

South African
Barley
Breeding
Institute

REPORT ON THE BARLEY LINE EVALUATION TRIALS IN THE RÛENS / VERSLAG VAN DIE GARS LYNEVALUASIE PROEWE IN DIE RÛENS

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 IN
DIE RÛENS

*REPORT ON THE BARLEY LINE
EVALUATION TRIALS IN THE
RûENS*

SEISOEN 2010 SEASON



Programme executed by:



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



GARS LYN EVALUASIE IN DIE RÛENS, 2010 BARLEY LINE EVALUATION IN THE RÛENS, 2010

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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, 12 trials were planted under dry land conditions in the Southern Cape. All the trials, with the exception of Rietpoel and Heidelberg Vlake, were harvested and used for evaluation of the lines in the trial. Both mentioned trials unfortunately experienced severe herbicide damage and although Heidelberg Vlake was replanted the late drought had a severe effect on this trial and the decision was not to harvest it.

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

2. SUMMARY

As a summary **Figures 3** shows the average grain yield and quality parameters for the LE trials in the Rûens for the 2010 season. **Figures 4-6** shows the long-term relative performance of the 4th, 3rd and 2nd year lines in the LE trials.

3. LOCALITIES

The present barley production area (Rûens) was divided into three sub areas, namely Western Rûens (Caledon, Rietpoel, Greyton and Riviersonderend), Southern Rûens (Napier, Bredasdorp, Klipdale and Protém) and Eastern Rûens (Napky, Swellendam, Heidelberg and Heidelberg Vlake). Each of these three sub areas was covered by four 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 21**.

4. MATERIAL AND METHODS

The relevant information on the procedures and statistics of all the line evaluation trials executed in the Rûens are provided in **Table 21**.

The trial in the Rûens consisted of 25 entries (3 replicates) from which 3 are commercially grown cultivars (controls); four are provisionally released lines (from Sabbi), one fourth year line, one third year line, four second year lines and twelve new lines, all from Sabbi. All the entries for the Rûens are listed in **Table 22**.

All the trials were laid out according to a randomised complete block design and the data analysed with Agrobase Generation II software. In order to standardise the trials, all were planted by Sabbi with a Wintersteiger Plotman trial plot planter. The individual plots consisted of 8 rows with an inter row spacing of 19 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. The source used for fertilisation with sowing was 2:1:0 (35) + 4%S, depending on the soil analysis. Nitrogen top dressing KAN (28) 50kh/ha was only applied at Caledon and Protém during the season. The exact amount of nitrogen and phosphate applied at the individual trials are listed in **Table 21**.

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. Weed control was applied during planting with Boxer at 3l/ha and Logran at 30g/ha. All the trials

received two applications of fungicide. A mixture of Abacus (100l/ha) and Cyperfos (800ml/ha) were applied 6 weeks after emergence and once more at flag leaf stage.

At the end of the growing season all trials were firstly swathed as the individual lines reached maturity and later threshed with a Hege trial plot harvester. The net trial plots consisted of 6 rows of 5 m length (5.7 m²). 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), waste (< 2.0 mm) and percentage kernel nitrogen will be represented.

5. CLIMATIC CONDITIONS

The 2010 and long term average rainfall figures for the representative weather stations in the Rûens are indicated in **Table 23** and **Figures 1 to 2**. The following is a list of weather stations with the respective trials that they represent:

Weather Station	Figure	Locality Represented
Dunghye Park	1	Caledon Rietpoel
Voorstekop	2	Heidelberg Heidelberg Vlake

6. RESULTS

The trials excluded from the results were Rietpoel and Heidelberg Vlake.

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

6.1 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

6.2 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.

6.3 Disease Readings

All the disease readings were executed on an additional untreated replicate at one of the localities in each area under dry land conditions. The disease readings were executed by representatives of Sabbi at Heidelberg (Eastern Rûens), Tygerhoek and Caledon (Western Rûens). Readings for leaf rust (*Puccinia hordei*), net blotch (*Pyrenophora spp*) and leaf blotch (*Rhynchosporium*) could be assessed and are summarised in **Tables 19 to 20**.

6.4 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.

6.5 Stage of ripeness

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

6.6 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.

6.7 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.

6.8 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 opbrengsrankordes van inskrywings in die LE proef vir die Rùens, 2010
 TABLE 1: Mean yields and yield rankings of entries in the LE trial for the Rùens, 2010

Insk.n. Enfr.no.	Inskrywing Entry	Gem.rel. opb. % van std.	Rùens		Klipdale		Bredasdorp		Protem		Caledon		Greyton		Tygerh		Napkei		Swellend Heideberg			
			Mean yield % of std.	Yield	Rk	Yield	Rk	Yield	Rk	Yield	Rk	Yield	Rk	Yield	Rk	Yield	Rk	Yield	Rk	Yield	Rk	
1	SSG 564	100.0	2693	13	2174	13	1744	12	2524	14	5353	7	2387	19	3734	14	2050	4	2154	17	1751	13
2	Sabb Erica	116.7	3143	1	2486	4	2044	3	3747	1	5153	11	3514	1	3958	10	1737	14	2666	3	2489	1
3	Sabb Nemesia	103.8	2796	10	2125	15	1755	10	2819	11	4882	16	2876	4	4063	6	1713	16	2477	6	2034	9
4	S5	90.7	2443	20	2188	12	1436	20	2424	17	4701	18	2445	17	2044	25	1648	18	2304	10	2215	7
5	S6	86.6	2333	22	1529	22	1671	15	3084	3	4415	20	2159	22	2442	24	1284	23	2215	14	1696	16
6	S7	96.2	2589	14	1651	20	1898	7	2506	15	5041	13	2322	20	4026	7	1461	21	2373	8	1741	14
7	S9	111.1	2990	3	2418	7	1750	11	2884	7	5590	4	2869	7	3792	13	2018	6	2649	4	2366	4
8	99-043-01	73.0	1966	25	1454	24	1197	25	2021	24	4170	22	1818	24	2975	23	1096	25	1189	25	1349	22
9	01-026-02D	106.1	2857	9	2421	6	3277	4	2953	4	4977	14	2689	13	4111	5	1622	20	2300	11	2103	8
10	01-008-06	107.9	2905	6	2319	8	3540	5	2196	20	4822	17	2838	10	4019	8	2179	3	2713	2	2417	2
11	01-015-03	74.5	2007	24	1543	21	1346	21	2037	23	3644	25	1752	25	3084	22	1307	22	1523	23	1219	23
12	01-017-03	76.9	2071	23	1252	25	1336	22	2613	13	3749	24	2049	23	3608	17	1263	24	1799	21	1013	25
13	01-019-04	88.9	2394	21	2098	17	1207	24	1817	25	5052	12	2630	15	3933	11	1690	17	1509	24	1391	21
14	02-035-05	95.7	2575	16	2291	11	1665	16	2838	10	4918	15	2442	18	3384	20	1723	15	2173	16	1595	18
15	02-035-06	92.9	2501	18	1810	19	1496	18	2043	22	4532	19	2674	14	3714	15	1867	12	2226	13	1819	12
16	02-035-07	106.6	2870	8	2485	5	2031	4	2863	8	5730	2	2871	6	3855	12	2034	5	2057	19	2027	10
17	02-035-08	106.7	2874	7	2103	16	1680	14	2935	5	6050	1	2843	9	4478	1	1947	8	2096	18	1421	19
18	02-045-03	101.3	2729	11	2131	14	1804	8	2927	6	5236	9	2750	12	3998	9	1896	10	1758	22	1611	17
19	02-055-01	114.4	3080	2	2719	1	2062	2	3331	2	5528	5	3139	3	4438	2	2198	2	2293	12	2019	11
20	02-055-02	110.5	2976	4	2486	3	3222	6	2745	12	5227	10	2874	5	4277	3	2279	1	2466	7	2253	5
21	02-056-02	108.8	2929	5	2717	2	3275	9	2488	16	5347	8	3143	2	3677	16	1871	11	2787	1	2223	6
22	04-031-05D	100.5	2705	12	2296	9	1734	13	2862	9	4023	23	2832	11	3500	19	1991	7	2187	15	2367	3
23	04-031-06D	92.1	2480	19	2294	10	1523	17	2372	18	4389	21	2195	21	3143	21	1827	13	2477	5	1736	15
24	06-900-65	93.6	2520	17	1472	23	2784	19	2267	19	5469	6	2514	16	4245	4	1902	9	1911	20	1189	24
25	07-900-07	96.2	2589	15	1859	18	1289	23	2177	21	5623	3	2856	8	3582	18	1629	19	2370	9	1397	20
GEMIDD/AVERAGE			2641		2093		2996		2619		4945		2619		3683		1769		2187		1818	
KV/CV			9.4		8.2		7.9		14.1		6.7		8.0		8.8		7.3		10.6		10.9	
KBV/LSD (0.10)			217		189		261		404		350		221		354		142		246		210	
KBV/LSD (0.05)			279		260		337		522		451		286		457		184		318		270	

TABEL 2: Gemiddelde opbrengste en opbrengsrangordes van inskrywings in die LE proef vir die Wes-Rûens
 TABLE 2: Mean yields and yield rankings of entries in the LE trial for the Western Rûens

Insk.nr. <i>Entr.no.</i>	Inskrywing <i>Entry</i>	Gem.rel. opb. % van std. <i>Mean rel.</i> <i>yield %</i> <i>of std.</i>	Western Rûens		Lokaliteite/Localities					
			Gemiddelde <i>Mean</i> <i>Yield</i>	<i>Rk</i>	CALEDON		GREYTON		TYGERH	
			<i>Yield</i>	<i>Rk</i>	<i>Yield</i>	<i>Rk</i>	<i>Yield</i>	<i>Rk</i>	<i>Yield</i>	<i>Rk</i>
1	SSG 564	100.0	3824.6	15	5353	7	2387	19	3734	14
2	<small>Sabbi</small> Erica	110.0	4208.2	3	5153	11	3514	1	3958	10
3	<small>Sabbi</small> Nemesia	103.0	3940.2	11	4882	16	2876	4	4063	6
4	S5	80.1	3063.3	22	4701	18	2445	17	2044	25
5	S6	78.6	3005.5	23	4415	20	2159	22	2442	24
6	S7	99.3	3796.2	16	5041	13	2322	20	4026	7
7	S9	106.8	4083.7	6	5590	4	2869	7	3792	13
8	99-043-01	78.1	2987.8	24	4170	22	1818	24	2975	23
9	01-026-02D	102.6	3925.8	12	4977	14	2689	13	4111	5
10	01-008-06	101.8	3892.9	13	4822	17	2838	10	4019	8
11	01-015-03	73.9	2826.7	25	3644	25	1752	25	3084	22
12	01-017-03	82.0	3135.0	21	3749	24	2049	23	3608	17
13	01-019-04	101.2	3871.6	14	5052	12	2630	15	3933	11
14	02-035-05	93.6	3581.1	18	4918	15	2442	18	3384	20
15	02-035-06	95.2	3639.8	17	4532	19	2674	14	3714	15
16	02-035-07	108.6	4151.8	4	5730	2	2871	6	3855	12
17	02-035-08	116.5	4456.8	1	6050	1	2843	9	4478	1
18	02-045-03	104.4	3994.3	10	5236	9	2750	12	3998	9
19	02-055-01	114.2	4368.5	2	5528	5	3139	3	4438	2
20	02-055-02	107.9	4126.0	5	5227	10	2874	5	4277	3
21	02-056-02	106.0	4055.5	8	5347	8	3143	2	3677	16
22	04-031-05D	90.3	3452.0	19	4023	23	2832	11	3500	19
23	04-031-06D	84.8	3242.3	20	4389	21	2195	21	3143	21
24	06-900-65	106.6	4075.9	7	5469	6	2514	16	4245	4
25	07-900-07	105.1	4020.5	9	5623	3	2856	8	3582	18
GEMIDD/AVERAGE			3749		4945		2619		3683	
KV/CV			7.8		6.7		8.0		8.8	
KBV/LSD (90)			455.4		350		221		354	
KBV/LSD (95)			587.9		451		286		457	

TABEL 3: Gemiddelde opbrengste en opbrengsrankordes van inskrywings in die LE proef vir die Suid-Rûens
 TABLE 3: Mean yields and yield rankings of entries in the LE trial for the Southern Rûens

Insk.nr. Entr.no.	Inskrywing Entry	Gem.rel. opb. % van std. Mean rel. yield % of std.	Southern Rûens Gemiddelde Mean		NAPIER		KLIPDALE		BREDASDORP		PROTEM	
			Yield	Rk	Yield	Rk	Yield	Rk	Yield	Rk	Yield	Rk
1	SSG 564	100.0	2374	14	2174	13	3055	13	1744	12	2524	14
2	Sabb Erica	125.4	2978	1	2486	4	3636	1	2044	3	3747	1
3	Sabb Nemesia	104.4	2478	11	2125	15	3211	8	1755	10	2819	11
4	S5	95.5	2268	16	2188	12	3024	14	1436	20	2424	17
5	S6	96.0	2280	15	1529	22	2835	17	1671	15	3084	3
6	S7	94.0	2232	18	1651	20	2874	15	1898	7	2506	15
7	S9	111.8	2655	4	2418	7	3569	2	1750	11	2884	7
8	99-043-01	74.4	1766	25	1454	24	2393	24	1197	25	2021	24
9	01-026-02D	113.4	2692	3	2421	6	3277	4	2118	1	2953	4
10	01-008-06	106.0	2515	9	2319	8	3540	3	2007	5	2196	20
11	01-015-03	79.4	1884	23	1543	21	2612	23	1346	21	2037	23
12	01-017-03	76.2	1808	24	1252	25	2032	25	1336	22	2613	13
13	01-019-04	81.5	1934	22	2098	17	2616	22	1207	24	1817	25
14	02-035-05	100.3	2380	13	2291	11	2726	21	1665	16	2838	10
15	02-035-06	86.1	2044	20	1810	19	2827	18	1496	18	2043	22
16	02-035-07	106.6	2532	8	2485	5	2749	20	2031	4	2863	8
17	02-035-08	104.3	2476	12	2103	16	3186	9	1680	14	2935	5
18	02-045-03	105.7	2509	10	2131	14	3176	10	1804	8	2927	6
19	02-055-01	117.8	2796	2	2719	1	3072	12	2062	2	3331	2
20	02-055-02	109.3	2595	5	2486	3	3222	7	1928	6	2745	12
21	02-056-02	107.9	2562	6	2717	2	3275	5	1767	9	2488	16
22	04-031-05D	106.9	2538	7	2296	9	3259	6	1734	13	2862	9
23	04-031-06D	95.1	2258	17	2294	10	2841	16	1523	17	2372	18
24	06-900-65	84.0	1994	21	1472	23	2784	19	1452	19	2267	19
25	07-900-07	88.8	2108	19	1859	18	3108	11	1289	23	2177	21
GEMIDD/AVERAGE			2346		2093		2996		1678		2619	
KV/CV			10.6		8.2		7.9		8.4		14.1	
KBV/LSD (90)			277		189		261		155		404	
KBV/LSD (95)			355		260		337		200		522	

TABEL 4: Gemiddelde opbrengste en opbrengsrangordes van inskrywings in die LE proef vir die Oos-Rûens
 TABLE 4: Mean yields and yield rankings of entries in the LE trial for the Eastern Rûens

Insk.nr. <i>Entr.no.</i>	Inskrywing <i>Entry</i>	Gem.rel. opb. % van std. <i>Mean rel.</i> <i>yield %</i> <i>of std.</i>	Eastern Rûens		Lokalteite/Localities					
			Gemiddelde <i>Mean</i> <i>Yield</i>	<i>Rk</i>	NAPKEI		SWELLEND		HEIDELBERG	
			<i>Yield</i>	<i>Rk</i>	<i>Yield</i>	<i>Rk</i>	<i>Yield</i>	<i>Rk</i>	<i>Yield</i>	<i>Rk</i>
1	SSG 564	100.0	1985	13	2050	4	2154	17	1751	13
2	^{Sabb} Erica	115.7	2297	4	1737	14	2666	3	2489	1
3	^{Sabb} Nemesia	104.5	2075	8	1713	16	2477	6	2034	9
4	S5	103.5	2056	9	1648	18	2304	10	2215	7
5	S6	87.2	1732	20	1284	23	2215	14	1696	16
6	S7	93.6	1858	15	1461	21	2373	8	1741	14
7	S9	118.1	2344	2	2018	6	2649	4	2366	4
8	99-043-01	61.0	1211	25	1096	25	1189	25	1349	22
9	01-026-02D	101.2	2008	12	1622	20	2300	11	2103	8
10	01-008-06	122.7	2436	1	2179	3	2713	2	2417	2
11	01-015-03	68.0	1350	24	1307	22	1523	23	1219	23
12	01-017-03	68.4	1358	23	1263	24	1799	21	1013	25
13	01-019-04	77.1	1530	22	1690	17	1509	24	1391	21
14	02-035-05	92.2	1830	16	1723	15	2173	16	1595	18
15	02-035-06	99.3	1971	14	1867	12	2226	13	1819	12
16	02-035-07	102.7	2039	10	2034	5	2057	19	2027	10
17	02-035-08	91.8	1821	17	1947	8	2096	18	1421	19
18	02-045-03	88.4	1755	19	1896	10	1758	22	1611	17
19	02-055-01	109.3	2170	7	2198	2	2293	12	2019	11
20	02-055-02	117.5	2333	3	2279	1	2466	7	2253	5
21	02-056-02	115.5	2294	5	1871	11	2787	1	2223	6
22	04-031-05D	109.9	2182	6	1991	7	2187	15	2367	3
23	04-031-06D	101.4	2013	11	1827	13	2477	5	1736	15
24	06-900-65	84.0	1667	21	1902	9	1911	20	1189	24
25	07-900-07	90.6	1799	18	1629	19	2370	9	1397	20
GEMIDD/AVERAGE			1925		1769		2187		1818	
KV/CV			9.9		7.3		10.6		10.9	
KBV/LSD (90)			304		142		246		210	
KBV/LSD (95)			393		184		318		270	

TABEL 5: Gemiddelde vetkorrel (>2,5mm) van inskrywings in die LE proef vir die Rùens, 2010
 TABLE 5: Mean plumpness (>2,5mm) of entries in the LE trial for the Rùens, 2010

Insk.n. Enfr.no.	Inskrywing Entry	Gem.rel. vetk. % van std.	Rùens																										
			Gemiddelde																										
			Plump % of std.	Plump	Rk	Plump	Rk	Plump	Rk	Plump	Rk	Plump	Rk	Plump	Rk	Plump	Rk	Plump	Rk	Plump	Rk	Plump	Rk	Plump	Rk	Plump	Rk		
1	SSG 564	100.0	83.5	24	87.8	21	94.4	23	75.6	19	46.2	25	92.1	22	96.5	25	90.8	25	86.7	22	78.6	25	86.4	23					
2	SabbErica	107.6	89.8	16	92.1	12	95.7	17	75.7	18	75.9	13	95.4	8	98.8	13	91.1	23	87.9	20	92.6	8	93.4	14					
3	SabbNemesia	109.4	91.3	12	91.8	13	96.9	13	84.4	12	80.7	9	94.1	15	99.0	11	94.6	18	90.7	17	95.2	5	86.0	24					
4	S5	113.9	95.1	1	93.0	9	97.0	10	87.4	7	92.0	1	96.4	5	99.3	5	98.5	3	92.9	10	97.1	2	97.4	4					
5	S6	106.2	88.7	21	86.7	22	94.4	22	80.2	16	69.8	17	95.7	6	97.2	23	98.6	2	85.2	24	86.2	18	92.6	18					
6	S7	101.5	84.8	23	85.4	24	95.2	18	71.0	24	56.7	23	89.3	24	98.6	14	93.9	20	82.9	25	82.0	24	92.5	19					
7	S9	110.7	92.4	10	92.6	11	96.9	12	89.6	1	71.1	16	92.8	19	99.2	8	96.5	8	94.9	4	96.8	3	93.8	12					
8	99-043-01	106.6	89.0	19	88.3	20	93.9	24	77.9	17	75.2	14	94.7	9	97.5	22	96.4	9	87.9	21	85.8	19	92.7	16					
9	01-026-02D	112.1	93.6	6	92.7	10	97.5	5	89.3	2	89.0	3	95.6	7	98.5	16	91.0	24	92.5	14	93.7	6	96.7	6					
10	01-008-06	104.6	87.4	22	91.0	16	94.4	21	73.0	22	53.9	24	93.8	17	98.9	12	94.9	16	93.0	9	85.8	20	95.0	11					
11	01-015-03	112.2	93.7	5	94.2	3	96.7	14	87.6	6	88.9	4	97.0	3	97.8	21	96.2	10	92.3	15	93.1	7	92.6	17					
12	01-017-03	111.5	93.2	7	93.7	6	97.3	7	83.2	13	85.4	6	98.4	1	98.3	19	96.6	6	90.7	18	92.2	10	95.8	9					
13	01-019-04	107.5	89.8	17	91.4	15	96.4	16	75.4	20	80.2	10	94.5	11	98.5	15	96.0	11	90.0	19	85.7	21	89.7	22					
14	02-035-05	106.7	89.1	18	93.6	7	97.2	9	74.6	21	62.8	21	92.5	20	99.5	3	95.8	12	93.8	6	89.6	16	91.3	20					
15	02-035-06	107.7	89.9	15	90.3	18	94.9	20	81.3	15	76.6	12	86.8	25	98.4	18	94.8	17	92.7	12	89.7	14	93.6	13					
16	02-035-07	113.7	94.9	2	94.0	5	96.4	15	89.0	4	91.6	2	93.9	16	99.3	6	98.9	1	93.7	7	95.3	4	97.0	5					
17	02-035-08	112.9	94.2	3	90.6	17	97.3	8	89.3	3	85.6	5	94.3	13	98.4	17	96.6	7	93.2	8	100.9	1	96.4	7					
18	02-045-03	106.5	88.9	20	86.2	23	92.1	25	82.3	14	74.3	15	89.4	23	97.1	24	97.7	5	91.9	16	85.2	22	92.9	15					
19	02-055-01	111.3	92.9	8	93.5	8	96.9	11	87.0	8	79.5	11	94.2	14	99.1	9	95.2	15	92.9	11	92.5	9	98.4	2					
20	02-055-02	108.9	91.0	13	91.7	14	97.6	4	84.9	10	67.9	19	93.4	18	99.5	2	93.5	21	94.9	3	90.8	13	95.5	10					
21	02-056-02	110.7	92.5	9	95.3	1	98.6	1	86.8	9	69.5	18	94.5	10	99.8	1	95.8	13	96.9	2	91.3	12	96.2	8					
22	04-031-05D	109.8	91.7	11	94.6	2	98.2	2	84.7	11	66.0	20	98.0	2	99.4	4	95.2	14	93.9	5	89.6	15	97.6	3					
23	04-031-06D	112.4	93.8	4	94.1	4	97.7	3	88.0	5	81.2	8	96.6	4	99.1	10	97.9	4	97.6	1	86.9	17	99.4	1					
24	06-900-65	108.5	90.6	14	89.0	19	97.5	6	72.8	23	82.8	7	94.5	12	99.2	7	94.6	19	92.6	13	92.1	11	90.9	21					
25	07-900-07	99.2	82.8	25	84.4	25	95.0	19	54.8	25	60.1	22	92.4	21	98.2	20	91.8	22	85.4	23	82.6	23	83.7	25					
GEMIDD/AVERAGE			90.6		91.1		96.2		81.0		74.5		94.0		98.6		95.3		91.5		90.0		93.5						
KV/CV			4.2		2.0		1.6		4.4		12.4		2.2		0.7		2.6		2.7		4.1		2.8						
KBV/LSD (0.10)			3.1		2.0		1.6		3.9		10.2		2.3		0.8		2.7		2.7		4.0		2.9						
KBV/LSD (0.05)			4.0		4.3		3.5		8.5		22.2		4.9		1.7		6.0		5.9		8.8		6.2						

TABEL 6: Gemiddelde vetkorrel (>2,5mm) van inskrywings in die LE proef vir die Wes-Rûens

TABLE 6: Mean plumpness (>2,5mm) of entries in the LE trial for the Western Rûens

Insk.nr. <i>Entr.no.</i>	Inskrywing <i>Entry</i>	Gem.rel. vetk. % van std. <i>Mean rel.</i> <i>Plump %</i> <i>of std.</i>	Western Rûens		Lokalteite/Localities					
			Gemiddelde <i>Mean</i> <i>Plump</i>	<i>Rk</i>	CALEDON		GREYTON		TYGERH	
					<i>Plump</i>	<i>Rk</i>	<i>Plump</i>	<i>Rk</i>	<i>Plump</i>	<i>Rk</i>
1	SSG 564	100.0	93.1	25	92.1	22	96.5	25	90.8	25
2	Sabbi Erica	102.1	95.1	19	95.4	8	98.8	13	91.1	23
3	Sabbi Nemesia	102.9	95.9	16	94.1	15	99.0	11	94.6	18
4	S5	105.3	98.0	1	96.4	5	99.3	5	98.5	3
5	S6	104.3	97.1	6	95.7	6	97.2	23	98.6	2
6	S7	100.9	93.9	23	89.3	24	98.6	14	93.9	20
7	S9	103.2	96.2	13	92.8	19	99.2	8	96.5	8
8	99-043-01	103.2	96.2	11	94.7	9	97.5	22	96.4	9
9	01-026-02D	102.0	95.0	20	95.6	7	98.5	16	91.0	24
10	01-008-06	102.9	95.8	17	93.8	17	98.9	12	94.9	16
11	01-015-03	104.2	97.0	7	97.0	3	97.8	21	96.2	10
12	01-017-03	105.0	97.8	3	98.4	1	98.3	19	96.6	6
13	01-019-04	103.4	96.3	10	94.5	11	98.5	15	96.0	11
14	02-035-05	103.0	95.9	15	92.5	20	99.5	3	95.8	12
15	02-035-06	100.2	93.3	24	86.8	25	98.4	18	94.8	17
16	02-035-07	104.5	97.4	5	93.9	16	99.3	6	98.9	1
17	02-035-08	103.5	96.4	9	94.3	13	98.4	17	96.6	7
18	02-045-03	101.7	94.7	21	89.4	23	97.1	24	97.7	5
19	02-055-01	103.2	96.2	11	94.2	14	99.1	9	95.2	15
20	02-055-02	102.5	95.5	18	93.4	18	99.5	2	93.5	21
21	02-056-02	103.8	96.7	8	94.5	10	99.8	1	95.8	13
22	04-031-05D	104.7	97.5	4	98.0	2	99.4	4	95.2	14
23	04-031-06D	105.1	97.9	2	96.6	4	99.1	10	97.9	4
24	06-900-65	103.1	96.1	14	94.5	12	99.2	7	94.6	19
25	07-900-07	101.0	94.1	22	92.4	21	98.2	20	91.8	22
GEMIDD/AVERAGE			96.0		94.0		98.6		95.3	
KV/CV			2.0		2.2		0.7		2.6	
KBV/LSD (90)			2.5		2.3		0.8		2.7	
KBV/LSD (95)			3.2		4.9		1.7		6.0	

TABEL 7: Gemiddelde vetkorrel (>2,5mm) van inskrywings in die LE proef vir die Suid-Rûens
 TABLE 7: Mean plumpness (>2,5mm) of entries in the LE trial for the Southern Rûens

Insk.nr. <i>Entr.no.</i>	Inskrywing <i>Entry</i>	Gem.rel. vetk. % van std. <i>Mean rel.</i> <i>Plump %</i>	<i>Southern</i> <i>Rûens</i> Gemiddelde <i>Mean</i>		NAPIER		KLIPDALE		BREDASDORP		PROTEM	
		<i>of std.</i>	<i>Plump</i>	<i>Rk</i>	<i>Plump</i>	<i>Rk</i>	<i>Plump</i>	<i>Rk</i>	<i>Plump</i>	<i>Rk</i>	<i>Plump</i>	<i>Rk</i>
1	SSG 564	100.0	76.0	24	87.8	21	94.4	23	75.6	19	46.2	25
2	Sabb Erica	111.6	84.8	17	92.1	12	95.7	17	75.7	18	75.9	13
3	Sabb Nemesia	116.4	88.5	9	91.8	13	96.9	13	84.4	12	80.7	9
4	S5	121.5	92.3	2	93.0	9	97.0	10	87.4	7	92.0	1
5	S6	108.9	82.8	20	86.7	22	94.4	22	80.2	16	69.8	17
6	S7	101.4	77.1	23	85.4	24	95.2	18	71.0	24	56.7	23
7	S9	115.2	87.6	10	92.6	11	96.9	12	89.6	1	71.1	16
8	99-043-01	110.3	83.8	18	88.3	20	93.9	24	77.9	17	75.2	14
9	01-026-02D	121.2	92.1	3	92.7	10	97.5	5	89.3	2	89.0	3
10	01-008-06	102.8	78.1	22	91.0	16	94.4	21	73.0	22	53.9	24
11	01-015-03	120.9	91.9	4	94.2	3	96.7	14	87.6	6	88.9	4
12	01-017-03	118.3	89.9	7	93.7	6	97.3	7	83.2	13	85.4	6
13	01-019-04	112.9	85.8	13	91.4	15	96.4	16	75.4	20	80.2	10
14	02-035-05	108.0	82.1	21	93.6	7	97.2	9	74.6	21	62.8	21
15	02-035-06	112.8	85.8	14	90.3	18	94.9	20	81.3	15	76.6	12
16	02-035-07	122.1	92.8	1	94.0	5	96.4	15	89.0	4	91.6	2
17	02-035-08	119.3	90.7	5	90.6	17	97.3	8	89.3	3	85.6	5
18	02-045-03	110.2	83.8	19	86.2	23	92.1	25	82.3	14	74.3	15
19	02-055-01	117.4	89.2	8	93.5	8	96.9	11	87.0	8	79.5	11
20	02-055-02	112.5	85.5	16	91.7	14	97.6	4	84.9	10	67.9	19
21	02-056-02	115.2	87.5	11	95.3	1	98.6	1	86.8	9	69.5	18
22	04-031-05D	113.0	85.9	12	94.6	2	98.2	2	84.7	11	66.0	20
23	04-031-06D	118.7	90.2	6	94.1	4	97.7	3	88.0	5	81.2	8
24	06-900-65	112.5	85.5	15	89.0	19	97.5	6	72.8	23	82.8	7
25	07-900-07	96.8	73.6	25	84.4	25	95.0	19	54.8	25	60.1	22
GEMIDD/AVERAGE			85.7		91.1		96.2		81.0		74.5	
KV/CV			6.0		2.0		1.6		4.4		12.4	
KBV/LSD (90)			6.7		2.0		1.6		3.9		10.2	
KBV/LSD (95)			8.7		4.3		3.5		8.5		22.2	

TABEL 8: Gemiddelde vetkorrel (>2,5mm) van inskrywings in die LE proef vir die Oos-Rûens

TABLE 8: Mean plumpness (>2,5mm) of entries in the LE trial for the Eastern Rûens

Insk.nr. <i>Entr.no.</i>	Inskrywing <i>Entry</i>	Gem.rel. vetk. % van std. <i>Mean rel.</i> <i>Plump %</i> <i>of std.</i>	<i>Eastern Rûens</i>		Lokalteite/Localities					
			Gemiddelde <i>Mean</i>		NAPKEI		SWELLEND		HEIDELBERG	
			<i>Plump</i>	<i>Rk</i>	<i>Plump</i>	<i>Rk</i>	<i>Plump</i>	<i>Rk</i>	<i>Plump</i>	<i>Rk</i>
1	SSG 564	100.0	83.9	24	86.7	22	78.6	25	86.4	23
2	^{Sabri} Erica	108.8	91.3	16	87.9	20	92.6	8	93.4	14
3	^{Sabri} Nemesia	108.0	90.6	18	90.7	17	95.2	5	86.0	24
4	S5	114.2	95.8	2	92.9	10	97.1	2	97.4	4
5	S6	104.9	88.0	22	85.2	24	86.2	18	92.6	18
6	S7	102.3	85.8	23	82.9	25	82.0	24	92.5	19
7	S9	113.4	95.1	4	94.9	4	96.8	3	93.8	12
8	99-043-01	105.8	88.8	20	87.9	21	85.8	19	92.7	16
9	01-026-02D	112.4	94.3	8	92.5	14	93.7	6	96.7	6
10	01-008-06	108.7	91.2	17	93.0	9	85.8	20	95.0	11
11	01-015-03	110.5	92.7	12	92.3	15	93.1	7	92.6	17
12	01-017-03	110.7	92.9	11	90.7	18	92.2	10	95.8	9
13	01-019-04	105.4	88.5	21	90.0	19	85.7	21	89.7	22
14	02-035-05	109.1	91.5	15	93.8	6	89.6	16	91.3	20
15	02-035-06	109.7	92.0	13	92.7	12	89.7	14	93.6	13
16	02-035-07	113.6	95.3	3	93.7	7	95.3	4	97.0	5
17	02-035-08	115.4	96.8	1	93.2	8	100.9	1	96.4	7
18	02-045-03	107.3	90.0	19	91.9	16	85.2	22	92.9	15
19	02-055-01	112.8	94.6	7	92.9	11	92.5	9	98.4	2
20	02-055-02	111.7	93.7	9	94.9	3	90.8	13	95.5	10
21	02-056-02	113.0	94.8	5	96.9	2	91.3	12	96.2	8
22	04-031-05D	111.7	93.7	10	93.9	5	89.6	15	97.6	3
23	04-031-06D	112.8	94.6	6	97.6	1	86.9	17	99.4	1
24	06-900-65	109.5	91.9	14	92.6	13	92.1	11	90.9	21
25	07-900-07	100.0	83.9	25	85.4	23	82.6	23	83.7	25
GEMIDD/AVERAGE			91.7		91.5		90.0		93.5	
KV/CV			3.3		2.7		4.1		2.8	
KBV/LSD (90)			3.7		2.7		4.0		2.9	
KBV/LSD (95)			5.0		5.9		8.8		6.2	

TABEL 9: Gemiddelde sifsel (>2,5mm) van inskrywings in die LE proef vir die Rùens, 2010
 TABLE 9: Mean Screen (>2,5mm) of entries in the LE trial for the Rùens, 2010

Insk.n. Enfr.no.	Inskrywing Entry	Gem. rel. sifsel % van std. Rùens		Lokaliëte/Localities																																		
		Mean		KLIPDALE				BREDASDORP				PROTEM				CALEDON				GREYTON				TYGERH				NAPKEI				SWELLEND HEIDELBERG						
		Screen	Rk	Screen	Rk	Screen	Rk	Screen	Rk	Screen	Rk	Screen	Rk	Screen	Rk	Screen	Rk	Screen	Rk	Screen	Rk	Screen	Rk	Screen	Rk	Screen	Rk	Screen	Rk	Screen	Rk							
1	SSG 564	100.0	3.9	1	2.4	22	1.6	22	4.1	17	20.5	25	1.4	23	0.6	13	1.5	25	2.4	23	3.5	25	1.2	24														
2	Sabb Erica	37.2	1.5	17	1.5	8	0.8	13	3.7	14	1.9	9	0.8	6	0.5	11	1.4	24	2.1	21	1.5	11	0.4	5														
3	Sabb Nemesia	28.4	1.1	21	2.2	19	0.7	11	2.2	11	0.0	5	1.1	17	0.7	17	1.0	18	1.8	19	1.0	4	0.4	3														
4	S5	30.8	1.2	20	2.0	17	0.7	8	3.7	15	0.0	4	1.0	12	0.8	22	0.6	8	1.7	18	1.2	6	0.4	4														
5	S6	55.0	2.2	9	2.4	21	0.5	2	3.8	16	6.4	13	0.8	4	0.7	18	0.4	2	3.5	25	2.5	19	0.7	17														
6	S7	79.6	3.1	4	2.3	20	0.8	14	4.8	20	13.6	22	1.5	24	0.8	23	0.8	14	3.3	24	2.8	21	0.5	9														
7	S9	51.6	2.0	10	1.7	11	1.0	20	1.8	5	10.4	18	1.0	14	0.5	9	1.0	19	1.6	14	0.7	2	0.7	16														
8	99-043-01	64.3	2.5	5	2.7	23	1.4	21	6.1	24	6.2	12	1.1	15	1.4	25	1.0	20	1.6	16	3.0	24	0.7	15														
9	01-026-02D	24.4	1.0	23	1.7	14	0.6	7	0.6	1	0.0	1	0.8	5	0.7	20	1.4	23	1.9	20	1.4	10	0.4	6														
10	01-008-06	82.9	3.2	3	2.2	18	1.6	23	4.8	21	18.4	24	0.8	3	0.3	3	0.7	12	0.8	5	2.2	16	0.7	14														
11	01-015-03	42.5	1.7	15	1.2	4	1.7	24	1.9	8	5.6	11	0.8	2	0.7	21	1.1	21	1.0	8	1.8	13	0.9	23														
12	01-017-03	37.4	1.5	16	1.3	6	0.9	15	4.1	18	1.9	8	1.1	19	0.8	24	0.7	13	0.9	6	2.2	18	0.7	20														
13	01-019-04	36.2	1.4	18	1.4	7	0.7	9	4.9	22	0.0	2	0.9	10	0.6	14	0.7	10	1.4	11	3.0	22	0.8	21														
14	02-035-05	63.1	2.5	6	1.6	10	0.6	5	4.9	23	10.5	19	1.2	20	0.5	12	1.1	22	1.6	15	2.2	17	0.6	12														
15	02-035-06	55.6	2.2	8	1.8	15	0.9	18	3.4	12	7.7	16	2.5	25	0.6	16	0.9	17	1.4	13	1.9	15	0.7	19														
16	02-035-07	18.9	0.7	25	0.7	1	0.9	17	1.7	3	0.2	6	1.0	11	0.5	7	0.4	3	0.6	3	1.0	3	0.4	7														
17	02-035-08	21.3	0.8	24	1.5	9	0.8	12	1.7	4	1.8	7	0.9	9	0.5	8	0.4	4	0.7	4	-0.2	1	0.3	2														
18	02-045-03	57.6	2.3	7	2.8	24	1.8	25	3.5	13	7.4	14	1.3	21	0.5	10	0.4	1	1.3	9	3.0	23	0.7	18														
19	02-055-01	28.3	1.1	22	1.3	5	0.6	6	1.9	6	3.5	10	1.1	18	0.4	6	0.6	6	0.1	1	1.4	8	0.2	1														
20	02-055-02	45.4	1.8	13	1.7	13	0.5	4	2.0	10	8.4	17	1.1	16	0.4	5	0.9	16	0.9	7	1.2	5	0.6	13														
21	02-056-02	43.5	1.7	14	0.8	2	0.0	1	1.5	2	10.8	20	0.8	8	0.2	1	0.7	9	0.4	2	1.2	7	0.5	10														
22	04-031-05D	50.6	2.0	11	1.1	3	0.7	10	2.0	9	10.8	21	0.7	1	0.3	2	0.9	15	1.3	10	1.5	12	0.6	11														
23	04-031-06D	46.0	1.8	12	1.7	12	0.9	16	1.9	7	7.5	15	1.0	13	0.7	19	0.6	7	1.4	12	1.9	14	0.5	8														
24	06-900-65	33.2	1.3	19	2.0	16	0.5	3	4.8	19	0.0	3	0.8	7	0.4	4	0.5	5	1.7	17	1.4	9	0.9	22														
25	07-900-07	95.2	3.7	2	2.9	25	1.0	19	9.4	25	15.1	23	1.3	22	0.6	15	0.7	11	2.2	22	2.7	20	1.3	25														
GEMIDD/AVERAGE			1.9		1.8		0.9		3.4		6.7		1.1		0.6		0.8		1.5		1.8		0.6															
KV/CV			100.9		24.9		36.0		28.9		89.6		25.0		22.8		43.8		37.9		31.8		28.8															
KBV/LSD (0.10)			1.4		0.5		0.3		1.1		6.4		0.3		0.1		0.4		0.6		0.6		0.2															
KBV/LSD (0.05)			1.8		0.6		0.4		1.4		8.2		0.4		0.2		0.5		0.8		0.8		0.3															

TABEL 10: Gemiddelde korreliekstuf van inskrywings in die LE proef vir die Rùens, 2010
 TABLE 10: Mean kernel nitrogen of entries in the LE trial for the Rùens, 2010

Insk.nr. Enfr.no.	Inskrywing Entry	Gem.rel. vetk. % van std.	Rùens		Lokaliite/Localities																																			
			Mean		PROTEM				BREDASDORP				KLIPDALE				NAPIER				NAPIER				GREYTON				TYGERH				NAPKEI				SWELLEND HEIDELBERG			
			TN	Rk	TN	Rk	TN	Rk	TN	Rk	TN	Rk	TN	Rk	TN	Rk	TN	Rk	TN	Rk	TN	Rk	TN	Rk	TN	Rk	TN	Rk	TN	Rk	TN	Rk	TN	Rk						
1	SSG 564	100.0	1.94	14	1.41	22	1.55	12	2.24	18	2.55	3	1.92	8	1.52	22	1.88	18	1.99	21	2.11	5	2.23	16																
2	SabbErica	98.4	1.91	21	1.48	10	1.50	21	2.31	8	2.45	9	1.58	25	1.58	19	1.85	25	2.15	7	1.96	14	2.23	17																
3	SabbNemesia	99.4	1.93	18	1.39	24	1.53	18	2.13	25	2.48	8	1.77	21	1.65	8	1.88	19	2.24	3	1.94	18	2.28	10																
4	S5	100.5	1.95	11	1.48	11	1.59	9	2.29	11	2.44	12	1.59	24	1.64	9	1.86	24	2.29	1	1.98	13	2.34	1																
5	S6	97.0	1.88	23	1.46	15	1.59	8	2.28	14	2.42	14	1.64	23	1.58	18	1.86	23	2.06	15	1.84	22	2.08	25																
6	S7	98.6	1.91	19	1.42	21	1.54	13	2.26	16	2.37	18	1.75	22	1.63	14	1.94	16	2.04	17	1.95	16	2.23	18																
7	S9	101.9	1.98	7	1.45	16	1.63	3	2.19	23	2.49	6	1.85	14	1.65	7	2.02	8	2.12	9	2.10	6	2.27	11																
8	99-043-01	100.4	1.95	12	1.47	14	1.53	17	2.29	10	2.33	21	1.84	15	1.64	10	2.07	4	2.05	16	1.95	17	2.30	6																
9	01-026-02D	101.6	1.97	8	1.50	8	1.52	20	2.37	1	2.34	20	1.88	11	1.68	2	1.98	12	2.15	8	2.01	9	2.28	9																
10	01-008-06	96.5	1.87	24	1.43	18	1.53	19	2.17	24	2.38	17	1.81	17	1.51	24	1.87	22	1.89	25	2.02	8	2.11	24																
11	01-015-03	104.7	2.03	3	1.56	2	1.67	2	2.29	12	2.32	22	2.17	1	1.65	5	2.21	1	2.12	12	2.00	10	2.32	4																
12	01-017-03	98.5	1.91	20	1.48	13	1.49	23	2.21	20	2.17	24	1.84	16	1.61	16	1.98	13	2.23	4	1.83	23	2.27	12																
13	01-019-04	103.0	2.00	4	1.50	7	1.62	4	2.35	4	2.44	11	2.02	2	1.63	12	2.02	7	2.12	11	1.99	12	2.29	7																
14	02-035-05	105.3	2.04	2	1.51	5	1.69	1	2.19	22	2.71	1	1.98	4	1.65	3	2.12	2	2.25	2	2.00	11	2.33	2																
15	02-035-06	99.8	1.94	15	1.40	23	1.47	24	2.30	9	2.49	7	1.93	7	1.47	25	2.07	5	2.09	13	1.91	19	2.24	14																
16	02-035-07	100.2	1.94	13	1.43	19	1.62	5	2.36	2	2.40	15	1.88	12	1.63	15	1.87	21	2.08	14	1.96	15	2.20	19																
17	02-035-08	101.3	1.97	9	1.45	17	1.50	22	2.32	6	2.45	10	1.97	5	1.63	13	1.95	14	2.22	6	1.89	20	2.28	8																
18	02-045-03	97.9	1.90	22	1.42	20	1.58	10	2.23	19	2.40	16	1.91	9	1.51	23	1.94	17	1.93	24	1.89	21	2.18	21																
19	02-055-01	99.5	1.93	17	1.50	9	1.54	14	2.32	7	2.21	23	1.90	10	1.64	11	1.95	15	1.99	20	2.07	7	2.19	20																
20	02-055-02	101.2	1.96	10	1.53	3	1.53	16	2.36	3	2.50	5	1.87	13	1.65	6	1.87	20	2.04	18	2.17	2	2.12	23																
21	02-056-02	102.3	1.99	5	1.48	12	1.54	15	2.33	5	2.60	2	1.80	18	1.65	4	2.05	6	2.00	19	2.14	3	2.26	13																
22	04-031-05D	105.9	2.06	1	1.58	1	1.61	6	2.25	17	2.51	4	1.99	3	1.61	17	2.09	3	2.23	5	2.37	1	2.31	5																
23	04-031-06D	102.0	1.98	6	1.51	6	1.60	7	2.20	21	2.43	13	1.77	19	1.80	1	1.99	11	2.12	10	2.12	4	2.24	15																
24	06-900-65	99.6	1.93	16	1.52	4	1.57	11	2.28	13	2.36	19	1.94	6	1.55	20	2.00	10	1.97	22	1.81	24	2.33	3																
25	07-900-07	94.6	1.84	25	1.32	25	1.42	25	2.26	15	2.16	25	1.77	20	1.54	21	2.00	9	1.95	23	1.77	25	2.17	22																
GEMIDD/AVERAGE			1.9		1.47		1.56		2.27		2.42		1.85		1.61		1.97		2.09		1.99		2.24																	
KV/CV			4.7		3.6		3.8		3.3		3.8		3.9		4.7		7.4		5.2		4.7		4.1																	
KBV/LSD (0.10)			0.06		0.06		0.07		0.08		0.10		0.08		0.08		0.16		0.12		0.10		0.10																	
KBV/LSD (0.05)			0.08		0.08		0.08		0.11		0.13		0.10		0.11		0.21		0.16		0.13		0.13																	

TABEL 11: Gemiddelde korrelstikstof van inskrywings in die LE proef vir die Wes-Rûens

TABLE 11: Mean kernel nitrogen of entries in the LE trial for the Western Rûens

Insk.nr. <i>Entr.no.</i>	Inskrywing <i>Entry</i>	Gem.rel. vetk. % van std. <i>Mean rel.</i> <i>TN %</i> <i>of std.</i>	Western Rûens		Lokalteite/Localities					
			Gemiddelde <i>Mean</i> <i>TN</i>	<i>Rk</i>	CALEDON		GREYTON		TYGERH	
					<i>TN</i>	<i>Rk</i>	<i>TN</i>	<i>Rk</i>	<i>TN</i>	<i>Rk</i>
1	SSG 564	100.0	1.77	18	1.92	8	1.52	22	1.88	18
2	^{Sabbi} Erica	94.2	1.67	25	1.58	25	1.58	19	1.85	25
3	^{Sabbi} Nemesia	99.6	1.77	21	1.77	21	1.65	8	1.88	19
4	S5	95.7	1.70	23	1.59	24	1.64	9	1.86	24
5	S6	95.5	1.69	24	1.64	23	1.58	18	1.86	23
6	S7	100.0	1.77	18	1.75	22	1.63	14	1.94	16
7	S9	103.8	1.84	9	1.85	14	1.65	7	2.02	8
8	99-043-01	104.3	1.85	6	1.84	15	1.64	10	2.07	4
9	01-026-02D	104.1	1.85	8	1.88	11	1.68	2	1.98	12
10	01-008-06	97.6	1.73	22	1.81	17	1.51	24	1.87	22
11	01-015-03	113.3	2.01	1	2.17	1	1.65	5	2.21	1
12	01-017-03	102.1	1.81	14	1.84	16	1.61	16	1.98	13
13	01-019-04	106.6	1.89	4	2.02	2	1.63	12	2.02	7
14	02-035-05	108.1	1.92	2	1.98	4	1.65	3	2.12	2
15	02-035-06	102.8	1.82	13	1.93	7	1.47	25	2.07	5
16	02-035-07	101.1	1.79	16	1.88	12	1.63	15	1.87	21
17	02-035-08	104.3	1.85	6	1.97	5	1.63	13	1.95	14
18	02-045-03	100.8	1.79	17	1.91	9	1.51	23	1.94	17
19	02-055-01	103.2	1.83	11	1.90	10	1.64	11	1.95	15
20	02-055-02	101.3	1.80	15	1.87	13	1.65	6	1.87	20
21	02-056-02	103.4	1.83	10	1.80	18	1.65	4	2.05	6
22	04-031-05D	107.0	1.90	3	1.99	3	1.61	17	2.09	3
23	04-031-06D	104.5	1.85	5	1.77	19	1.80	1	1.99	11
24	06-900-65	103.2	1.83	11	1.94	6	1.55	20	2.00	10
25	07-900-07	99.8	1.77	20	1.77	20	1.54	21	2.00	9
GEMIDD/AVERAGE			1.81		1.85		1.61		1.97	
KV/CV			5.8		3.9		4.7		7.4	
KBV/LSD (90)			0.11		0.08		0.08		0.16	
KBV/LSD (95)			0.14		0.10		0.11		0.21	

TABEL 12: Gemiddelde korrelstikstof van inskrywings in die LE proef vir die Suid-Rûens
 TABLE 12: Mean kernel nitrogen of entries in the LE trial for the Southern Rûens

Insk.nr. <i>Entr.no.</i>	Inskrywing <i>Entry</i>	Gem.rel. vetk. % van std. <i>Mean rel.</i> <i>TN %</i> <i>of std.</i>	Southern Rûens Gemiddelde <i>Mean</i>		NAPIER		KLIPDALE		BREDASDORP		PROTEM	
			<i>TN</i>	<i>Rk</i>	<i>TN</i>	<i>Rk</i>	<i>TN</i>	<i>Rk</i>	<i>TN</i>	<i>Rk</i>	<i>TN</i>	<i>Rk</i>
1	SSG 564	100.0	1.94	10	1.41	22	1.55	12	2.24	18	2.55	3
2	Sabb Erica	99.9	1.94	12	1.48	10	1.50	21	2.31	8	2.45	9
3	Sabb Nemesia	97.2	1.88	22	1.39	24	1.53	18	2.13	25	2.48	8
4	S5	100.6	1.95	8	1.48	11	1.59	9	2.29	11	2.44	12
5	S6	100.0	1.94	10	1.46	15	1.59	8	2.28	14	2.42	14
6	S7	97.9	1.90	20	1.42	21	1.54	13	2.26	16	2.37	18
7	S9	100.1	1.94	9	1.45	16	1.63	3	2.19	23	2.49	6
8	99-043-01	98.3	1.91	19	1.47	14	1.53	17	2.29	10	2.33	21
9	01-026-02D	99.7	1.93	14	1.50	8	1.52	20	2.37	1	2.34	20
10	01-008-06	96.9	1.88	23	1.43	18	1.53	19	2.17	24	2.38	17
11	01-015-03	101.2	1.96	6	1.56	2	1.67	2	2.29	12	2.32	22
12	01-017-03	94.8	1.84	24	1.48	13	1.49	23	2.21	20	2.17	24
13	01-019-04	102.1	1.98	5	1.50	7	1.62	4	2.35	4	2.44	11
14	02-035-05	104.5	2.03	1	1.51	5	1.69	1	2.19	22	2.71	1
15	02-035-06	98.8	1.92	17	1.40	23	1.47	24	2.30	9	2.49	7
16	02-035-07	100.8	1.95	7	1.43	19	1.62	5	2.36	2	2.40	15
17	02-035-08	99.6	1.93	16	1.45	17	1.50	22	2.32	6	2.45	10
18	02-045-03	98.5	1.91	18	1.42	20	1.58	10	2.23	19	2.40	16
19	02-055-01	97.7	1.89	21	1.50	9	1.54	14	2.32	7	2.21	23
20	02-055-02	102.2	1.98	4	1.53	3	1.53	16	2.36	3	2.50	5
21	02-056-02	102.6	1.99	3	1.48	12	1.54	15	2.33	5	2.60	2
22	04-031-05D	102.6	1.99	2	1.58	1	1.61	6	2.25	17	2.51	4
23	04-031-06D	99.9	1.94	12	1.51	6	1.60	7	2.20	21	2.43	13
24	06-900-65	99.7	1.93	15	1.52	4	1.57	11	2.28	13	2.36	19
25	07-900-07	92.4	1.79	25	1.32	25	1.42	25	2.26	15	2.16	25
GEMIDD/AVERAGE			1.9		1.47		1.56		2.27		2.42	
KV/CV			3.5		3.6		3.8		3.3		3.8	
KBV/LSD (90)			0.09		0.06		0.07		0.08		0.10	
KBV/LSD (95)			0.12		0.08		0.08		0.11		0.13	

TABEL 13: Gemiddelde korrelstikstof van inskrywings in die LE proef vir die Oos-Rûens
 TABLE 13: Mean kernel nitrogen of entries in the LE trial for the Eastern Rûens

Insk.nr. <i>Entr.no.</i>	Inskrywing <i>Entry</i>	Gem.rel. vetk. % van std. <i>Mean rel.</i> <i>TN %</i> <i>of std.</i>	Eastern Rûens		Lokalteite/Localities					
			Gemiddelde <i>Mean</i>		NAPKEI		SWELLEND		HEIDELBERG	
			<i>TN</i>	<i>Rk</i>	<i>TN</i>	<i>Rk</i>	<i>TN</i>	<i>Rk</i>	<i>TN</i>	<i>Rk</i>
1	SSG 564	100.0	2.11	13	1.99	21	2.11	5	2.23	16
2	^{Sabb} Erica	100.2	2.11	12	2.15	7	1.96	14	2.23	17
3	^{Sabb} Nemesia	102.1	2.15	6	2.24	3	1.94	18	2.28	10
4	S5	104.4	2.20	2	2.29	1	1.98	13	2.34	1
5	S6	94.5	1.99	24	2.06	15	1.84	22	2.08	25
6	S7	98.3	2.07	20	2.04	17	1.95	16	2.23	18
7	S9	102.5	2.16	4	2.12	9	2.10	6	2.27	11
8	99-043-01	99.5	2.10	16	2.05	16	1.95	17	2.30	6
9	01-026-02D	101.7	2.15	7	2.15	8	2.01	9	2.28	9
10	01-008-06	95.1	2.01	22	1.89	25	2.02	8	2.11	24
11	01-015-03	101.7	2.15	7	2.12	12	2.00	10	2.32	4
12	01-017-03	100.0	2.11	13	2.23	4	1.83	23	2.27	12
13	01-019-04	101.1	2.13	9	2.12	11	1.99	12	2.29	7
14	02-035-05	103.9	2.19	3	2.25	2	2.00	11	2.33	2
15	02-035-06	98.6	2.08	18	2.09	13	1.91	19	2.24	14
16	02-035-07	98.6	2.08	18	2.08	14	1.96	15	2.20	19
17	02-035-08	100.9	2.13	11	2.22	6	1.89	20	2.28	8
18	02-045-03	94.8	2.00	23	1.93	24	1.89	21	2.18	21
19	02-055-01	98.7	2.08	17	1.99	20	2.07	7	2.19	20
20	02-055-02	100.0	2.11	13	2.04	18	2.17	2	2.12	23
21	02-056-02	101.1	2.13	9	2.00	19	2.14	3	2.26	13
22	04-031-05D	109.2	2.30	1	2.23	5	2.37	1	2.31	5
23	04-031-06D	102.4	2.16	5	2.12	10	2.12	4	2.24	15
24	06-900-65	96.5	2.04	21	1.97	22	1.81	24	2.33	3
25	07-900-07	93.0	1.96	25	1.95	23	1.77	25	2.17	22
GEMIDD/AVERAGE			2.11		2.09		1.99		2.24	
KV/CV			4.7		5.2		4.7		4.1	
KBV/LSD (90)			0.12		0.12		0.10		0.10	
KBV/LSD (95)			0.16		0.16		0.13		0.13	

TABEL 14: Gemiddelde ontkiemingsenergie (4ml) en rangordes van inskrywings in die LE proef vir die Rùens, 2010
 TABLE 14: Mean germinative energy (4ml) and rankings of entries in the LE trial for the Rùens, 2010

Insk.n. Entr.no.	Inskrywing Entry	Gem.rel. OE % van std.		Rùens Gemiddelde Mean		Lokaliëte/Localities																			
		GE %	of std.	4ml/2h Rk	Mean	NAPIER	KLIPDALE	BREDASDORP	PROTEM	CALEDON	GREYTON	TYGERH	NAPKEI	SWELLEND	HEIDELBERG										
				4ml/2h Rk		4ml/2h Rk	4ml/2h Rk	4ml/2h Rk	4ml/2h Rk	4ml/2h Rk	4ml/2h Rk	4ml/2h Rk	4ml/2h Rk	4ml/2h Rk	4ml/2h Rk	4ml/2h Rk									
1	SSG 564	100.0		92	7	98	5	97	3	79	14	94	8	92	12	93	15	80	18	90	18	95	7	99	1
2	Saba Erica	98.0		90	13	99	2	96	5	85	9	78	24	98	2	95	9	67	24	96	6	91	19	94	5
3	Saba Nemesia	98.8		91	10	86	24	91	17	91	4	97	3	94	11	94	13	83	11	95	8	93	12	82	20
4	S5	95.1		87	20	100	1	92	15	58	23	92	13	91	13	92	19	83	12	92	17	91	20	81	21
5	S6	45.3		42	25	66	25	55	25	8	25	48	25	38	25	33	25	28	25	55	25	37	25	47	25
6	S7	96.8		89	16	93	15	89	19	95	2	91	14	90	17	86	22	76	22	89	20	89	22	90	11
7	S9	98.3		90	11	93	14	87	20	91	5	91	16	94	9	99	3	78	19	97	2	91	21	80	23
8	99-043-01	94.5		87	21	91	20	94	11	71	20	92	12	94	10	93	18	84	10	83	23	92	13	73	24
9	01-026-02D	102.6		94	1	97	7	96	4	96	1	89	19	100	1	99	1	82	14	92	16	92	14	98	2
10	01-008-06	89.3		82	24	86	23	82	22	74	18	83	22	82	24	83	23	86	8	82	24	81	24	80	22
11	01-015-03	96.4		88	18	90	22	94	9	87	7	94	5	91	14	82	24	80	15	88	21	92	15	86	14
12	01-017-03	97.1		89	15	93	16	95	8	87	6	93	10	90	16	87	21	80	17	92	15	84	23	89	12
13	01-019-04	100.4		92	3	92	18	95	6	92	3	95	4	97	3	93	16	94	1	89	19	91	16	83	18
14	02-035-05	94.1		86	23	95	12	77	23	56	24	94	7	89	18	95	7	77	21	93	12	96	3	91	8
15	02-035-06	96.5		89	17	96	9	97	2	78	16	90	18	88	20	89	20	78	20	93	13	94	9	82	19
16	02-035-07	96.1		88	19	90	21	91	16	69	21	78	23	86	22	93	17	86	7	96	5	98	1	94	4
17	02-035-08	94.2		86	22	92	17	90	18	68	22	83	21	89	19	94	12	70	23	94	9	91	17	93	7
18	02-045-03	99.5		91	8	95	11	93	12	81	13	85	20	96	5	98	4	90	4	94	10	95	6	85	17
19	02-055-01	99.5		91	8	98	4	86	21	77	17	102	1	96	6	95	10	80	16	97	4	91	18	90	9
20	02-055-02	100.2		92	5	99	3	93	13	79	15	98	2	90	15	95	8	87	6	93	11	95	5	90	10
21	02-056-02	101.3		93	2	96	10	95	7	86	8	90	17	97	4	97	5	87	5	98	1	94	10	89	13
22	04-031-05D	100.4		92	3	96	8	98	1	81	11	93	9	96	8	93	14	83	13	92	14	96	4	93	6
23	04-031-06D	98.3		90	11	97	6	74	24	81	12	94	6	96	7	99	2	86	9	95	7	93	11	86	15
24	06-900-65	100.2		92	5	94	13	94	10	83	10	92	11	88	21	97	6	92	3	97	3	97	2	85	16
25	07-900-07	97.8		90	14	92	19	92	14	71	19	91	15	86	23	94	11	93	2	88	22	95	8	95	3
GEMIDD/AVERAGE				88		93		90		77		89		90		91		80		91		90		86	
KV/CV				7.8		5.1		7.0		12.3		11.7		3.7		4.8		11.5		4.6		3.7		8.2	
KBV/LSD (0.10)				4		5		7		10		11		4		5		10		5		4		8	
KBV/LSD (0.05)				5		7		9		13		15		5		6		13		6		5		10	

TABEL 15: Gemiddelde ontkiemingsenergie (8m) en rangordes van inskrywings in die LE proef vir die Rùens, 2010
 TABLE 15: Mean germinative energy (8m) and rankings of entries in the LE trial for the Rùens, 2010

Insk.n. Entr.no.	Inskrywing Entry	Gem.rel. OE. % van std. Mean rel.	Rùens Mean	Lokaliite/Localities																				
				GE % of std.	8mI2h Rk	NAPIER 8mI2h Rk	KLIPDALE 8mI2h Rk	BREDASDORP 8mI2h Rk	PROTEM 8mI2h Rk	CALEDON 8mI2h Rk	GREYTON 8mI2h Rk	TYGERH 8mI2h Rk	NAPKEI 8mI2h Rk	SWELLEND 8mI2h Rk	HEIDELBERG 8mI2h Rk									
1	SSG 564	100.0	46	20	49	22	51	21	22	19	49	16	51	16	55	21	35	20	64	22	67	7	19	19
2	Subb Erica	124.9	58	11	65	13	58	18	35	11	48	17	71	5	89	1	28	24	78	9	60	15	45	3
3	Subb Nemesia	132.0	61	7	69	10	70	10	40	9	50	14	61	9	87	2	64	4	83	4	61	14	25	14
4	S5	117.1	54	17	74	5	61	16	23	18	52	12	57	13	72	10	41	18	79	8	64	11	18	21
5	S6	66.5	31	25	31	25	36	24	14	23	45	20	16	25	37	25	30	22	64	23	23	25	11	25
6	S7	125.3	58	9	63	16	75	5	47	5	64	7	57	11	59	18	51	13	71	14	59	16	33	10
7	S9	148.7	69	3	83	2	74	6	50	2	65	5	79	3	84	5	62	8	84	2	67	8	39	7
8	99-043-01	118.6	55	16	59	19	76	4	20	21	68	4	53	15	57	20	45	17	68	17	63	12	39	6
9	01-026-02D	147.0	68	4	75	4	82	3	55	1	73	2	66	8	75	7	49	14	74	13	79	2	51	1
10	01-008-06	103.5	48	18	43	24	56	20	28	16	57	9	47	18	60	17	53	12	66	20	47	20	21	18
11	01-015-03	130.5	60	8	67	12	74	7	49	3	72	3	57	14	61	16	63	7	69	16	52	19	39	8
12	01-017-03	137.0	63	6	73	6	87	2	44	7	64	6	59	10	68	14	46	16	75	12	75	3	42	5
13	01-019-04	155.4	72	1	80	3	87	1	46	6	75	1	86	1	84	3	68	2	82	5	73	4	37	9
14	02-035-05	100.0	46	20	63	18	50	22	12	25	44	21	48	17	71	12	38	19	68	18	44	21	24	15
15	02-035-06	78.4	36	24	57	20	35	25	24	17	21	25	38	21	39	24	29	23	67	19	40	22	24	24
16	02-035-07	82.3	38	22	46	23	57	19	12	24	26	24	33	23	51	22	34	21	65	21	35	24	21	17
17	02-035-08	79.0	37	23	64	15	40	23	15	22	31	23	25	24	50	23	25	25	53	25	39	23	23	16
18	02-045-03	140.0	65	5	73	7	67	11	44	8	55	10	66	7	80	6	78	1	85	1	68	5	31	12
19	02-055-01	125.3	58	9	63	17	58	17	31	13	49	15	57	12	72	11	58	9	79	7	68	6	44	4
20	02-055-02	123.8	57	13	70	9	72	8	30	15	60	8	45	20	75	9	53	11	77	10	64	9	26	13
21	02-056-02	119.7	55	15	65	14	67	13	30	14	45	18	70	6	71	13	56	10	75	11	57	17	17	22
22	04-031-05D	124.0	57	12	68	11	62	15	34	12	45	19	78	4	75	8	48	15	70	15	61	13	32	11
23	04-031-06D	151.7	70	2	85	1	67	12	48	4	53	11	82	2	84	4	68	3	84	3	82	1	48	2
24	06-900-65	121.2	56	14	71	8	71	9	36	10	52	13	46	19	63	15	63	5	79	6	64	10	15	23
25	07-900-07	101.3	47	19	56	21	64	14	21	20	43	22	33	22	58	19	63	6	55	24	56	18	19	20
GEMIDD/AVERAGE			55		64		64		32		52		55		67		50		73		59		29	
KV/CV			17		9.7		12.7		38.8		22.2		13.7		11.6		21.5		11.4		15.0		33	
KBV/LSD (0.10)			6		7		9		13		13		8		9		12		9		10		10	
KBV/LSD (0.05)			7		9		11		17		16		11		11		15		12		12		13	

TABEL 16: Agronomiese eienskappe van die inskrywings in die LE proef vir die Wes-Rûens, 2010

TABLE 16: Agronomic characteristics of the entries in the Line Evaluation Trial in the Western Rûens, 2010

Insk.nr. Entry no.	Inskrywing Entry	General appearance	Stage of Ripeness	Straw		Peduncle strength and ear loss
				Height (cm)	Strength	
1	SSG 564	5.5	3.0	64	4.8	3.8
2	Erica	5.5	3.0	63	4.9	3.8
3	Nemesia	5.5	3.2	62	4.9	3.8
4	S5	5.1	3.2	61	4.9	3.8
5	S6	4.9	3.7	63	4.8	3.8
6	S7	5.2	3.6	63	4.8	3.8
7	S9	6.2	3.1	69	4.8	3.8
8	99-043-01	5.1	4.1	62	4.8	3.8
9	01-026-02D	6.2	3.0	67	4.9	3.8
10	01-008-06	6.5	3.0	67	4.6	3.8
11	01-015-03	5.7	3.9	65	4.8	3.8
12	01-017-03	5.2	3.0	72	4.8	3.8
13	01-019-04	6.1	3.6	69	4.9	3.8
14	02-035-05	6.1	3.0	64	4.9	3.8
15	02-035-06	6.1	3.4	68	4.8	3.8
16	02-035-07	6.2	3.2	66	4.8	3.8
17	02-035-08	6.2	3.1	64	4.8	3.8
18	02-045-03	6.2	3.1	74	4.8	3.3
19	02-055-01	5.7	2.8	64	4.8	3.8
20	02-055-02	5.8	3.1	64	4.9	3.8
21	02-056-02	5.8	3.2	68	4.6	3.8
22	04-031-05D	5.6	3.2	64	4.6	3.8
23	04-031-06D	5.2	3.1	67	4.8	3.8
24	06-900-65	5.8	3.4	61	4.8	3.8
25	07-900-07	6.2	3.5	65	4.8	3.8

(Localities: Caledon, Rietpoel, Greyton, Tygerhoek)

Legend:**General appearance**

9 - Good

1 - Bad

Straw Length

S - Short

MS - Medium short

M - Medium

ML - Medium long

L - Long

Peduncle strength and Ear loss

1 - Very weak peduncle

5 - Very strong peduncle

Stage of Ripeness

1 - Early

5 - Late

Straw strength

1 - No resistance to lodging

5 - Total resistance to lodging

TABEL 17: Agronomiese eienskappe van die inskrywings in die LE proef vir die Suid-Rûens, 2010
 TABLE 17: Agronomic characteristics of the entries in the LE trial in the Southern Rûens, 2010

Insk.nr. Entry no.	Inskrywing Entry	General appearance	Stage of Ripeness	Straw		Peduncle strength and ear loss
				Height (cm)	Strength	
1	SSG 564	4.9	2.9	66	4.3	4.0
2	Erica	5.0	3.3	63	4.5	4.5
3	Nemesia	5.1	3.1	60	4.7	4.5
4	S5	4.7	3.5	58	4.7	4.5
5	S6	4.8	3.7	60	4.7	4.5
6	S7	4.3	4.0	56	4.7	4.5
7	S9	5.1	3.4	62	4.4	4.5
8	99-043-01	4.5	3.9	62	4.7	4.5
9	01-026-02D	5.7	3.3	64	4.4	4.4
10	01-008-06	5.8	3.1	64	4.6	4.5
11	01-015-03	4.8	4.0	61	4.6	4.5
12	01-017-03	4.6	3.6	67	4.4	4.5
13	01-019-04	5.0	3.7	61	4.6	4.5
14	02-035-05	4.9	3.7	59	4.6	4.5
15	02-035-06	4.9	3.7	61	4.6	4.5
16	02-035-07	4.9	3.6	58	4.6	4.5
17	02-035-08	4.8	3.8	59	4.7	4.5
18	02-045-03	4.6	3.7	65	4.4	4.4
19	02-055-01	4.7	3.6	62	4.5	4.5
20	02-055-02	5.0	3.7	59	4.6	4.5
21	02-056-02	4.9	3.6	62	4.5	4.5
22	04-031-05D	4.4	3.2	58	4.6	4.5
23	04-031-06D	4.8	3.5	58	4.5	4.5
24	06-900-65	4.4	3.9	51	4.7	4.5
25	07-900-07	4.6	3.7	53	4.6	4.5

(Localities: Napier, Klipdale, Bredasdorp, Proteem)

Legend:

General appearance

9 - Good
1 - Bad

Straw Length

S - Short
MS - Medium short
M - Medium
ML - Medium long
L - Long

Peduncle strength and Ear loss

1 - Very weak peduncle
5 - Very strong peduncle

Stage of Ripeness

1 - Early
5 - Late

Straw strength

1 - No resistance to lodging
5 - Total resistance to lodging

TABEL 18: Agronomiese eienskappe van die inskrywings in die LE proef vir die Oos-Rûens, 2010

TABLE 18: Agronomic characteristics of the entries in the Line Evaluation Trial in the Eastern Rûens, 2010

Insk.nr. Entry no.	Inskrywing Entry	General appearance	Stage of Ripeness	Straw		Peduncle strength and ear loss
				Height (cm)	Strength	
1	SSG 564	4.9	2.7	59	2.7	5.0
2	Erica	4.8	2.4	58	2.7	5.0
3	Nemesia	4.3	2.5	53	2.7	5.0
4	S5	4.1	2.8	53	2.7	5.0
5	S6	4.1	3.8	52	2.7	5.0
6	S7	3.3	3.6	47	2.7	5.0
7	S9	5.0	2.7	60	2.7	5.0
8	99-043-01	3.7	4.3	48	2.7	5.0
9	01-026-02D	5.2	2.5	59	2.7	5.0
10	01-008-06	5.6	2.7	60	2.7	5.0
11	01-015-03	4.8	3.6	57	2.7	5.0
12	01-017-03	4.4	3.4	61	2.7	5.0
13	01-019-04	4.5	3.1	55	2.7	5.0
14	02-035-05	5.1	2.7	59	2.7	4.7
15	02-035-06	4.9	2.9	58	2.7	5.0
16	02-035-07	5.2	2.5	61	2.7	5.0
17	02-035-08	4.9	3.0	58	2.7	5.0
18	02-045-03	4.3	3.5	61	2.7	5.0
19	02-055-01	4.6	2.5	58	2.7	5.0
20	02-055-02	5.1	2.5	60	2.7	5.0
21	02-056-02	5.4	2.6	63	2.7	5.0
22	04-031-05D	4.9	2.3	59	2.7	5.0
23	04-031-06D	5.5	2.5	59	2.7	5.0
24	06-900-65	4.8	3.2	52	2.7	5.0
25	07-900-07	5.4	3.0	53	2.7	5.0

(Localities: Napkei, Swellendam, Heidelberg, Heidelberg Vlakte)

Legend:**General appearance**

9 - Good

1 - Bad

Straw Length

S - Short

MS - Medium short

M - Medium

ML - Medium long

L - Long

Peduncle strength and Ear loss

1 - Very weak peduncle

5 - Very strong peduncle

Stage of Ripeness

1 - Early

5 - Late

Straw strength

1 - No resistance to lodging

5 - Total resistance to lodging

TABEL 19: Siektelesings van inskrywings in die LE Rûens Caledon proef, 2010

TABLE 19: Disease readings of entries in the LE Rûens Caledon trial, 2010

Insk.nr. <i>Entr.no.</i>	Inskrywing <i>Entry</i>	CALEDON		
		<i>Scald</i>	<i>Net form Net Blotch</i>	<i>Spot form Net Blotch</i>
1	SSG 564	0	6	n
2	Erica	6	7	n
3	Nemesia	8	n	n
4	S5	9	n	n
5	S6	0	3	3.3
6	S7	n	7	n
7	S9	0	6	2.1
8	99-043-01	0	1	2.4
9	01-026-02D	8	0	0
10	01-008-06	0	2	3.3
11	01-015-03	0	0	2.4
12	01-017-03	0	0	3.3
13	01-019-04	0	1	3.2
14	02-035-05	0	0	2.3
15	02-035-06	0	0	2.3
16	02-035-07	n	6	2.3
17	02-035-08	0	3	2.3
18	02-045-03	n	4	3.2
19	02-055-01	n	9	n
20	02-055-02	n	9	n
21	02-056-02	n	8	n
22	04-031-05D	7	n	n
23	04-031-06D	7	n	n
24	06-900-65	n	7	n
25	07-900-07	3	0	2.3

Scald and Netblotch

1 = lightly infested

9 = heavily infested

n = no reading possible

TABEL 20: Siektelesings van inskrywings in die LE Rûens Riviersonderend proef, 2010
 TABLE 20: Disease readings of entries in the LE Rûens Riviersonderend trial, 2010

Insk.nr. <i>Entr.no.</i>	Inskrywing <i>Entry</i>	RIVIERSONDEREND		
		<i>Scald</i>	<i>Net form Net Blotch</i>	<i>Spot form Net Blotch</i>
1	SSG 564	0	8	0
2	Erica	6	7	0
3	Nemesia	9	n	n
4	S5	9	n	2.2
5	S6	0	4	1.1
6	S7	5	7	1.1
7	S9	7	7	1.1
8	99-043-01	0	0	1.1
9	01-026-02D	7	1	2.1
10	01-008-06	0	1	2.3
11	01-015-03	0	4	1.1
12	01-017-03	3	4	3.2
13	01-019-04	0	0	2.3
14	02-035-05	0	0	2.3
15	02-035-06	0	1	3.2
16	02-035-07	n	7	2.1
17	02-035-08	6	6	2.1
18	02-045-03	0	2	3.2
19	02-055-01	n	9	n
20	02-055-02	9	n	n
21	02-056-02	8	7	n
22	04-031-05D	9	n	n
23	04-031-06D	9	n	n
24	06-900-65	0	7	1.1
25	07-900-07	1	0	2.2

Scald and Netblotch

1 = lightly infested

9 = heavily infested

n = no reading possible

TABEL 21: Siektelesings van inskrywings in die LE Rûens Heidelberg proef, 2010

TABLE 21: Disease readings of entries in the LE Rûens Heidelberg trial, 2010

Insk.nr. <i>Entr.no.</i>	Inskrywing <i>Entry</i>	HEIDELBERG		
		<i>Scald</i>	<i>Net form Net Blotch</i>	<i>Spot form Net Blotch</i>
1	SSG 564	0	7	0
2	Erica	0	4	2.1
3	Nemesia	0	1	1.1
4	S5	0	1	1.1
5	S6	0	4	0
6	S7	1	5	0
7	S9	0	4	0
8	99-043-01	0	0	0
9	01-026-02D	0	2	0
10	01-008-06	0	0	2.1
11	01-015-03	0	1	1.1
12	01-017-03	0	3	1.1
13	01-019-04	0	0	1.1
14	02-035-05	0	3	2.1
15	02-035-06	0	3	1.1
16	02-035-07	0	4	2.1
17	02-035-08	0	1	1.1
18	02-045-03	0	0	1.1
19	02-055-01	5	6	1.1
20	02-055-02	0	5	1.1
21	02-056-02	4	3	1.1
22	04-031-05D	0	3	1.1
23	04-031-06D	2	1	1.1
24	06-900-65	0	5	1.1
25	07-900-07	0	1	2.1

Scald and Netblotch

1 = lightly infested

9 = heavily infested

n = no reading possible

Table 22: Production statistics of the troal localities for the 2010 Line Evaluation Trial in the Rûens

AREA	LOKALITEIT	PLAASNAAM	VERANTW	ROTASIE 2009	BEMESTING (Kg/Ha)		PLANT DATUM	PLANT DIGTHEID
					N	P		
Wes-Rûens (OA)	Caledon	Dunghye Park	SABBI	Braak	49	25	19.05.10	220
	Rietpoel	Rietkuil	SABBI	Koring	31	16	12.05.10	220
	Greyton	Serjeantsrivier	SABBI	Koring	31	16	26.05.10	220
	Tygerhoek	Tygerhoek Proefplaas	SABBI	Canola	27	14	12.05.10	220
Suid-Rûens (OA)	Napier	Panorama	SABBI	Koring	47	23	25.05.10	220
	Bredasdorp	Môreilig	SABBI	Koring	23	11	11.05.10	220
	Klipdale	Hermanusheuvel	SABBI	Koring	23	11	11.05.10	220
	Protem	Adowa	SABBI	Koring	23	11	11.05.10	220
Oos-Rûens (SSK)	Napkei	Mopama	SABBI	Gars	15	7	10.05.10	200
	Swellendam	Kosani	SABBI	Koring	15	7	10.05.10	200
	Heidelberg	Voorstekop	SABBI	Koring	23	11	07.05.10	200
	Heidelberg Vlakte	Duinerug	SABBI	Lusern	15	7	11.06.10	200

TABEL 23: Lys van inskrywings in die Lyn Evaluasieproef in die Rûens, 2010

TABLE 23: List of entries in the Line Evaluation trial in the Rûens, 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	SSG 564	Control	Sabbi
2	<small>Sabbi</small> Erica	Control	Sabbi
3	<small>Sabbi</small> Nemesia	Control	Sabbi
4	S5	Experimental	Sabbi
5	S6	Experimental	Sabbi
6	S7	Experimental	Sabbi
7	S9	Experimental	Sabbi
8	99-043-01	4	Sabbi
9	01-026-02D	3	Sabbi
10	01-008-06	2	Sabbi
11	01-015-03	2	Sabbi
12	01-017-03	2	Sabbi
13	01-019-04	2	Sabbi
14	02-035-05	1	Sabbi
15	02-035-06	1	Sabbi
16	02-035-07	1	Sabbi
17	02-035-08	1	Sabbi
18	02-045-03	1	Sabbi
19	02-055-01	1	Sabbi
20	02-055-02	1	Sabbi
21	02-056-02	1	Sabbi
22	04-031-05D	1	Sabbi
23	04-031-06D	1	Sabbi
24	06-900-65	1	Sabbi
25	07-900-07	1	Sabbi

FIGURE 1: Rainfall patterns for Western Rûens: Long term vs. 2010
Dunghye Park

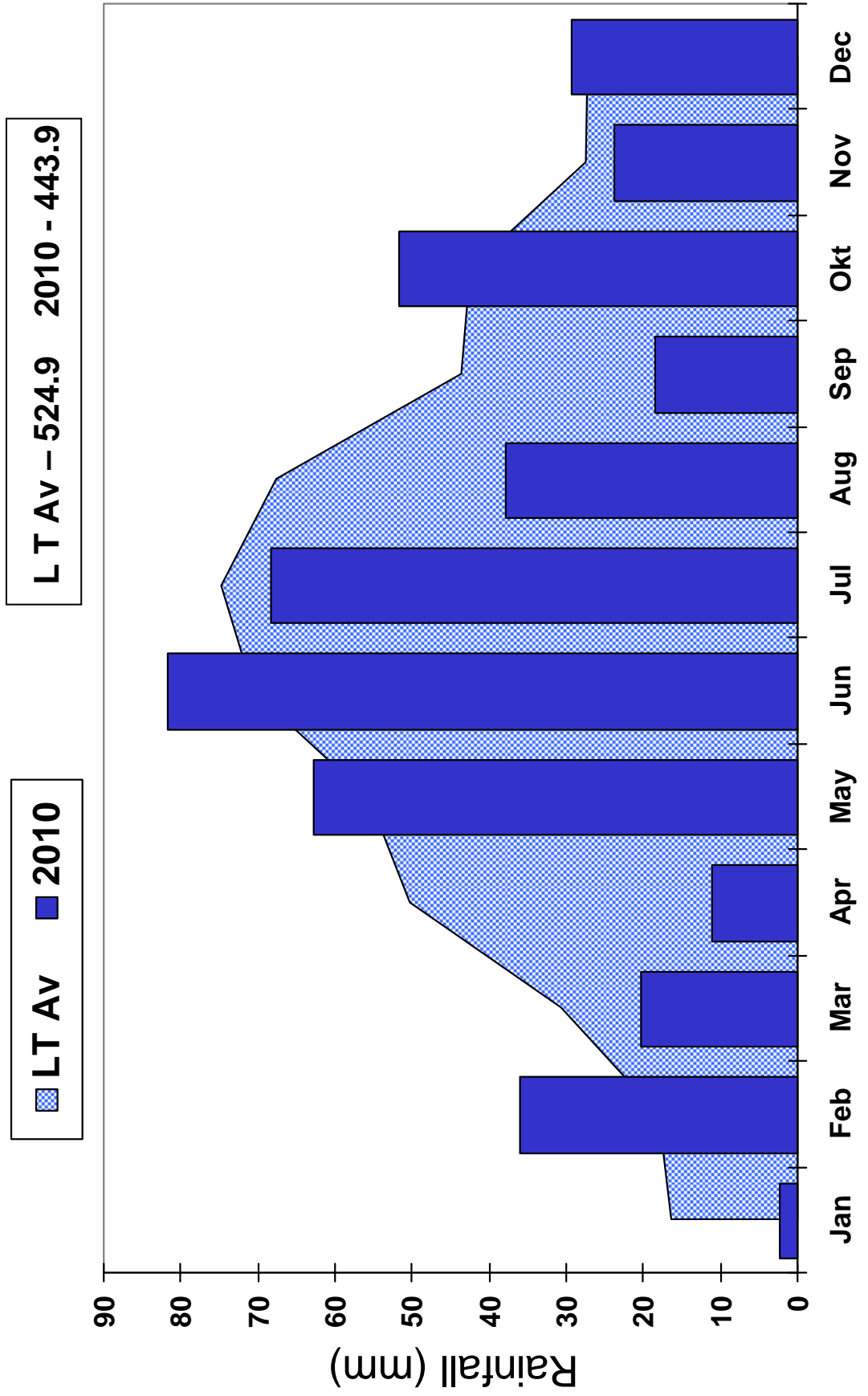


FIGURE 2: Rainfall patterns for Eastern Rûens: Long term vs 2010
 Heidelberg

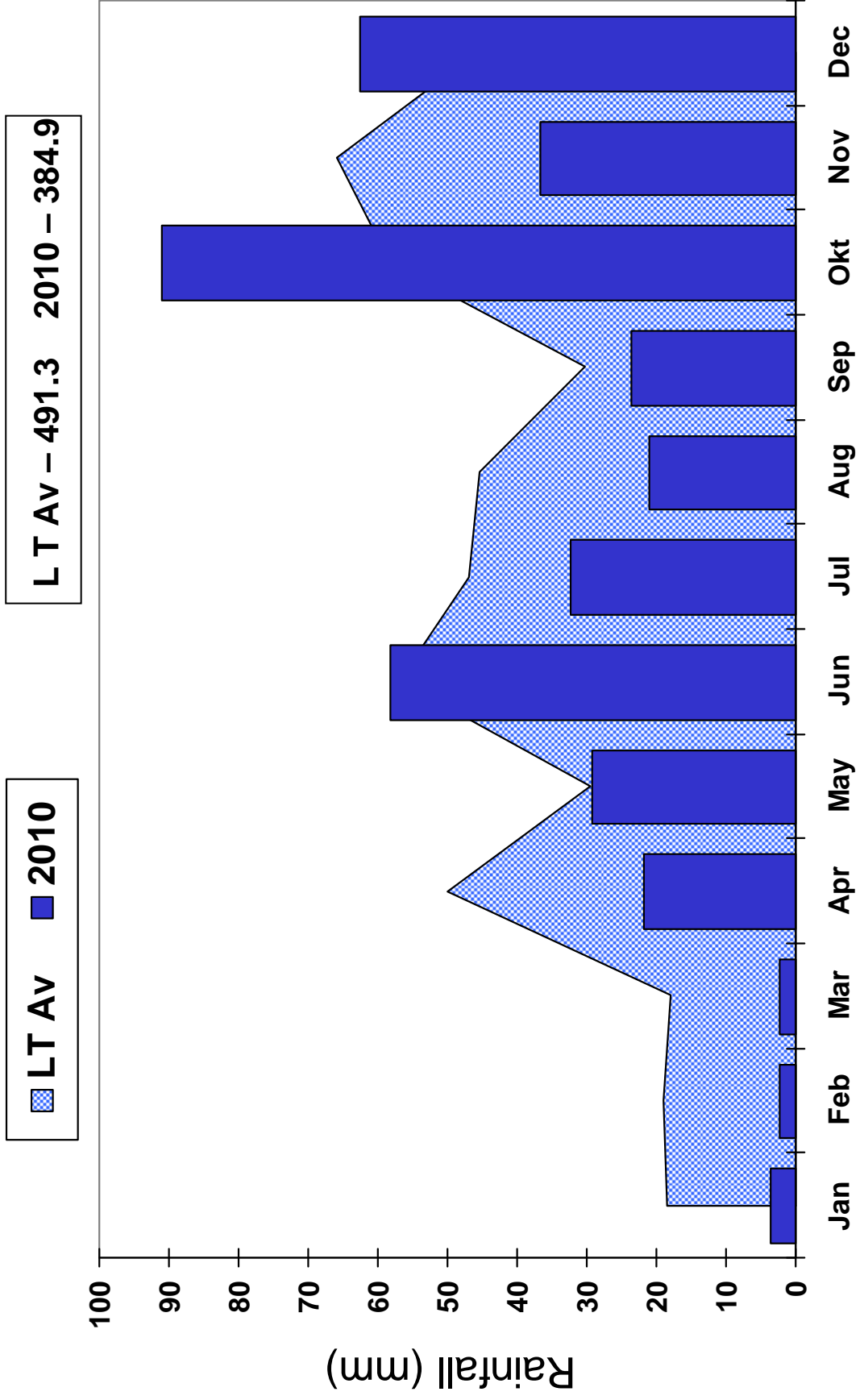
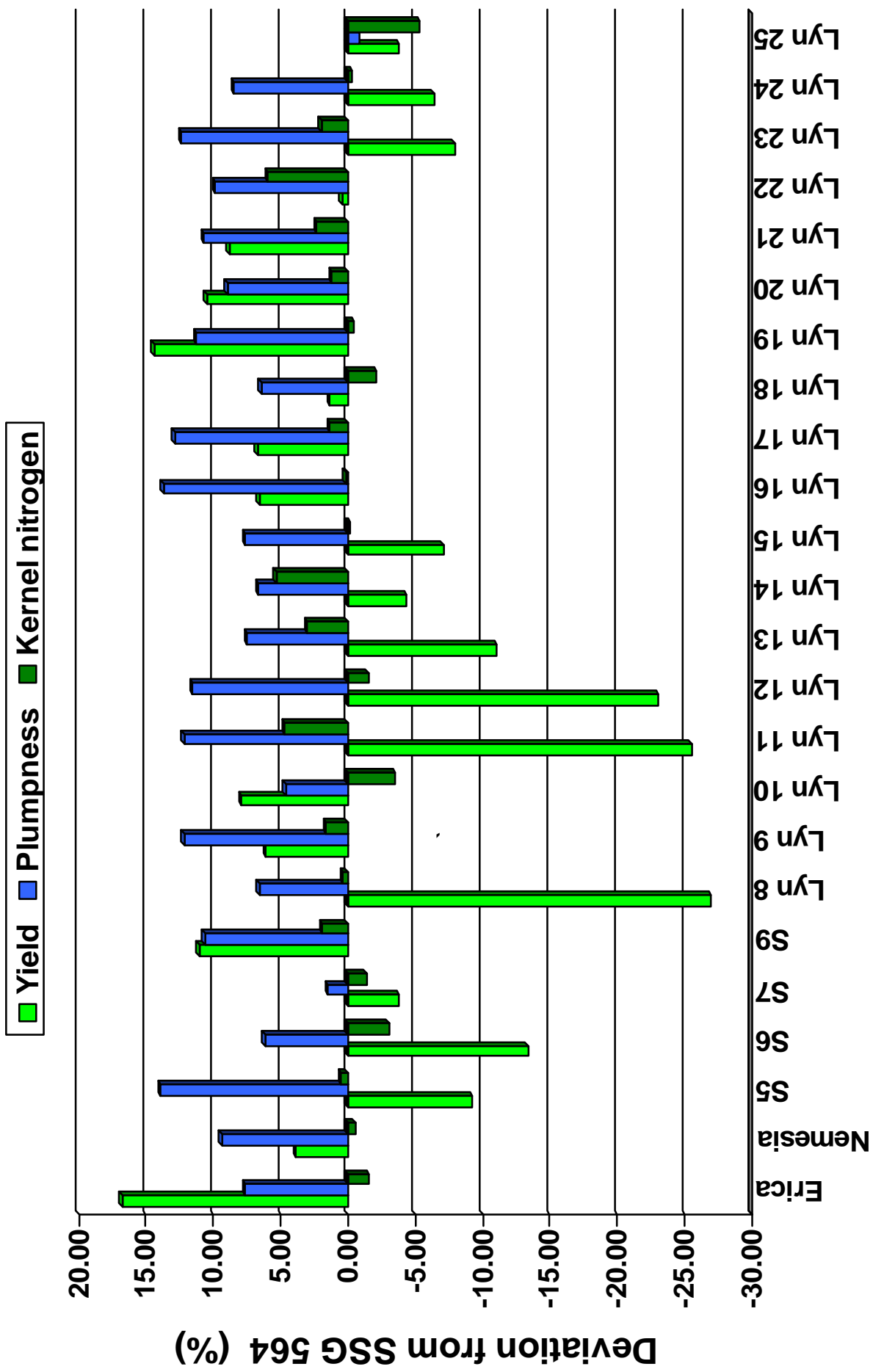


FIGURE 3: Average grain yield and quality parameters for the LE trials in the Rûens, 2010.



**FIGURE 4: Long term relative performance of lines in the LE trial
2010 (4th year)**

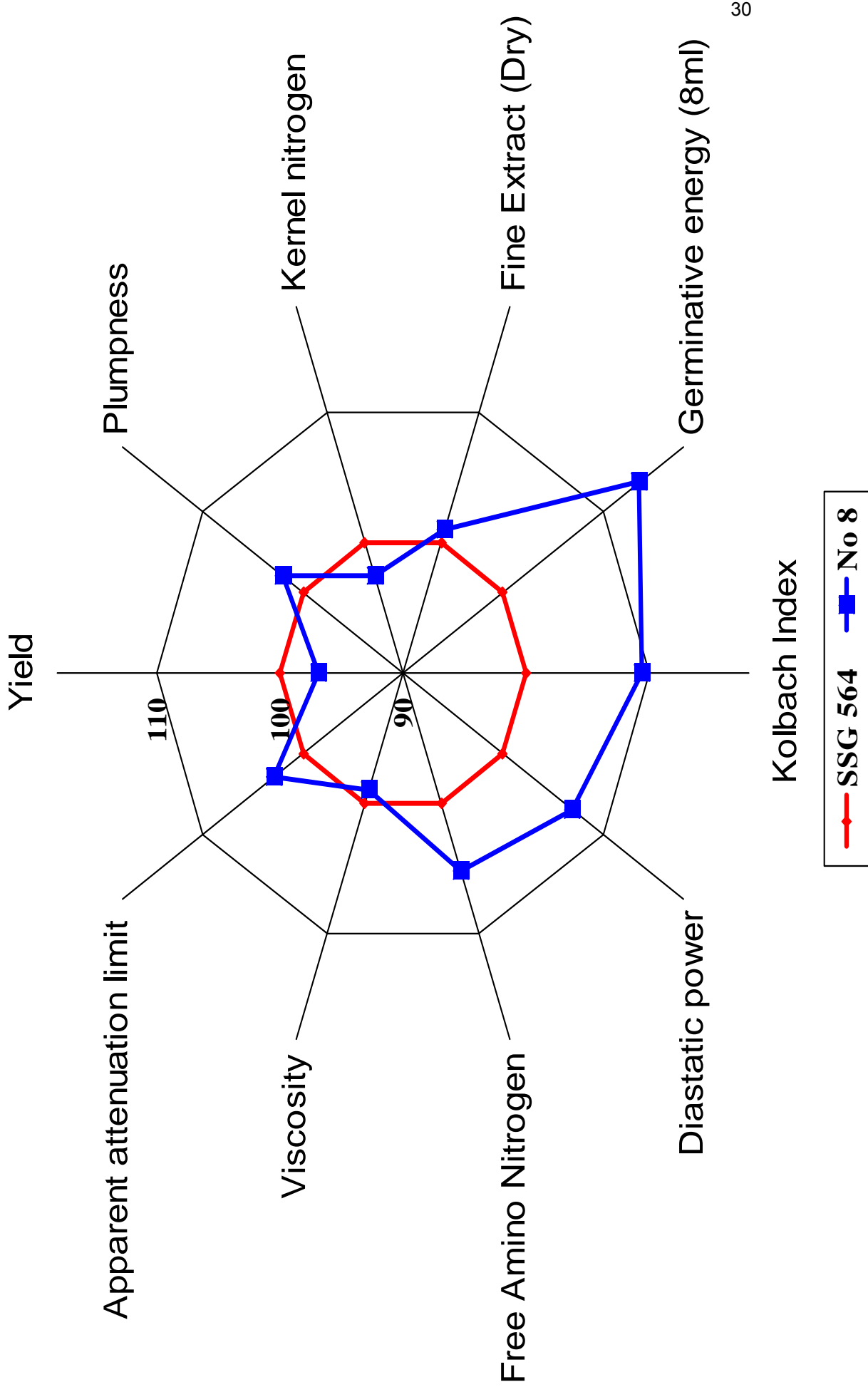


FIGURE 5: Long term relative performance of lines in the LE trial
2010 (3rd year)

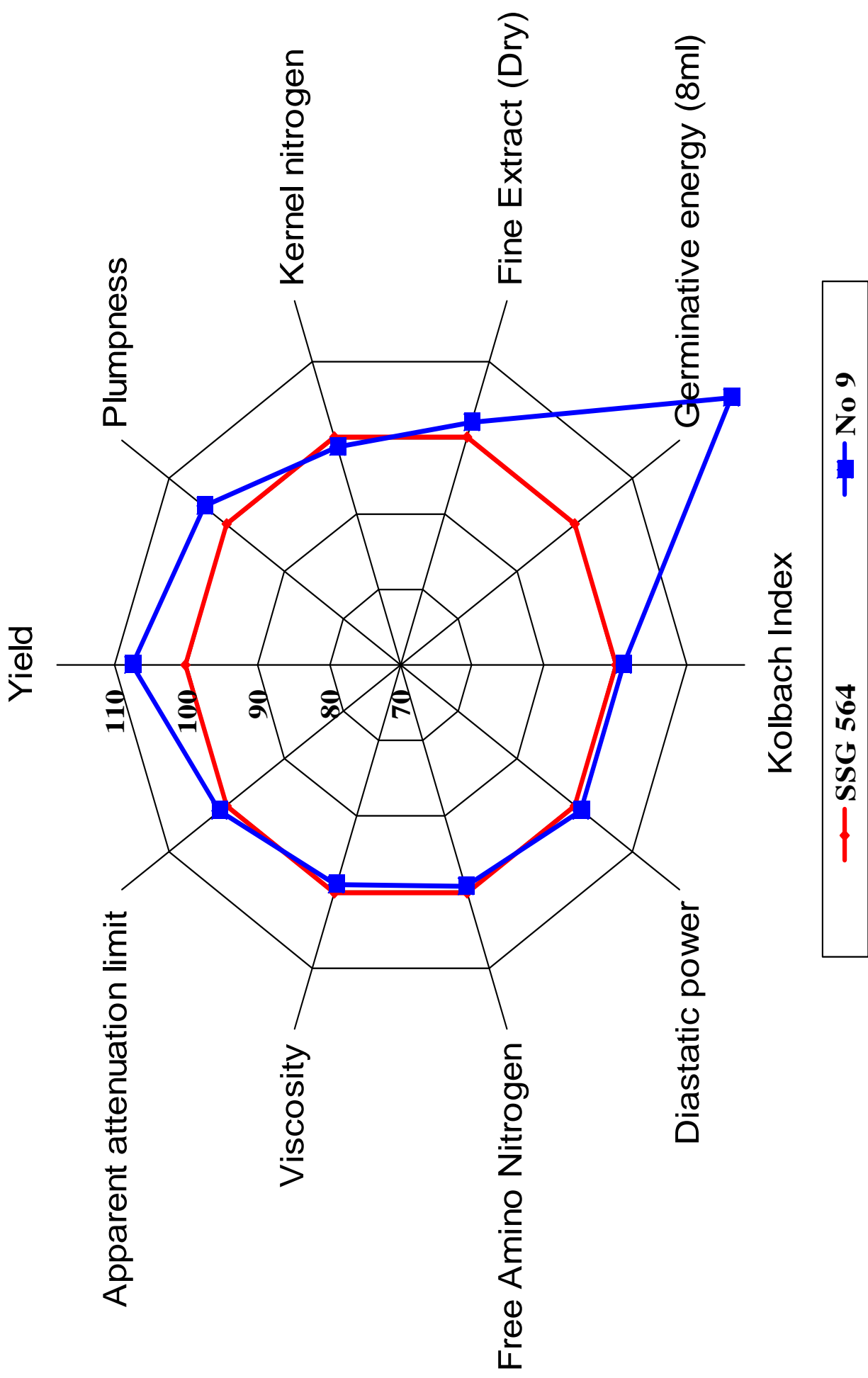


FIGURE 6: Long term relative performance of lines in the LE trial
2010 (2nd yrs.)

