.9	9321	4	8918	6	9440	4	9604	3
13	07-900-30	105.6	8148	12	8872	7	7274	21	8297	12
14	01-010-14	105.1	8103	13	7638	18	8376	11	8296	13
15	01-041-02	99.5	7673	18	7888	15	7582	19	7550	19
16	03-059-02	106.0	8171	11	7665	17	8000	16	8850	8
17	03-060-03	95.1	7338	21	6653	25	7812	17	7549	20
18	02-055-02	99.4	7667	19	7554	19	7689	18	7758	15
19	02-055-05	93.3	7196	24	6961	24	6923	25	7703	17
20	09-900-01	112.8	8696	10	8713	10	8389	10	8985	7
21	09-900-02	113.7	8767	9	9141	4	8444	9	8717	9
22	09-900-06	121.0	9333	3	9200	3	9378	5	9422	4
23	03-060-01	103.3	7969	15	8019	13	8279	12	7611	18
24	03-061-01	100.3	7734	16	7209	21	8250	13	7743	16
25	03-066-01	114.3	8813	8	8603	11	8781	8	9054	6
GEMIDD/AVERAGE			8232		8154		8262		8281	
KV/CV			6.3		4.6		7.8		5.9	
KBV/LSD (T0.10)			532		415		687		535	
KBV/LSD (T0.05)			686		536		887		690	

TABEL 3: Gemiddelde opbrengste en opbrengsrangordes van inskrywings in die LE Besproeiingsproef Suid  
 TABLE 3: Mean yields and yield rankings of entries in the LE Irrigation trial South

Insk.nr. Entr.no.	Inskrywing Entry	Gem.rel. opb. % van std. Mean rel. yield % of std.	Gemiddelde Mean		Lokaliteite/Localities					
			Yield	Rk	RIETRIVIER		DOUGLAS 1		DOUGLAS 2	
					Yield	Rk	Yield	Rk	Yield	Rk
1	Puma	100.0	5325	24	4248	21	6381	22	5347	23
2	SSG 585	112.1	5969	10	4723	11	7230	7	5952	18
3	Cocktail	113.7	6053	8	4092	23	6816	14	7252	1
4	Marthe	111.3	5926	13	4619	12	7304	5	5854	19
5	Cristalia	110.5	5883	15	5362	2	6291	23	5994	17
6	Publican	117.8	6273	4	5275	3	6808	16	6738	4
7	B06/04	98.0	5220	25	4497	14	6124	24	5039	24
8	B06/05	110.8	5901	14	4777	9	6525	20	6400	9
9	Snakebite	118.1	6288	2	4871	7	7279	6	6713	5
10	07-900-19	104.0	5541	20	4597	13	5777	25	6249	11
11	07-900-23	111.5	5937	12	4303	17	6995	11	6513	8
12	07-900-25	115.2	6133	6	4255	20	7437	3	6708	6
13	07-900-30	104.0	5538	21	4323	16	6814	15	5476	22
14	01-010-14	117.9	6281	3	4817	8	7028	10	6998	2
15	01-041-02	112.2	5976	9	4889	6	6739	17	6298	10
16	03-059-02	105.0	5592	18	4738	10	7034	8	5003	25
17	03-060-03	103.8	5526	22	4204	22	6849	13	5524	21
18	02-055-02	107.5	5724	16	4448	15	7032	9	5692	20
19	02-055-05	104.4	5557	19	3910	24	6548	19	6214	12
20	09-900-01	103.6	5519	23	3635	25	6884	12	6037	16
21	09-900-02	116.3	6192	5	5200	4	6681	18	6696	7
22	09-900-06	112.0	5964	11	4293	18	7552	2	6047	15
23	03-060-01	114.9	6121	7	4935	5	7357	4	6071	14
24	03-061-01	105.7	5630	17	4269	19	6502	21	6120	13
25	03-066-01	124.1	6611	1	5485	1	7596	1	6750	3
GEMIDD/AVERAGE			5867		4591		6863		6147	
KV/CV			10.7		12.4		11.2		8.0	
KBV/LSD (T0.10)			573		626		842		543	
KBV/LSD (T0.05)			740		808		1087		700	

TABEL 4: Gemiddelde vetkorrelpersentasie (&gt;2,5mm) en rangordes van inskrywings in die LE Besproeiingsproef

TABLE 4: Mean plumpness (&gt;2,5mm) and rankings of entries in the LE Irrigation trial

Insk.nr. Entr.no.	Inskrywing Entry	Gem.rel. opb. % van std. Mean rel. yield % of std.	Gemiddelde Mean		Lokaleite/Localities											
					TAUNG		HARTSWATER		BULL HILL		RIETRIVIER		DOUGLAS 1		DOUGLAS 2	
					Plump	Rk	Plump	Rk	Plump	Rk	Plump	Rk	Plump	Rk	Plump	Rk
1	Puma	100.0	90.2	17	98.5	5	95.9	17	97.3	16	68.8	18	87.0	20	93.7	21
2	SSG 585	104.1	93.9	4	98.8	2	98.3	3	98.5	3	76.9	8	94.5	7	96.5	9
3	Cocktail	93.0	83.8	25	94.5	24	92.6	25	95.3	23	45.1	25	78.8	25	96.7	8
4	Marthe	103.0	92.9	10	98.5	6	96.2	14	98.3	4	83.0	1	89.3	18	92.2	24
5	Cristalia	101.4	91.5	14	96.6	19	95.7	18	97.3	14	73.0	14	89.6	16	96.8	5
6	Publican	98.9	89.2	20	95.2	22	93.9	23	97.3	12	67.4	19	86.9	21	94.2	18
7	B06/04	103.3	93.2	7	97.6	12	97.2	7	97.6	10	76.8	9	91.4	14	98.6	1
8	B06/05	104.3	94.0	3	98.3	8	97.3	5	97.6	11	79.3	4	94.0	8	97.7	2
9	Snakebite	100.2	90.4	16	93.2	25	94.9	21	94.5	24	75.4	10	90.3	15	93.8	19
10	07-900-19	100.0	90.2	18	96.1	20	96.0	16	98.1	6	70.3	16	85.0	23	95.7	12
11	07-900-23	97.5	87.9	23	97.3	14	93.0	24	95.9	21	64.9	20	81.6	24	94.9	16
12	07-900-25	98.8	89.1	21	96.7	17	94.6	22	96.4	19	62.6	22	88.3	19	95.9	11
13	07-900-30	97.4	87.9	24	96.1	21	96.3	13	90.9	25	64.5	21	85.6	22	93.8	20
14	01-010-14	105.6	95.2	1	98.5	7	98.4	1	98.5	2	79.8	3	99.0	1	97.3	3
15	01-041-02	103.3	93.2	9	97.6	11	96.9	9	97.3	13	79.3	5	94.5	5	93.3	22
16	03-059-02	101.5	91.5	13	97.3	15	95.1	20	97.2	17	75.0	11	89.5	17	95.1	14
17	03-060-03	102.9	92.8	11	98.6	4	96.8	11	96.0	20	77.1	7	93.8	9	94.7	17
18	02-055-02	99.6	89.8	19	97.5	13	97.1	8	98.0	8	61.2	23	92.5	11	92.6	23
19	02-055-05	102.9	92.8	12	98.2	9	96.8	10	97.9	9	73.6	13	95.5	4	95.0	15
20	09-900-01	103.3	93.2	8	98.8	3	98.4	2	98.0	7	69.8	17	97.2	2	97.0	4
21	09-900-02	101.1	91.2	15	97.1	16	96.1	15	96.7	18	72.7	15	92.5	12	92.2	25
22	09-900-06	104.5	94.2	2	96.6	18	97.3	6	97.3	15	81.2	2	96.3	3	96.8	7
23	03-060-01	103.8	93.6	5	99.1	1	97.8	4	98.9	1	74.6	12	94.5	6	96.8	6
24	03-061-01	103.6	93.4	6	98.1	10	96.7	12	98.1	5	77.9	6	93.8	10	96.0	10
25	03-066-01	98.6	89.0	22	94.7	23	95.6	19	95.4	22	60.4	24	92.1	13	95.5	13
GEMIDD/AVERAGE			91.4		97.2		96.2		97.0		71.6		90.9		95.3	
KV/CV			3.7		1.3		1.2		1.4		9.7		3.2		2.1	
KBV/LSD (T0.10)			3.2		1.3		1.2		1.5		7.7		3.1		2.2	
KBV/LSD (T0.05)			4.1		1.7		1.6		1.9		9.9		4.1		2.8	

TABEL 5: Gemiddelde vetkorrelpersentasie (>2,5mm) en rangordes van inskrywings in die LE Besproeiingsproef Noor  
 TABLE 5: Mean plumpness (>2,5mm) and rankings of entries in the LE Irrigation trial North

Insk.nr. Entr.no.	Inskrywing Entry	Gem.rel. vet. % van std. Mean rel. plump % of std.	Gemiddelde Mean		Lokalteite/Localities					
			Plump	Rk	TAUNG		HARTSWATER		BULL HILL	
					Plump	Rk	Plump	Rk	Plump	Rk
1	Puma	100.0	97.2	12	98.5	5	95.9	17	97.3	16
2	SSG 585	101.4	98.5	2	98.8	2	98.3	3	98.5	3
3	Cocktail	96.9	94.2	25	94.5	24	92.6	25	95.3	23
4	Marthe	100.5	97.7	6	98.5	6	96.2	14	98.3	4
5	Cristalia	99.3	96.5	18	96.6	19	95.7	18	97.3	14
6	Publican	98.2	95.5	20	95.2	22	93.9	23	97.3	12
7	B06/04	100.3	97.5	10	97.6	12	97.2	7	97.6	10
8	B06/05	100.6	97.8	5	98.3	8	97.3	5	97.6	11
9	Snakebite	96.9	94.2	24	93.2	25	94.9	21	94.5	24
10	07-900-19	99.5	96.7	15	96.1	20	96.0	16	98.1	6
11	07-900-23	98.2	95.4	21	97.3	14	93.0	24	95.9	21
12	07-900-25	98.6	95.9	19	96.7	17	94.6	22	96.4	19
13	07-900-30	97.1	94.4	23	96.1	21	96.3	13	90.9	25
14	01-010-14	101.3	98.4	3	98.5	7	98.4	1	98.5	2
15	01-041-02	100.1	97.3	11	97.6	11	96.9	9	97.3	13
16	03-059-02	99.3	96.6	17	97.3	15	95.1	20	97.2	17
17	03-060-03	99.9	97.1	13	98.6	4	96.8	11	96.0	20
18	02-055-02	100.3	97.5	9	97.5	13	97.1	8	98.0	8
19	02-055-05	100.4	97.6	8	98.2	9	96.8	10	97.9	9
20	09-900-01	101.2	98.4	4	98.8	3	98.4	2	98.0	7
21	09-900-02	99.4	96.6	16	97.1	16	96.1	15	96.7	18
22	09-900-06	99.8	97.1	14	96.6	18	97.3	6	97.3	15
23	03-060-01	101.4	98.6	1	99.1	1	97.8	4	98.9	1
24	03-061-01	100.4	97.6	7	98.1	10	96.7	12	98.1	5
25	03-066-01	98.0	95.2	22	94.7	23	95.6	19	95.4	22
GEMIDD/AVERAGE			96.8		97.2		96.2		97.0	
KV/CV			1.3		1.3		1.2		1.4	
KBV/LSD (T0.10)			1.3		1.3		1.2		1.5	
KBV/LSD (T0.05)			1.7		1.7		1.6		1.9	

TABEL 6: Gemiddelde vetkorrelpersentasie (>2,5mm) en rangordes van inskrywings in die LE Besproeiingsproef Suid  
 TABLE 6: Mean plumpness (>2,5mm) and rankings of entries in the LE Irrigation trial South

Insk.nr. Entr.no.	Inskrywing Entry	Gem.rel. vet. % van std. Mean rel. plump % of std.	Gemiddelde Mean		Lokalteite/Localities					
			Plump	Rk	RIETRIVIER		DOUGLAS 1		DOUGLAS 2	
					Plump	Rk	Plump	Rk	Plump	Rk
1	Puma	100.0	83.2	18	68.8	18	87.0	20	93.7	21
2	SSG 585	107.4	89.3	4	76.9	8	94.5	7	96.5	9
3	Cocktail	88.4	73.5	25	45.1	25	78.8	25	96.7	8
4	Marthe	106.0	88.1	10	83.0	1	89.3	18	92.2	24
5	Cristalia	104.0	86.5	15	73.0	14	89.6	16	96.8	5
6	Publican	99.6	82.8	19	67.4	19	86.9	21	94.2	18
7	B06/04	106.9	88.9	7	76.8	9	91.4	14	98.6	1
8	B06/05	108.6	90.3	3	79.3	4	94.0	8	97.7	2
9	Snakebite	104.0	86.5	14	75.4	10	90.3	15	93.8	19
10	07-900-19	100.6	83.6	17	70.3	16	85.0	23	95.7	12
11	07-900-23	96.7	80.4	24	64.9	20	81.6	24	94.9	16
12	07-900-25	98.9	82.3	21	62.6	22	88.3	19	95.9	11
13	07-900-30	97.8	81.3	23	64.5	21	85.6	22	93.8	20
14	01-010-14	110.6	92.0	1	79.8	3	99.0	1	97.3	3
15	01-041-02	107.1	89.0	6	79.3	5	94.5	5	93.3	22
16	03-059-02	104.0	86.5	13	75.0	11	89.5	17	95.1	14
17	03-060-03	106.5	88.5	9	77.1	7	93.8	9	94.7	17
18	02-055-02	98.7	82.1	22	61.2	23	92.5	11	92.6	23
19	02-055-05	105.8	88.0	11	73.6	13	95.5	4	95.0	15
20	09-900-01	105.8	88.0	12	69.8	17	97.2	2	97.0	4
21	09-900-02	103.1	85.8	16	72.7	15	92.5	12	92.2	25
22	09-900-06	109.9	91.4	2	81.2	2	96.3	3	96.8	7
23	03-060-01	106.6	88.6	8	74.6	12	94.5	6	96.8	6
24	03-061-01	107.3	89.2	5	77.9	6	93.8	10	96.0	10
25	03-066-01	99.4	82.7	20	60.4	24	92.1	13	95.5	13
GEMIDD/AVERAGE			86.0		71.6		90.9		95.3	
KV/CV			5.3		9.7		3.2		2.1	
KBV/LSD (T0.10)			6.1		7.7		3.1		2.2	
KBV/LSD (T0.05)			7.8		9.9		4.1		2.8	

TABEL 7: Gemiddelde sifsels (&lt;2,0mm) en rangordes van inskrywings in die LE Besproeiingsproef

TABLE 7: Mean screenings (&lt;2,0mm) and rankings of entries in the LE Irrigation trial

Insk.nr. Entr.no.	Inskrywing Entry	Gem.rel. sifs. % van std. Mean rel. screen % of std.	Gemiddelde Mean		Lokalteite/Localities											
					TAUNG		HARTSWATER		BULL HILL		RIETRIVIER		DOUGLAS 1		DOUGLAS 2	
					Screen	Rk	Screen	Rk	Screen	Rk	Screen	Rk	Screen	Rk	Screen	Rk
1	Puma	100.0	2.9	21	0.4	10	0.9	13	0.6	12	10.9	20	3.0	21	1.7	24
2	SSG 585	56.6	1.7	7	0.2	2	0.6	3	0.5	6	6.5	8	1.1	5	1.0	16
3	Cocktail	181.6	5.3	25	0.9	24	1.5	25	0.9	18	22.4	25	5.6	24	0.6	4
4	Marthe	70.6	2.1	11	0.3	6	0.9	17	0.4	2	6.2	7	2.9	20	1.7	25
5	Cristalia	81.4	2.4	15	0.7	21	0.9	14	0.7	13	8.9	13	2.0	14	1.0	14
6	Publican	93.1	2.7	19	0.9	23	1.4	24	1.0	20	9.3	16	2.7	17	1.0	18
7	B06/04	67.7	2.0	11	0.6	16	0.7	7	0.5	5	7.2	10	2.1	15	0.8	12
8	B06/05	55.6	1.6	7	0.4	12	0.8	11	0.6	8	5.9	4	1.5	9	0.6	5
9	Snakebite	91.2	2.7	16	1.0	25	0.9	16	1.3	23	9.3	15	2.3	16	1.1	19
10	07-900-19	91.1	2.7	14	0.8	22	0.8	12	0.4	1	9.7	19	3.3	22	1.0	15
11	07-900-23	124.7	3.6	19	0.5	13	1.4	23	1.5	24	11.3	22	6.1	25	1.1	20
12	07-900-25	94.9	2.8	14	0.4	9	1.0	18	0.8	17	11.0	21	2.8	18	0.7	8
13	07-900-30	105.0	3.1	17	0.5	15	1.3	22	2.3	25	9.0	14	4.6	23	0.8	11
14	01-010-14	44.1	1.3	1	0.3	5	0.3	2	0.6	11	6.0	5	0.2	1	0.3	1
15	01-041-02	68.1	2.0	10	0.4	11	0.8	9	0.7	15	7.4	11	1.2	6	1.4	21
16	03-059-02	102.3	3.0	22	0.6	17	1.3	21	0.9	19	11.4	23	2.8	19	0.9	13
17	03-060-03	67.5	2.0	9	0.2	3	1.0	19	1.2	22	6.8	9	1.6	11	1.0	17
18	02-055-02	54.4	1.6	5	0.5	14	0.6	4	0.5	7	5.0	3	1.3	7	1.6	23
19	02-055-05	52.7	1.5	4	0.3	8	0.8	10	0.6	9	6.2	6	0.6	2	0.7	9
20	09-900-01	63.4	1.9	8	0.2	1	0.3	1	0.6	10	8.9	12	0.7	3	0.4	3
21	09-900-02	88.3	2.6	15	0.6	18	1.1	20	1.0	21	9.4	17	1.9	13	1.5	22
22	09-900-06	45.6	1.3	2	0.7	19	0.6	5	0.7	14	4.7	1	0.8	4	0.4	2
23	03-060-01	46.3	1.4	3	0.2	4	0.7	6	0.4	4	4.7	2	1.5	8	0.6	7
24	03-061-01	76.8	2.2	13	0.3	7	0.8	8	0.4	3	9.6	18	1.8	12	0.6	6
25	03-066-01	99.0	2.9	20	0.7	20	0.9	15	0.8	16	12.5	24	1.5	10	0.8	10
GEMIDD/AVERAGE			2.4		0.5		0.9		0.8		8.8		2.2		0.9	
KV/CV			52.0		46.0		33.9		51.2		30.9		40.4		61.0	
KBV/LSD (T0.10)			1.3		0.2		0.3		0.4		3.0		1.0		0.6	
KBV/LSD (T0.05)			1.7		0.3		0.4		0.6		3.9		1.3		0.8	

TABEL 8: Gemiddelde korrelstikstof en rangordes van inskrywings in die LE Besproeiingsproef

TABLE 8: Mean kernel nitrogen and rankings of entries in the LE Irrigation trial

Insk.nr. Entr.no.	Inskrywing Entry	Gem.rel. opb. % van std. Mean rel. yield % of std.	Gemiddelde Mean		Lokaleite/Localities											
					TAUNG		HARTSWATER		BULL HILL		RIETRIVIER		DOUGLAS 1		DOUGLAS 2	
					TN	Rk	TN	Rk	TN	Rk	TN	Rk	TN	Rk	TN	Rk
1	Puma	100.0	1.95	1	1.67	2	1.63	13	1.91	6	2.52	1	1.95	3	1.99	1
2	SSG 585	98.2	1.91	5	1.57	5	1.74	1	1.95	5	2.39	11	1.93	5	1.88	6
3	Cocktail	91.3	1.78	20	1.39	24	1.57	20	1.72	22	2.44	6	1.77	20	1.77	18
4	Marthe	96.6	1.88	7	1.48	15	1.66	5	1.88	11	2.36	16	1.94	4	1.95	4
5	Cristalia	92.1	1.79	17	1.48	16	1.62	15	1.79	14	2.30	25	1.80	15	1.76	21
6	Publican	91.1	1.77	23	1.48	18	1.57	19	1.68	23	2.31	23	1.79	18	1.80	17
7	B06/04	95.4	1.86	12	1.54	12	1.62	16	1.88	10	2.33	19	1.91	9	1.85	10
8	B06/05	95.6	1.86	11	1.47	19	1.74	2	1.89	9	2.36	15	1.85	12	1.85	9
9	Snakebite	87.1	1.70	25	1.42	21	1.46	25	1.64	25	2.33	20	1.70	24	1.62	25
10	07-900-19	90.6	1.76	24	1.40	22	1.50	24	1.67	24	2.35	17	1.79	19	1.86	7
11	07-900-23	91.5	1.78	19	1.39	23	1.51	23	1.78	17	2.33	18	1.92	6	1.75	22
12	07-900-25	91.8	1.79	18	1.38	25	1.56	21	1.83	13	2.38	12	1.88	10	1.68	23
13	07-900-30	91.2	1.77	21	1.47	20	1.57	18	1.74	20	2.32	21	1.77	21	1.77	20
14	01-010-14	96.2	1.87	8	1.57	6	1.66	6	1.89	8	2.48	3	1.82	13	1.81	16
15	01-041-02	98.7	1.92	3	1.62	4	1.66	8	2.01	1	2.30	24	1.96	2	1.97	3
16	03-059-02	96.2	1.87	8	1.56	9	1.64	10	1.87	12	2.42	8	1.91	8	1.83	15
17	03-060-03	95.1	1.85	13	1.51	13	1.59	17	1.97	2	2.41	9	1.79	17	1.83	14
18	02-055-02	98.7	1.92	4	1.66	3	1.71	4	1.96	4	2.43	7	1.92	7	1.84	12
19	02-055-05	99.7	1.94	2	1.57	7	1.66	7	1.97	3	2.52	2	2.06	1	1.85	8
20	09-900-01	92.2	1.79	16	1.48	17	1.54	22	1.73	21	2.37	13	1.72	22	1.92	5
21	09-900-02	96.1	1.87	10	1.55	10	1.63	11	1.79	15	2.40	10	1.86	11	1.98	2
22	09-900-06	93.2	1.81	14	1.54	11	1.62	14	1.76	19	2.31	22	1.80	16	1.85	11
23	03-060-01	97.5	1.90	6	1.67	1	1.71	3	1.90	7	2.46	4	1.80	14	1.84	13
24	03-061-01	92.9	1.81	15	1.56	8	1.64	9	1.78	18	2.45	5	1.64	25	1.77	19
25	03-066-01	91.2	1.77	21	1.48	14	1.63	12	1.78	16	2.37	14	1.71	23	1.67	24
GEMIDD/AVERAGE			1.84		1.52		1.62		1.83		2.39		1.84		1.83	
KV/CV			3.8		5.0		2.6		4.3		2.9		4.8		2.5	
KBV/LSD (T0.10)			0.06		0.08		0.04		0.09		0.08		0.10		0.05	
KBV/LSD (T0.05)			0.07		0.10		0.06		0.11		0.10		0.13		0.07	

TABEL 9: Gemiddelde korrelstikstof en rangordes van inskrywings in die LE Besproeiingsproef Noord  
 TABLE 9: Mean kernel nitrogen and rankings of entries in the LE Irrigation trial North

Insk.nr. Entr.no.	Inskrywing Entry	Gem.rel. TN % van std. Mean rel. TN % of std.	Gemiddelde Mean		Lokalteite/Localities					
			TN	Rk	TAUNG		HARTSWATER		BULL HILL	
					TN	Rk	TN	Rk	TN	Rk
1	Puma	100.0	1.74	5	1.67	2	1.63	13	1.91	6
2	SSG 585	101.0	1.75	4	1.57	5	1.74	1	1.95	5
3	Cocktail	89.8	1.56	22	1.39	24	1.57	20	1.72	22
4	Marthe	96.4	1.67	12	1.48	15	1.66	5	1.88	11
5	Cristalia	93.9	1.63	16	1.48	16	1.62	15	1.79	14
6	Publican	90.8	1.58	21	1.48	18	1.57	19	1.68	23
7	B06/04	96.7	1.68	11	1.54	12	1.62	16	1.88	10
8	B06/05	97.9	1.70	8	1.47	19	1.74	2	1.89	9
9	Snakebite	86.8	1.51	25	1.42	21	1.46	25	1.64	25
10	07-900-19	87.7	1.52	24	1.40	22	1.50	24	1.67	24
11	07-900-23	89.8	1.56	22	1.39	23	1.51	23	1.78	17
12	07-900-25	91.6	1.59	19	1.38	25	1.56	21	1.83	13
13	07-900-30	91.7	1.59	18	1.47	20	1.57	18	1.74	20
14	01-010-14	98.3	1.71	7	1.57	6	1.66	6	1.89	8
15	01-041-02	101.5	1.76	2	1.62	4	1.66	8	2.01	1
16	03-059-02	97.3	1.69	9	1.56	9	1.64	10	1.87	12
17	03-060-03	97.3	1.69	9	1.51	13	1.59	17	1.97	2
18	02-055-02	102.3	1.78	1	1.66	3	1.71	4	1.96	4
19	02-055-05	99.8	1.73	6	1.57	7	1.66	7	1.97	3
20	09-900-01	91.2	1.58	20	1.48	17	1.54	22	1.73	21
21	09-900-02	95.4	1.66	14	1.55	10	1.63	11	1.79	15
22	09-900-06	94.4	1.64	15	1.54	11	1.62	14	1.76	19
23	03-060-01	101.3	1.76	3	1.67	1	1.71	3	1.90	7
24	03-061-01	95.6	1.66	13	1.56	8	1.64	9	1.78	18
25	03-066-01	93.9	1.63	17	1.48	14	1.63	12	1.78	16
GEMIDD/AVERAGE			1.65		1.52		1.62		1.83	
KV/CV			4.1		5.0		2.6		4.3	
KBV/LSD (T0.10)			0.06		0.08		0.04		0.09	
KBV/LSD (T0.05)			0.08		0.10		0.06		0.11	

TABEL 10: Gemiddelde korrelstikstof en rangordes van inskrywings in die LE Besproeiingsproef Suid  
 TABLE 10: Mean kernel nitrogen and rankings of entries in the LE Irrigation trial South

Insk.nr. Entr.no.	Inskrywing Entry	Gem.rel. TN % van std. Mean rel. TN % of std.	Gemiddelde		Lokalteite/Localities					
			Mean		RIETRIVIER		DOUGLAS 1		DOUGLAS 2	
			TN	Rk	TN	Rk	TN	Rk	TN	Rk
1	Puma	100.0	2.15	1	2.52	1	1.95	3	2.0	1
2	SSG 585	96.0	2.07	6	2.39	11	1.93	5	1.88	6
3	Cocktail	92.6	1.99	17	2.44	6	1.77	20	1.77	18
4	Marthe	96.7	2.08	3	2.36	16	1.94	4	1.95	4
5	Cristalia	90.7	1.95	21	2.30	25	1.80	15	1.76	21
6	Publican	91.3	1.97	20	2.31	23	1.79	18	1.80	17
7	B06/04	94.3	2.03	11	2.33	19	1.91	9	1.85	10
8	B06/05	93.8	2.02	12	2.36	15	1.85	12	1.85	9
9	Snakebite	87.5	1.88	25	2.33	20	1.70	24	1.62	25
10	07-900-19	92.9	2.00	15	2.35	17	1.79	19	1.86	7
11	07-900-23	92.9	2.00	16	2.33	18	1.92	6	1.75	22
12	07-900-25	92.0	1.98	19	2.38	12	1.88	10	1.68	23
13	07-900-30	90.7	1.95	21	2.32	21	1.77	21	1.77	20
14	01-010-14	94.6	2.04	9	2.48	3	1.82	13	1.81	16
15	01-041-02	96.4	2.08	5	2.30	24	1.96	2	1.97	3
16	03-059-02	95.4	2.05	8	2.42	8	1.91	8	1.83	15
17	03-060-03	93.3	2.01	13	2.41	9	1.79	17	1.83	14
18	02-055-02	95.8	2.06	7	2.43	7	1.92	7	1.84	12
19	02-055-05	99.5	2.14	2	2.52	2	2.06	1	1.85	8
20	09-900-01	93.0	2.00	14	2.37	13	1.72	22	1.92	5
21	09-900-02	96.6	2.08	4	2.40	10	1.86	11	1.98	2
22	09-900-06	92.3	1.99	18	2.31	22	1.80	16	1.85	11
23	03-060-01	94.4	2.03	10	2.46	4	1.80	14	1.84	13
24	03-061-01	90.7	1.95	21	2.45	5	1.64	25	1.77	19
25	03-066-01	89.0	1.92	24	2.37	14	1.71	23	1.67	24
GEMIDD/AVERAGE			2.02		2.39		1.84		1.83	
KV/CV			3.5		2.9		4.8		2.5	
KBV/LSD (T0.10)			0.09		0.08		0.10		0.05	
KBV/LSD (T0.05)			0.12		0.10		0.13		0.07	

TABEL 11: Gemiddelde ontkiemingsenergie (4ml; 72h) en rangordes van inskrywings in die LE Besproeiingsproef

TABLE 11: Mean germinative energy (4ml; 72h) and rankings of entries in the LE Irrigation trial

Insk.nr. Entr.no.	Inskrywing Entry	Gem.rel. OE % van std. Mean rel. GE % of std.	Gemiddelde Mean		Lokaliteite/Localities											
					TAUNG		HARTSWATER		BULL HILL		RIETRIVIER		DOUGLAS1		DOUGLAS2	
					OE	Rk	OE	Rk	OE	Rk	OE	Rk	OE	Rk	OE	Rk
1	Puma	100.0	98	4	100	5	99	15	100	5	93	10	98	19	100	2
2	SSG 585	95.4	94	24	100	4	95	23	100	8	79	25	97	25	92	23
3	Cocktail	100.2	99	3	99	11	99	7	100	6	94	8	99	18	100	3
4	Marthe	99.2	98	11	99	6	99	8	98	19	93	11	98	20	98	11
5	Cristalia	99.8	98	5	100	2	99	5	99	11	95	6	98	21	98	10
6	Publican	100.3	99	2	99	12	99	6	104	1	92	12	99	17	99	7
7	B06/04	99.5	98	9	99	9	99	10	101	3	91	17	99	9	98	8
8	B06/05	98.1	97	18	98	24	99	12	95	24	91	15	100	8	96	20
9	Snakebite	98.6	97	14	98	22	99	9	96	23	92	13	100	6	97	15
10	07-900-19	98.6	97	14	99	10	100	2	98	16	90	19	99	13	96	19
11	07-900-23	98.0	96	19	98	21	95	22	99	15	96	4	99	14	91	24
12	07-900-25	97.6	96	22	98	23	90	24	99	14	92	14	99	16	98	9
13	07-900-30	99.7	98	7	100	1	100	16	100	2	89	23	100	3	99	4
14	01-010-14	98.6	97	14	98	20	98	18	99	12	90	18	98	22	99	6
15	01-041-02	100.5	99	1	99	7	99	4	100	4	96	3	100	2	99	5
16	03-059-02	97.1	96	23	99	14	99	11	89	25	91	16	100	4	95	21
17	03-060-03	98.3	97	17	98	19	100	1	98	18	89	20	98	23	97	14
18	02-055-02	99.2	98	11	99	13	99	14	97	20	96	2	97	24	97	16
19	02-055-05	99.7	98	7	97	25	99	13	98	17	96	5	100	1	98	12
20	09-900-01	99.8	98	5	99	8	99	3	97	21	96	1	100	7	98	13
21	09-900-02	99.2	98	11	99	17	98	17	100	9	93	9	99	10	96	18
22	09-900-06	97.8	96	20	99	15	98	19	96	22	94	7	99	12	91	25
23	03-060-01	94.2	93	25	100	3	72	25	99	13	89	22	99	11	97	17
24	03-061-01	99.3	98	10	99	16	98	21	100	10	89	21	100	5	100	1
25	03-066-01	97.8	96	20	98	18	98	20	100	7	88	24	99	15	94	22
GEMIDD/AVERAGE			97		99		97		98		92		99		97	
KV/CV			5.0		1.1		10.8		3.7		3.4		0.7		2.8	
KBV/LSD (T0.10)			3		1.2		11.1		4.0		3.5		0.7		3.0	
KBV/LSD (T0.05)			4		2		14		5		4		1		4	

TABEL 12: Gemiddelde ontkiemingsenergie (8ml; 72h) en rangordes van inskrywings in die LE Besproeiingsproef

TABLE 12: Mean germinative energy (8ml; 72h) and rankings of entries in the LE Irrigation trial

Insk.nr. Entr.no.	Inskrywing Entry	Gem.rel. OE % van std. Mean rel. GE % of std.	Gemiddelde Mean		Lokalteite/Localities											
					TAUNG		HARTSWATER		BULL HILL		RIETRIVIER		DOUGLAS 1		DOUGLAS 2	
					OE	Rk	OE	Rk	OE	Rk	OE	Rk	OE	Rk	OE	Rk
1	Puma	100	82	3	91	4	88	1	92	2	64	12	76	16	81	4
2	SSG 585	72	59	25	66	25	54	24	74	21	41	24	65	21	53	24
3	Cocktail	99	81	5	82	19	86	6	91	6	72	5	82	5	75	15
4	Marthe	87	72	22	77	22	80	9	85	12	54	23	85	3	48	25
5	Cristalia	93	77	14	86	13	76	14	83	16	70	8	81	7	64	21
6	Publican	80	66	23	75	23	54	25	74	23	67	9	63	23	63	22
7	B06/04	101	83	1	93	3	87	3	89	8	70	7	72	18	87	1
8	B06/05	94	77	12	87	7	69	19	85	13	79	1	59	25	85	2
9	Snakebite	89	73	21	79	21	78	12	72	24	58	19	71	19	79	8
10	07-900-19	91	75	16	87	8	75	15	88	9	57	20	72	17	70	19
11	07-900-23	98	81	6	94	1	86	4	90	7	61	16	76	15	76	11
12	07-900-25	90	74	18	87	9	68	20	80	20	54	22	76	13	77	10
13	07-900-30	97	80	8	93	2	79	11	80	19	65	11	81	9	80	5
14	01-010-14	101	83	2	84	17	84	7	92	3	72	4	89	1	76	12
15	01-041-02	98	80	7	82	18	81	8	80	18	74	2	89	2	75	14
16	03-059-02	90	74	18	81	20	73	17	84	14	56	21	64	22	84	3
17	03-060-03	97	79	10	90	5	87	2	83	15	61	15	77	12	78	9
18	02-055-02	89	73	20	86	14	80	10	68	25	63	14	70	20	71	17
19	02-055-05	94	77	13	85	15	74	16	82	17	64	13	78	11	79	6
20	09-900-01	100	82	4	86	11	86	5	92	4	73	3	80	10	74	16
21	09-900-02	95	78	11	90	6	67	21	91	5	66	10	76	14	75	13
22	09-900-06	97	80	9	86	12	78	13	94	1	71	6	84	4	64	20
23	03-060-01	72	59	24	72	24	56	23	74	22	39	25	61	24	54	23
24	03-061-01	92	75	15	86	10	63	22	85	11	58	18	81	8	79	7
25	03-066-01	91	75	17	84	16	69	18	85	10	59	17	81	6	70	18
GEMIDD/AVERAGE			76		84		75		84		63		76		73	
KV/CV			10.4		6.6		10.7		7.0		13.4		11.6		12.9	
KBV/LSD (T0.10)			6		6		9		6		9		10		10	
KBV/LSD (T0.05)			8		8		11		8		12		12		13	

TABEL 13: Agronomiese prestasie van die inskrywings in die LE Besproeiingsproef by verskillende lokaliteite

TABLE 13: Agronomic performance of the entries in the LE Irrigation trial at different localities

Insk.nr. Entry nr.	Inskrywing Entry	General appearance	Stage of Ripeness	Heading Date	Plant Height (cm)	Resistance to Lodging	Peduncle strenght
1	Puma	5.6	3.0	105	96.5	4.6	5.0
2	SSG 585	5.3	2.5	101	87.0	4.0	5.0
3	Cocktail	6.5	3.2	103	89.8	4.8	5.0
4	Marthe	5.5	3.0	103	92.7	4.0	5.0
5	Cristalia	5.7	3.0	103	93.5	4.1	4.7
6	Publican	5.7	3.4	105	92.0	4.5	5.0
7	B06/04	4.5	2.7	103	103.3	4.5	4.7
8	B06/05	4.7	2.6	102	100.0	4.6	4.8
9	Snakebite	6.1	3.5	106	88.8	4.9	5.0
10	07-900-19	5.8	3.5	106	93.7	4.5	5.0
11	07-900-23	5.5	3.4	103	91.7	3.8	4.8
12	07-900-25	5.9	3.1	104	90.5	4.6	5.0
13	07-900-30	5.7	3.0	105	93.0	3.9	4.7
14	01-010-14	5.6	3.1	103	88.2	4.6	5.0
15	01-041-02	5.4	2.9	101	91.2	4.2	5.0
16	03-059-02	5.4	3.3	107	86.7	4.6	4.8
17	03-060-03	5.4	3.3	107	95.2	4.1	5.0
18	02-055-02	5.4	2.8	103	94.3	3.5	4.7
19	02-055-05	5.1	2.7	104	92.8	3.3	5.0
20	09-900-01	5.7	3.1	104	96.5	4.1	4.5
21	09-900-02	5.7	3.1	105	94.0	4.5	4.7
22	09-900-06	6.1	3.0	103	95.5	4.5	5.0
23	03-060-01	5.5	2.7	102	95.5	4.0	5.0
24	03-061-01	5.7	3.1	103	96.2	4.3	4.8
25	03-066-01	6.2	3.1	104	94.5	4.8	4.8

TABLE 14: Production statistics of the trial localities for the 2010 Line Evaluation Trial in the Irrigation area.

AREA	LOKALITEIT	PLAASNAAM	VERANTW	ROTASIE (2009/10 Somer Terugwaarts)	PLANT DATUM	PLANT DIGTHEID
Besproeiing Noord	Taung	Perseel JS1 - Ma Galodikwe	KGI	Gars, Mielies	15/06/2010	180
	Hartswater	Perseel 1F4 - Josias Delport	KGI	Gars, Mielies	16/06/2010	180
	Bull Hill	Perseel 27A3 - Piet Nel	KGI	Gars, Mielies	08/06/2010	180
Besproeiing Suid	Rietrivier	Karibu - Nico Jacobs	KGI	Koring, Mielies	28/06/2010	180
	Douglas 1	Torquay - Klasie Jacobs	KGI	Gars, Grondbone	23/06/2010	180
	Douglas 2	Eureka - Frank Lawrence	KGI	Gars, Mielies	23/06/2010	180

TABEL 15: Lys van inskrywings in die Lyn Evaluasieproef in die Besproeiings gebied, 2010

TABLE 15: List of entries in the Line Evaluation trial in the Irrigation area, 2010

Insk.nr. <i>Entr.no.</i>	Inskrywing <i>Entry</i>	Jare in LE proef <i>Years in LE trial</i>	Program <i>Program</i>
1	Puma	Control	SGI
2	SSG 585	Control	Sabbi
3	Cocktail	Control	Sabbi
4	Marthe	Experimental	Sabbi
5	Cristalia	Experimental	Sabbi
6	Publican	4	Sabbi
7	B06/04	3	SGI
8	B06/05	3	SGI
9	Snakebite	3	Sabbi
10	07-900-19	2	Sabbi
11	07-900-23	2	Sabbi
12	07-900-25	2	Sabbi
13	07-900-30	2	Sabbi
14	01-010-14	2	Sabbi
15	02-055-03	2	Sabbi
16	03-059-02	2	Sabbi
17	03-060-03	1	Sabbi
18	02-055-02	1	Sabbi
19	02-055-05	1	Sabbi
20	09-900-01	1	Sabbi
21	09-900-02	1	Sabbi
22	09-900-06	1	Sabbi
23	03-060-01	1	Sabbi
24	03-061-01	1	Sabbi
25	03-066-01	1	Sabbi

Figure 1: Average yield and quality parameters for the LE Irrigation trials, 2010

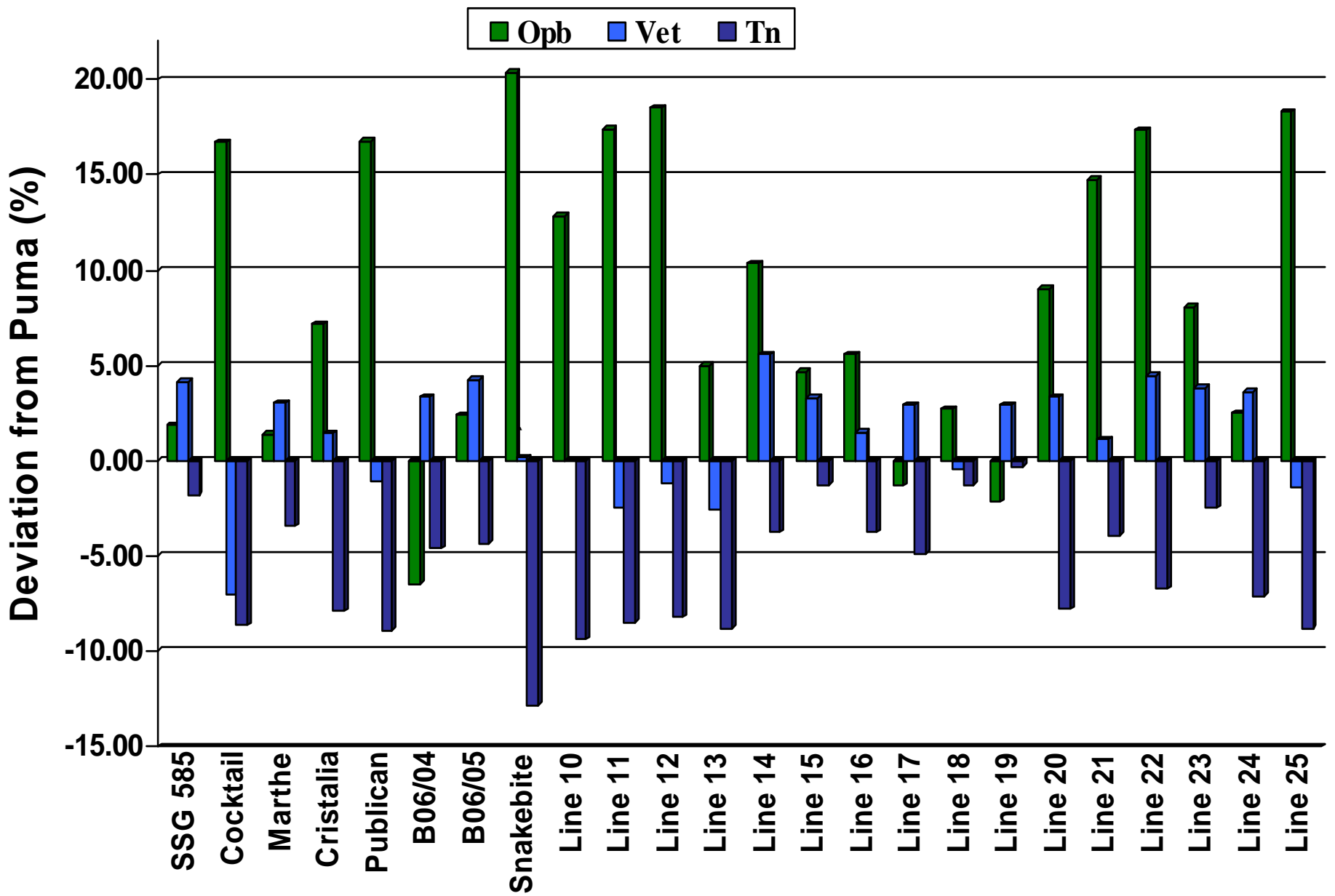


Figure 2: Long-term performance of lines in the LE trial 2010 (4<sup>th</sup> yr.)

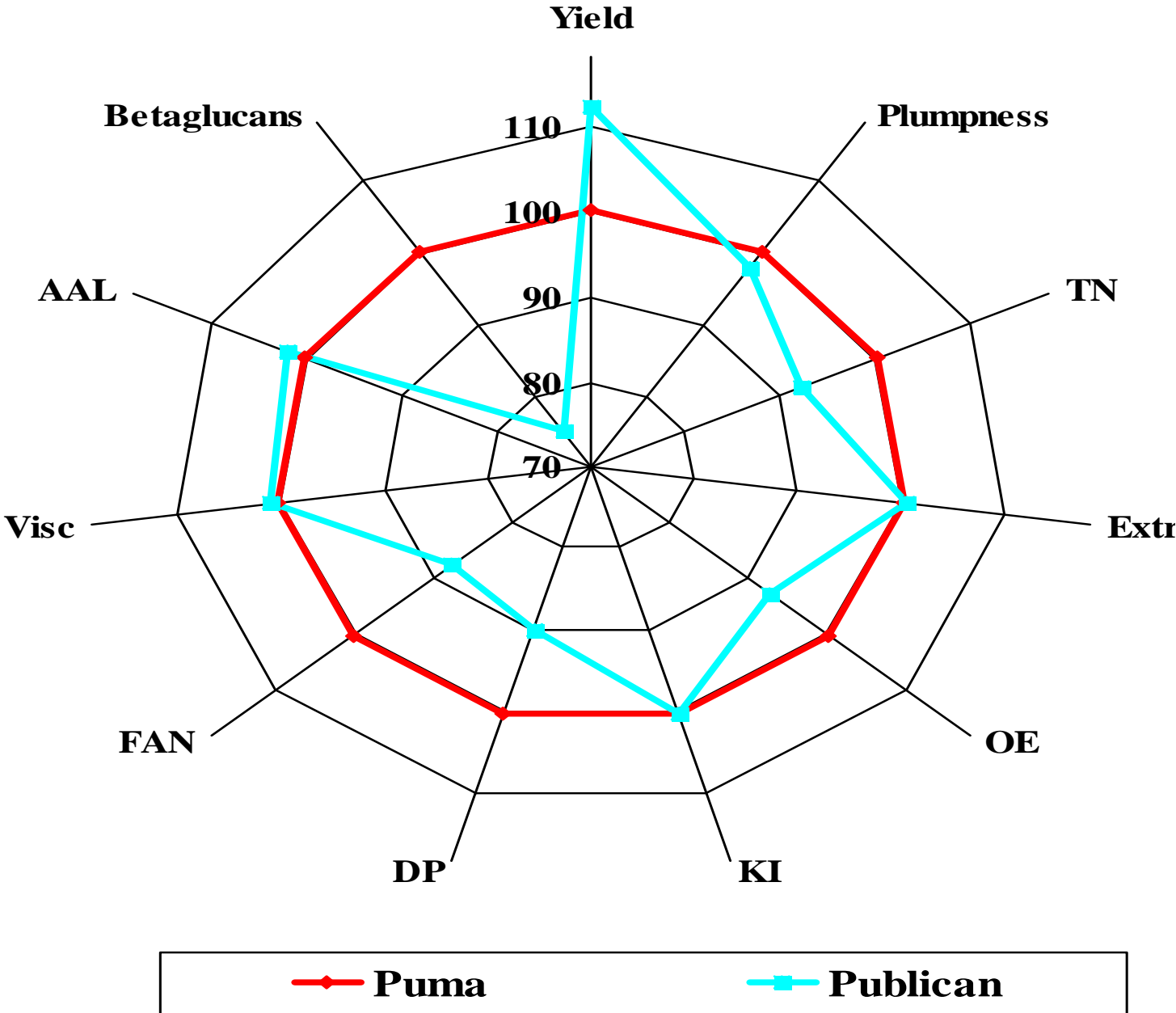


Figure 3: Long-term performance of lines in the LE trial 2010 (3<sup>rd</sup> yrs.)

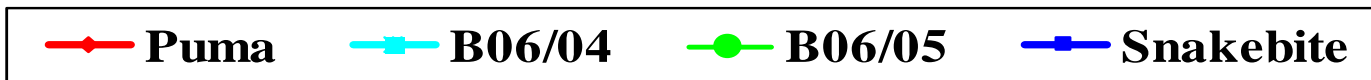
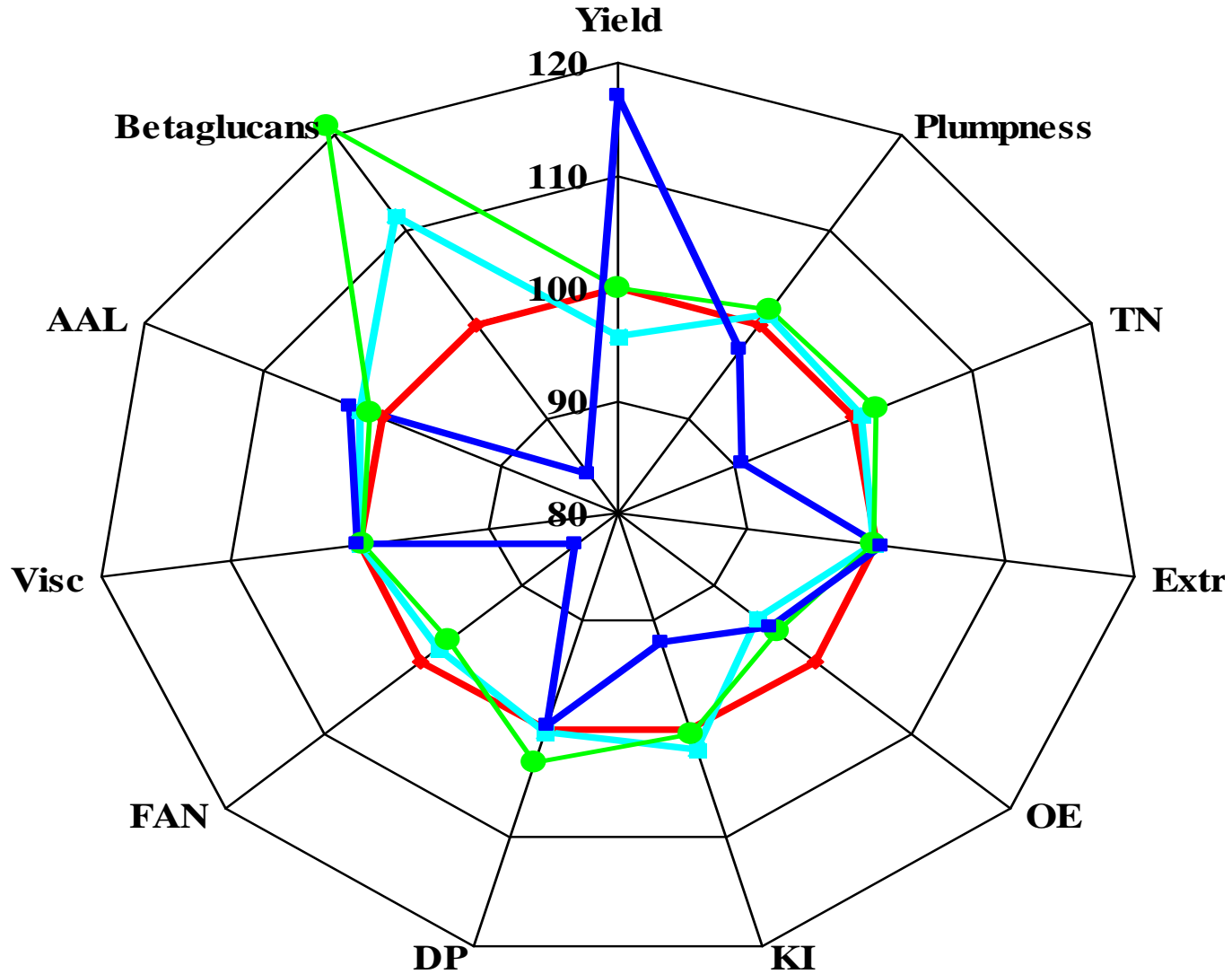


Figure 4: Long-term performance of lines in the LE trial 2010 (2<sup>nd</sup> yrs.)

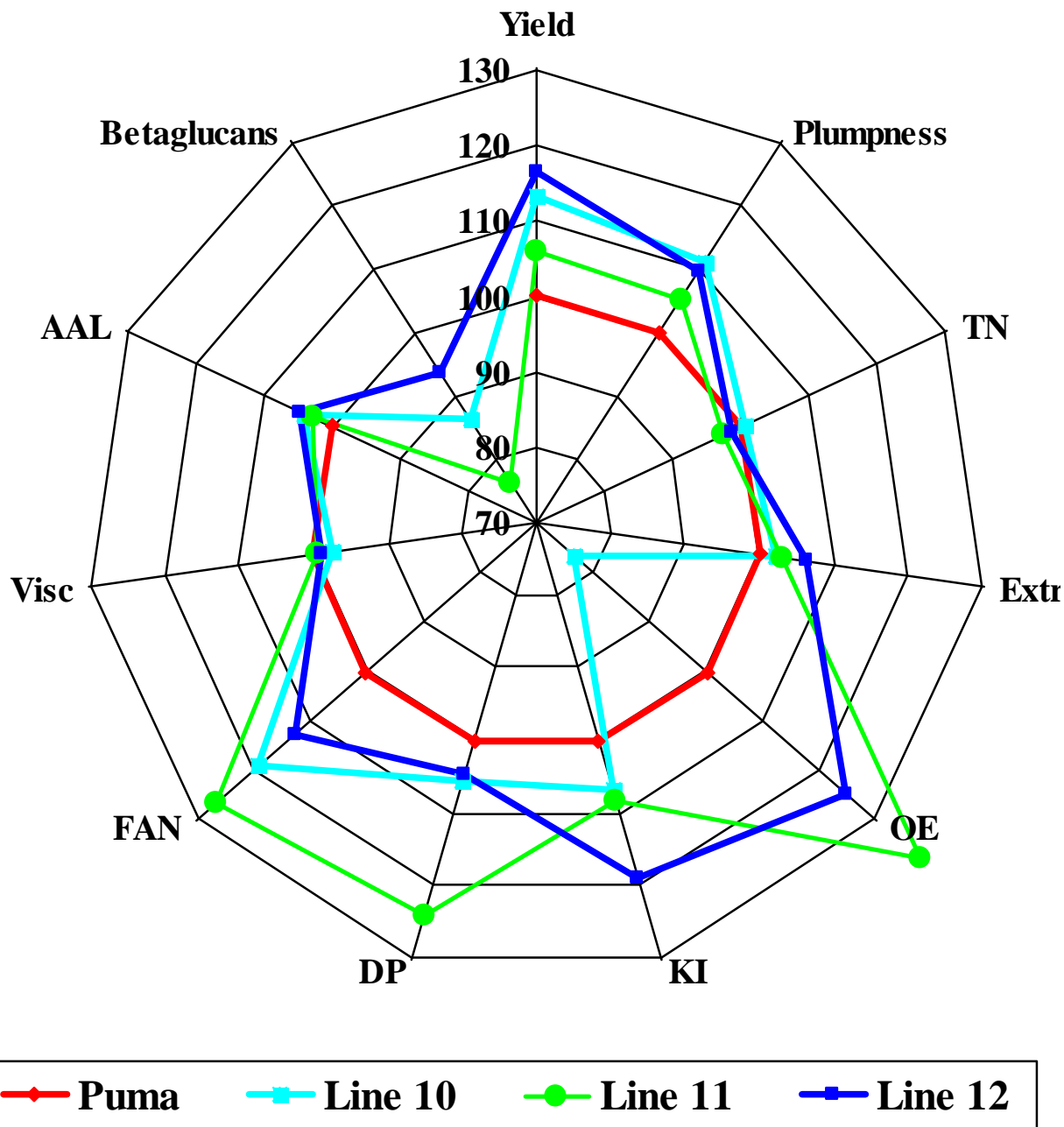


Figure 5: Long-term performance of lines in the LE trial 2010 (2<sup>nd</sup> yrs.)

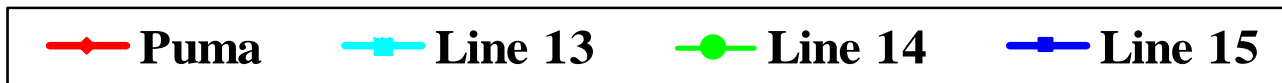
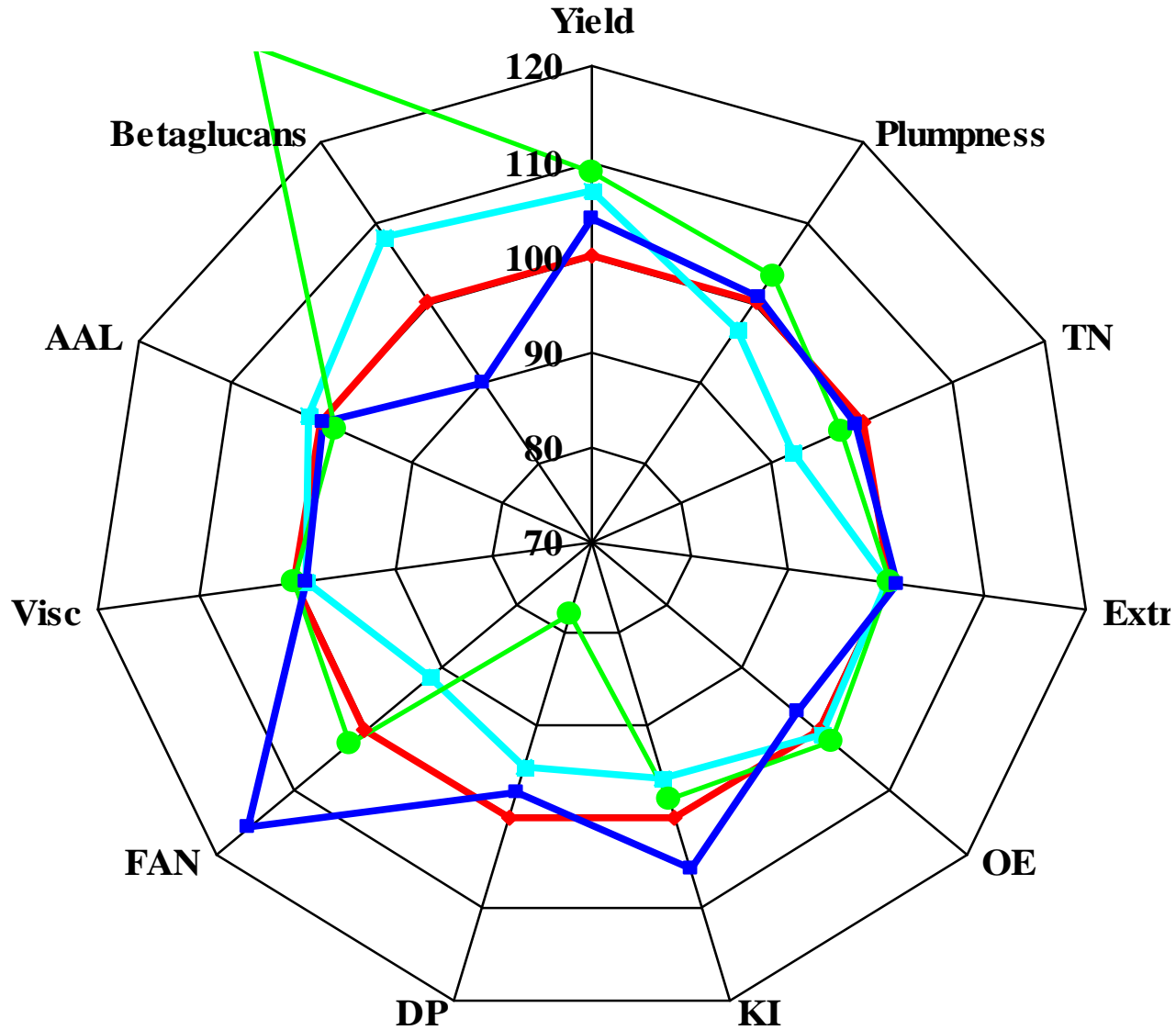


Figure 6: Long-term performance of lines in the LE trial 2010 (2<sup>nd</sup> yrs.)

