

Characterization of Maize Germplasm Grown in Eastern and Southern Africa

Results of the 2005 Regional Trials

Coordinated by CIMMYT

C. Magorokosho, B. Vivek, M. Bänziger,
and J. MacRobert

CONTENTS

1. Introduction	2
Maize germplasm	2
Trial management	2
Data analysis	3
Summary tables	3
Individual site results	3
How can the results be used	5
2. Descriptions of Traits Recorded	6
3. Sites and Local Checks	8
4. Collaborators	13
5. Summary Results	16
Early Maturing Population (EPOP05).....	16
Intermediate and Late Maturing Populations (ILPOP05)	18
Early and Intermediate Maturing Hybrids (EIHYB05).....	20
Intermediate and Late Maturing Hybrids (ILHYB05)	22
Quality Protein Maize (QPM) Hybrids (QHYB05)	24
6. Individual Site Results	26
EPOP05	26
ILPOP05.....	31
EIHYB05.....	37
ILHYB05	42
QHYB05	48

1. Introduction

Maize germplasm

The trials evaluated elite pre-release and released maize germplasm supplied by CIMMYT, National Agricultural Research Programs, and private seed companies from southern Africa. CIMMYT received the germplasm, grouped it according to vigor and maturity, and formed five replicated trials:

EPOP05: early to intermediate maturing open-pollinated varieties (OPVs)

ILPOP05: intermediate to late maturing open-pollinated varieties (OPVs)

EIHVB05: early to intermediate maturing hybrids

ILHVB05: intermediate to late maturing hybrids

QHVB05: Quality Protein Maize (QPM) Hybrids

Each trial had an alpha (0,1) lattice design with three replicates.

Trial management

The trials were grown by CIMMYT, National Agricultural Research Programs, private seed companies and non-governmental organizations in eastern and southern Africa. Collaborators were encouraged to grow the trials under different types of conditions:

Well-fertilized/rain-fed conditions: trials were grown using optimal site-specific agronomic practices

Managed nitrogen stress: trials were grown in fields that had been depleted of nitrogen by growing unfertilized, non-leguminous crops for several seasons and removing the crop biomass after each season. Nitrogen fertilization to maize trials was designed so that yields under managed N stress averaged 20-35% of the yield of a well-fertilized maize crop at that site.

Managed drought stress: trials were grown during a rain-free period, with irrigation applied at the beginning of the season to establish a good plant stand. Afterwards, irrigation was withheld so that the crop suffered drought stress during flowering and grain-filling, resulting in average yields of about 1-3 t/ha.

Managed low pH stress: trials were grown in fields with high aluminum saturation (desirably = 60%) and/or low amounts of plant-available phosphorus (desirably 3-4 ppm P; i.e. 20-25% of the recommended levels). The objective was to achieve maize yields that were 50-65% below the optimal maize yield at the same site.

Artificial inoculation/infestation of biotic stress factors: trials were grown under artificial inoculation/infestation of leaf diseases, stem borers, and maize grain weevils.

A complete list of the sites can be found in Section 3.

Data analysis

In each Table, entries are grouped by anthesis date and sorted according to the average rank for yield across all sites. Within each maturity group, best ranking entries are listed at the top.

For presenting grain yields, sites were grouped into some or all of the following nine environments:

Mid Altitude Humid Warm (Zone A), Mid Altitude Humid Hot (Zone B), Mid Altitude Dry (Zone C), Lowland Tropical Humid (Zone D), Lowland Tropical Dry (Zone E), Highlands (Zone F), Midaltitudes in eastern Africa, Managed N stress, Low pH stress. This grouping was done based on the location (for making the division among rainfed/well fertilized sites, see Fig.1) and the management of the sites (rainfed/well fertilized, managed drought stress, managed N stress, low pH), maximum temperatures and seasonal precipitation. Please refer to Tables 1 and 2 for a detailed explanation of the characteristics of each zone.

Each trial is presented with two Summary Tables and individual site results.

Summary Tables

The Summary Tables present grain yields averaged across sites with significant differences between entries, for each of the environments. Data on agronomic performance such as anthesis date, plant and ear height, ear position, root and stem lodging, husk cover, ear rot, leaf diseases, grain weevil and stem borer damage, grain texture and grain moisture were averaged across all sites that provided results with significant differences between entries. If no data are presented for these traits, no trial data demonstrating significant differences for these traits was available.

Within each maturity group, **grain yields, root and stem lodging, husk cover, ear rot, leaf diseases, weevil and borer damage traits were color-coded.** Within a maturity group, colors that have no letter in common in the legend are different by at least one 'Least Significant Difference' (LSD, $P \leq 0.05$). LSDs were calculated from the mean square error that was pooled across sites. **Note: colors can only be used to compare grain yields within a certain maturity group.** For comparing grain yields between maturity groups, use the LSD listed at the bottom of the Table.

Color Legend		
Within a maturity group, colors that have no letter in common are different by at least one LSD. LSDs were calculated from the mean square error that was pooled across sites.	A	Very Good
	AB	Good
	BC	Average
	CD	Poor
	D	Very Poor

A description of all measurements can be found in Section 2.

Individual site results

These Tables present grain yields for individual sites, grouped by environment. A description of the sites can be found in Section 3.

Fig 1. Classification of locations based on SADC Maize Mega-Environments.

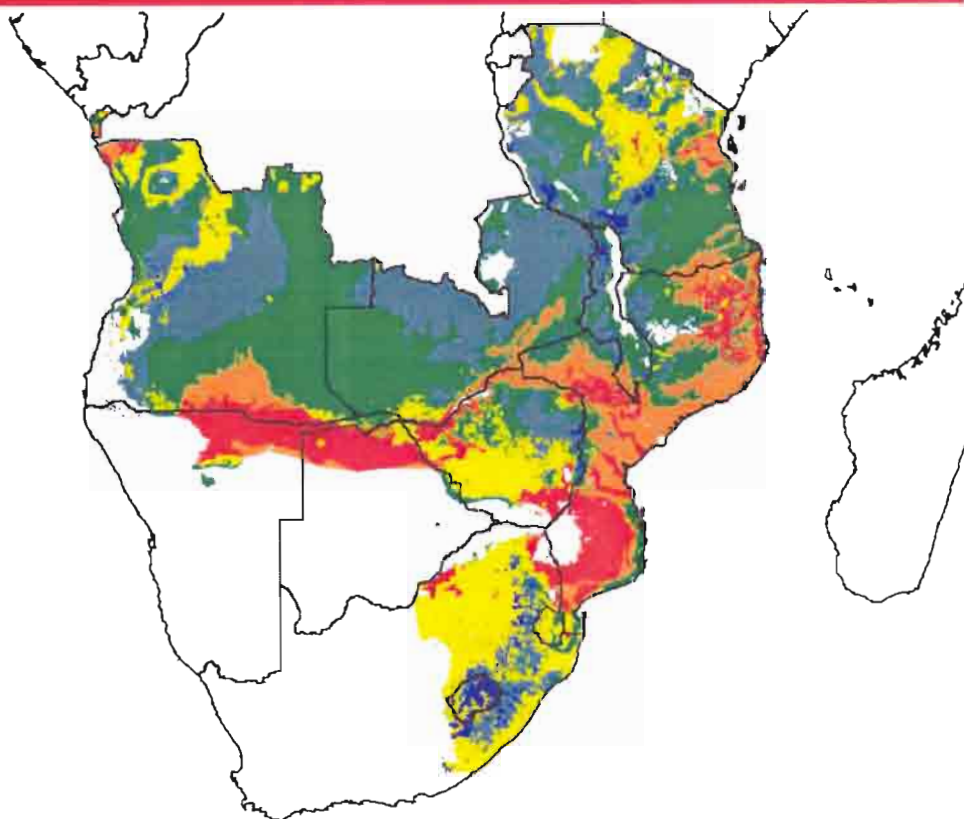


Table 1: Description of SADC Maize Mega-Environments.

Zone	Typical Environment ^a	Average Maximum Temperature	Risk of Drought	Season Precipitation	Area in SADC	
		°C		mm	ha	Percentage
A	Mid Altitude Humid Warm	24-27	Low	> 700	75,107,482	29.6%
B	Mid Altitude Humid Hot	27-30	Low	> 700	66,755,372	26.4%
C	Mid Altitude Dry	24-30	High	< 700	48,291,340	19.0%
D	Lowland Tropical Humid	>30	Low	> 700	17,145,789	6.8%
E	Lowland Tropical Dry	>30	High	< 700	38,403,454	15.1%
F	Highlands	<24			7,897,394	3.1%

^a Typical representative environment for zones A to F. However, zones A to F are best described by considering the average maximum temperature, risk of drought and seasonal precipitation given in Table 1 and illustrated in Figure 1

Table 2: Proportion of area in each SADC country for each mega-environment.

Zone	Proportion of area in each SADC country											
	SADC	Ang	Bot	Les	Mal	Moz	Nam	RSA	Swa	Tan	Zam	Zim
A	29%	30%	0%	11%	49%	7%	0%	19%	14%	32%	47%	17%
B	27%	48%	5%	0%	31%	25%	14%	3%	20%	36%	45%	22%
C	19%	12%	10%	22%	2%	2%	7%	64%	66%	21%	2%	39%
D	7%	6%	13%	0%	8%	39%	13%	1%	0%	5%	4%	8%
E	15%	3%	71%	0%	0%	26%	65%	5%	0%	1%	1%	12%
F	3%	1%	0%	67%	9%	1%	0%	8%	0%	4%	0%	1%

How can the results be used ...

.... by National Agricultural Research Programs?

- Request seed of the very best stress-tolerant, responsive OPVs and hybrids from CIMMYT, other National Programs, and private seed companies, and further test them in the National Maize Evaluation Trials.
- Conduct National Maize Evaluation Trials not only under optimal conditions but also under the most important stresses present in farmers' fields. Consider performance under stress conditions and farmers' preferences when making decisions on release of germplasm.
- Request and use seed of best CIMMYT germplasm (inbred lines, OPVs) in your breeding program and for registration.

.... by Private Seed Companies?

- Foster the distribution of cultivars that are not only high yielding under optimal conditions but as well under the most important stresses present in farmers' fields.
- Continue to submit seed of your best germplasm for evaluation in Regional Trials (to CIMMYT) and/or National Maize Evaluation Trials (to National Agricultural Research Programs of individual countries).
- Request and use seed of best CIMMYT germplasm (inbred lines, OPVs) in your breeding program and for commercialization.

.... by Seed-Distributing Agencies?

- Use data from Regional Trials (available from CIMMYT-Zimbabwe) and National Maize Evaluation Trials (available from National Agricultural Research Programs of individual countries) for making decisions on which seed to distribute to farmers.
- Distribute quality seed of the very best stress-tolerant, responsive hybrids and OPVs that are currently available.

Conclusion: Foster the availability and distribution of quality seed of the very best maize cultivars - those that are not only high yielding under optimal conditions but as well under the stresses present in farmers' fields.

2. Descriptions of Traits Recorded

Rel. GY	Relative grain yield expressed as percentage of the mean grain yield of the trial. Values above 100% indicate above-average performance; values below 100% indicate below-average performance.
Rank Avg.	Average rank for grain yield across all trials. Small values indicate superior performance; large values indicate inferior performance.
Rank Stdev.	Standard deviation of rank for grain yield across all trials. Small values indicate stable performance; large values indicate variable performance.
Grain yield	Shelled grain weight per plot adjusted to 12.5% grain moisture and converted to tons per hectare.
Anthesis date	Measured as number of days after planting when 50% of the plants shed pollen.
Plant Height	Measured as height between the base of a plant to the insertion of the first tassel branch of the same plant.
Ear Height	Measured as height between the base of a plant to the insertion of the top ear of the same plant.
Ear position	A ratio of ear height to plant height. Small values indicate low ear position; large values indicate high ear position.
Root Lodging	Measured as percentage of plants that show root lodging, i.e. those stems that are inclining by more than 45°.
Stem Lodging	Measured as percentage of plants that show stem lodging, i.e. those stems that are broken below the ear.
Husk Cover	Measured as percentage of plants with ears that are not completely covered by the husks.
Ear Rot	Percentage of ears that are rotten.
GLS	Score for the severity of gray leaf spot (<i>Cercospora zeae-maydis</i>) symptoms rated on a scale from 1 (= clean, no infection) to 5 (= severely diseased).
<i>P. sorghi</i>	Score for the severity of common rust (<i>Puccinia sorghi</i>) symptoms rated on a scale from 1 (= clean, no infection) to 5 (= severely diseased).
<i>E. turcicum</i>	Score for the severity of northern leaf blight (<i>Exserohilum turcicum</i>) symptoms rated on a scale from 1 (= clean, no infection) to 5 (= severely diseased).
<i>H. maydis</i>	Score for the severity of maydis leaf blight (<i>Helminthosporium maydis</i>) symptoms rated on a scale from 1 (= clean, no infection) to 5 (= severely diseased).
DM	Score for the severity of Downy Mildew (<i>Pernosclerospora</i> sp.) symptoms rated on a scale from 1 (= clean, no infection) to 5 (= severely diseased).

PLS	Score for the severity of <i>Phaeosphaeria</i> leaf spot (<i>Phaeosphaeria maydis</i>) symptoms rated on a scale from 1 (= clean, no infection) to 5 (= severely diseased).
Borer damage	Score for the severity of stem borer (<i>Busseola</i> and <i>Chilo</i>) damage rated on a scale from 1 (= clean, no damage) to 5 (= severe damage).
<i>Busseola</i> larvae	Count of the number of <i>Busseola</i> larvae. Higher the number indicates susceptibility.
<i>Chilo</i>	Score for the severity of <i>Chilo partellus</i> leaf damage rated on a scale from 1 (= no infestation) to 9 (= severely infested).
Leaf toughness	Force required to puncture leaves between veins as measured by the penetrometer. Genotypes with lower numbers tend to be susceptible to borers.
Grain weevil (Total F1)	Number of grain weevils hatching and emerging from an infested grain sample within a given period. Large values indicate susceptibility to grain weevils, small values indicate partial resistance to grain weevils.
Grain weevil (Wt loss)	Loss of weight of the grain samples caused by weevil feeding during a given period of incubation. Large values indicate susceptibility to weevils.
Grain texture	Rated on a scale from 1 (= flint) to 5 (=dent).
Grain moisture	Percent water content of grain as measured at harvest.
ASI	Anthesis-silking interval. Determined by (i) measuring the number of days after planting when 50% of the plants shed pollen (anthesis date, AD) and show silks (silking date, SD), respectively, and (ii) calculating: $ASI = SD - AD$. If measured under drought or N stress, small or negative values indicate stress tolerance.
EPP	Number of ears per plant. Counted as number of ears with at least one fully developed grain divided by the number of harvested plants. An EPP of below 1.0 indicates partial barrenness, an EPP of above 1.0 indicates partial prolificacy. If taken under drought or N stress, values of greater or equal to 1.0 indicate stress tolerance.
Leaf rolling	Leaf rolling score measured under drought stress on a scale from 1 (unrolled, turgid leaves, desirable) to 5 (severely rolled leaves, undesirable).
Senescence	Leaf senescence score on a scale from 1 to 10. Taken during grain-filling by estimating the percentage of dead leaf area and dividing it by 10. If taken under drought or N stress, small scores indicate stress tolerance. 1 = 10% dead leaf area; 6 = 60% dead leaf area 2 = 20% dead leaf area; 7 = 70% dead leaf area 3 = 30% dead leaf area; 8 = 80% dead leaf area 4 = 40% dead leaf area; 9 = 90% dead leaf area 5 = 50% dead leaf area; 10 = 100% dead leaf area
QPM Modification	Score for the extent of modification (extent of opaqueness) of quality protein maize (QPM) kernels rated on a scale from 1 (fully modified/normal looking kernels) to 5 (unmodified/opaque kernels) as evaluated on a light table.

3. Sites and Local Checks

Trial Name	Location	Country	Env	Planting Date	GY(t/ha)	Local Check1	Local Check2	Collaborator
EIHYB059	Cacuso	Angola	A	21-Jan-05	7.3	PANNAR6479	ZM621	F. Sito, J. Franco
EPOP054	Cacuso	Angola	A	17-Jan-05	6.7	PANN 6479		F. Sito, M. Junior
ILHYB058	Cacuso	Angola	A	20-Jan-05	8.3			F. Sito, J. Franco
ILPOP0512	Cacuso	Angola	A	20-Jan-05	7.2	PANNAR6479		F. Sito, J. Franco
QHYB0510	Cacuso	Angola	A	17-Jan-05	4.1	PANNAR6479		F. Sito, J. Franco
EIHYB055	Cela	Angola	A	26-Jan-05	3.1	R. CELA	ZM621	P. Salvador, F. Sito
EPOP057	Cela	Angola	A	26-Nov-05	2.3	R. CELA		P. Salvador, F. Sito
ILHYB059	Cela	Angola	A	25-Jan-05	2.5			P. Salvador, F. Sito
ILPOP0513	Cela	Angola	A	26-Jan-05	2.6	R. CELA		P. Salvador, F. Sito
EIHYB0512	Chianga	Angola	A	18-Jan-05	1.0	B. REDONDO	SAM3	O. Marias, F. Sioto
EPOP059	Chianga	Angola	A	12-Jan-05	2.0	B. REDONDO		
ILPOP053	Chianga	Angola	A	1-Dec-04	2.9	B. REDONDO		O. Morais, V. Kuanzimbini
EIHYB058	Malange	Angola	A	22-Feb-05	1.4	PANNAR6479	ZM621	F. Sito, J. Franco
EPOP058	Malange	Angola	A	16-Feb-05	1.3			F. Sito,
ILHYB057	Malange	Angola	A	23-Feb-05	0.6			F. Sito, J. Franco
ILPOP056	Malange	Angola	A	15-Feb-05	2.0			F. Sito, J. Franco
QHYB058	Malange	Angola	A	15-Feb-05	2.4	SAM3		F. Sito, J. Franco
EPOP0516	Machache	Lesotho	A	19-Nov-04	1.5	AFRIC1		M. Liphoto
ILPOP0516	Machache	Lesotho	A	19-Nov-04	1.8	AFRIC1		M. Liphoto
EPOP0515	Maseru	Lesotho	A	19-Nov-04	2.5	AFRIC1		M. Liphoto
ILPOP0518	Maseru	Lesotho	A	19-Nov-04	2.6	AFRIC1		M. Liphoto
ILHYB0531	Bvumbwe	Malawi	A	8-Dec-04	8.2			
ILPOP0541	Bvumbwe	Malawi	A	8-Dec-04	4.9	MASIKA		W. Paduwa
QHYB0536	Bvumbwe	Malawi	A	8-Dec-04	4.9	SC627		W. Paduwa
ILHYB0532	Chitedze	Malawi	A	16-Dec-04	7.4			G. Nhlane
QHYB0531	Chitedze	Malawi	A	9-Dec-04	7.7	SC627		
QHYB0532	Dedza	Malawi	A	24-Dec-04	1.1	SC627		
ILPOP0538	Mbawa	Malawi	A	10-Dec-04	6.7	MASIKA		G. Nhlane
EPOP0532	Golden Valley	Zambia	A	16-Dec-04	0.6	MMV400		K. Mwansa
QHYB0527	Kasama	Zambia	A	30-Dec-04	2.1	GV640		K. Mwansa
ILHYB0540	Magobo	Zambia	A		5.2			B. Verma, R. Matole
ILHYB0541	Magobo	Zambia	A		4.2			B. Verma, R. Matole

Trial Name	Location	Country	Env	Planting Date	GY(t/ha)	Local Check1	Local Check2	Collaborator
EIHYB0529	Mount Makulu	Zambia	A	21-Dec-04	2.1	GV470	GV640	K. Mwansa
EPOPO530	Mount Makulu	Zambia	A	21-Dec-04	4.4	MMV400		K. Mwansa
QHYB0524	Mount Makulu	Zambia	A	21-Dec-04	4.0	GV640		C. Mungoma
EIHYB0540	Zamseed Farm	Zambia	A	27-Dec-04	4.3	ZMS402		B. Verma, R. Matole
EIHYB0541	Zamseed Farm	Zambia	A	27-Dec-04	3.1	ZMS402		B. Verma, R. Matole
EPOPO543	Zamseed Farm	Zambia	A	27-Dec-04	3.6			B. Verma, R. Matole
ILPOPO550	Zamseed Farm	Zambia	A		3.0	ZM521		B. Verma, R. Matole
ILPOPO551	Zamseed Farm	Zambia	A		2.8	ZM521		B. Verma, R. Matole
QHYB0540	Zamseed Farm	Zambia	A	27-Dec-05	5.3	ZMS737		B. Verma, R. Matole
EIHYB0519	ART Farm Harare	Zimbabwe	A	24-Nov-04	9.6	CZH01008	CZH02008	CIMMYT
EPOPO520	ART Farm Harare	Zimbabwe	A	24-Nov-04	8.6	SAM15		CIMMYT
ILHYB0515	ART Farm Harare	Zimbabwe	A	24-Nov-04	7.6			CIMMYT
ILPOPO521	ART Farm Harare	Zimbabwe	A	24-Nov-04	8.7	ZM621		CIMMYT
QHYB0516	Harare	Zimbabwe	A	24-Nov-04	9.5	CZH01008		CIMMYT
EIHYB0524	Gwebi	Zimbabwe	A	9-Dec-04	7.5	ZS257	ZS255	D. Muungani, X. Mhike
EPOPO525	Gwebi	Zimbabwe	A	9-Dec-04	6.1	KATUMANI		D. Muungani, X. Mhike
EIHYB0515	Shamva	Zimbabwe	A	24-Dec-04	3.0	EXPITAL VAR1	EXPITAL VAR2	C. Mutengwa
QHYB0513	Shamva	Zimbabwe	A	24-Dec-04	2.8	EXPITAL VAR2		C. Mutengwa
EIHYB0535	Chitala	Malawi	B	24-Dec-04	5.1	MH18	PAN67	N. Kalowa, A. Chimphamba
QHYB0535	Chitala	Malawi	B	24-Dec-04	5.0	SC627		
ILPOPO540	Makoka	Malawi	B	12-Jan-05	1.1	MASIKA		
QHYB0533	Makoka	Malawi	B	10-Jan-05	1.5	SC627		
EIHYB0561	Angonia	Mozambique	B	31-Dec-04	2.9	CML395/CML444/CZL04011	CML181/CML182/CZL01006	
EIHYB0562	Angonia	Mozambique	B	31-Dec-04	1.9	CML395/CML444/CZL04011	CML181/CML182/CZL01006	
EIHYB0563	Angonia	Mozambique	B	7-Jan-05	2.2	CML395/CML444/CZL04011	CML181/CML182/CZL01006	
EIHYB0564	Angonia	Mozambique	B	7-Jan-05	2.1	CML395/CML444/CZL04011	CML181/CML182/CZL01006	
EPOPO565	Angonia	Mozambique	B	15-Jan-05	2.8	02SADVE2		
ILPOPO567	Angonia	Mozambique	B	13-Jan-05	1.1	SYN[SZElite01]		
QHYB0519	Angonia	Mozambique	B	14-Jan-05	1.1	SC633		
EIHYB0559	Sussundenga	Mozambique	B	20-Dec-04	1.8	CML395/CML444/CZL04011	CML181/CML182/CZL01006	
EPOPO566	Sussundenga	Mozambique	B	20-Dec-04	0.1	02SADVE2		M. Temo, C. Allino, D. Martote

Trial Name	Location	Country	Env	Planting Date	GY(t/ha)	Local Check1	Local Check2	Collaborator
ILPOP0572	Sussundenga	Mozambique	B	20-Dec-04	2.6	SYN[SZ/Elite01]		
QHYB0559	Sussundenga	Mozambique	B	20-Dec-04	2.7	SC633		
EIHYB0544	Katrin	Tanzania	B	25-Mar-05	5.0	STAHA	TMV1	A. Liampawe
EPOP0550	Katrin	Tanzania	B	25-Mar-05	3.3	STAHA		A. Liampawe
ILHYB0544	Katrin	Tanzania	B	24-Mar-05	4.2			A. Liampawe
ILPOP0563	Katrin	Tanzania	B	25-Mar-05	5.1	STAHA		A. Liampawe
ILHYB0527	Msekera	Zambia	B	20-Jan-05	0.9			C. Mungoma
ILPOP0532	Msekera	Zambia	B	3-Jan-05	1.0	POP10		C. Mungoma
EPOP0529	Baka	Malawi	C	30-Dec-04	4.8	SUNDWE		Baka Research
ILHYB052	Malikerns	Swaziland	C		3.0			V. Simeiane
ILPOP051	Malikerns	Swaziland	C	4-Nov-04	4.0	CRN3549		V. Simeiane
EIHYB0522	Kadoma	Zimbabwe	C	5-Jan-05	0.8	CZH01008	CZH02008	CIMMYT
EPOP0523	Kadoma	Zimbabwe	C	5-Jan-05	0.5	SAM15		CIMMYT
ILHYB0518	Kadoma	Zimbabwe	C	15-Dec-04	1.5			CIMMYT
ILPOP0573	Kadoma	Zimbabwe	C	5-Jan-05	0.5	ZM621		CIMMYT
EIHYB0521	Makoholi	Zimbabwe	C	15-Dec-05	3.3	CZH01008	CZH02008	CIMMYT
EIHYB0525	Makoholi	Zimbabwe	C	16-Dec-04	1.1	ZS257	ZS255	D. Muungani, X. Mhike
EPOP0522	Makoholi	Zimbabwe	C	15-Dec-04	3.1	SAM15		CIMMYT
EPOP0524	Makoholi	Zimbabwe	C	17-Dec-04	1.2	KATUMANI		D. Muungani, X. Mhike
ILHYB0519	Makoholi	Zimbabwe	C	15-Dec-04	0.7			D. Muungani, X. Mhike
ILPOP0523	Makoholi	Zimbabwe	C	15-Dec-04	2.2	ZM621		CIMMYT
ILPOP0527	Makoholi	Zimbabwe	C	17-Dec-04	1.4	WINTER SYNTHETIC (3)		D. Muungani, X. Mhike
QHYB0518	Makoholi	Zimbabwe	C	15-Dec-04	2.9	CZH01008		CIMMYT
QHYB0520	Makoholi	Zimbabwe	C	16-Dec-04	0.9	003WH25		D. Muungani, X. Mhike
EIHYB0548	Ilonga	Tanzania	D	5-Mar-05	4.2	PH4	ETA140	J. Assenga
EPOP0553	Ilonga	Tanzania	D	5-Mar-05	0.0	TMV1		J. Assenga
ILHYB0551	Ilonga	Tanzania	D	5-Mar-05	3.5			J. Assenga
ILPOP0554	Ilonga	Tanzania	D	5-Mar-05	3.2	STAHA		J. Assenga
QHYB0550	Ilonga	Tanzania	D	5-Mar-05	4.2	PH4		J. Assenga
EIHYB0530	Nanga	Zambia	E	1-Jul-05	4.1	GV470	GV640	J. Assenga
EPOP0531	Nanga	Zambia	E	1-Jul-05	1.3	MMV400		C. Mungoma
ILHYB0524	Nanga	Zambia	E	1-Jul-05	1.8			C. Mungoma
ILPOP0529	Nanga	Zambia	E	1-Jul-05	1.4	POP10		C. Mungoma
QHYB0525	Nanga	Zambia	E	1-Jul-05	1.3	GV640		C. Mungoma

Trial Name	Location	Country	Env	Planting Date	GY(t/ha)	Local Check1	Local Check2	Collaborator
EIHYB0520	Chiredzi	Zimbabwe	E	27-May-05	0.6	CZH01008	CZH02008	CIMMYT
EPOP0521	Chiredzi	Zimbabwe	E	18-May-05	0.9			CIMMYT
ILHYB0516	Chiredzi	Zimbabwe	E	10-May-05	2.3			CIMMYT
ILPOP0522	Chiredzi	Zimbabwe	E	10-May-05	1.9	ZM621		CIMMYT
QHYB0517	Chiredzi	Zimbabwe	E	10-May-05	2.3	CZH01008		CIMMYT
EIHYB054	Humpata	Angola	F	6-Jan-05	4.4	SAM3		W. Jesus, F. Sito
ILHYB055	Humpata	Angola	F	6-Jan-05	4.6			W. Jesus
ILPOP054	Humpata	Angola	F	6-Jan-05	3.9	SAM3		W. Jesus, F. Sito
QHYB056	Humpata	Angola	F	6-Jan-05	3.7	SAM3		F. Sito
EPOP0517	Mahobong	Lesotho	F	19-Nov-04	3.5	AFRIC1		M. Liphoto
ILPOP0517	Mahobong	Lesotho	F	17-Nov-04	2.7	AFRIC1		M. Liphoto
EPOP0538	Chitedze	Malawi	LN		0.9	SUNDWE		K. Kaonga
ILHYB0533	Chitedze	Malawi	LN		0.6			K. Kaonga
ILPOP0537	Chitedze	Malawi	LN		0.8	MASIKA		K. Kaonga
EIHYB0554	Ilonga	Tanzania	LN	5-Mar-05	0.7	PH4	ETA140	K. Kaonga
EPOP0551	Ilonga	Tanzania	LN	5-Mar-05	0.4	TMV1		J. Assenga
ILHYB0547	Ilonga	Tanzania	LN	5-Mar-05	0.0			J. Assenga
ILPOP0566	Ilonga	Tanzania	LN	5-Mar-05	1.9	STAH4		J. Assenga
EIHYB0531	Golden Valley	Zambia	LN	16-Dec-04	0.8	GV470	GV640	J. Assenga
ILHYB0525	Golden Valley	Zambia	LN	16-Dec-04	0.3			K. Mwansa
ILPOP0530	Golden Valley	Zambia	LN	16-Dec-04	0.5	POP10		K. Mwansa
QHYB0526	Golden Valley	Zambia	LN	16-Dec-04	0.8	GV640		K. Mwansa
EIHYB0518	CIMMYT Harare	Zimbabwe	LN	24-Nov-04	2.6	CZH01008	CZH02008	CIMMYT
EPOP0519	CIMMYT Harare	Zimbabwe	LN	1-Dec-04	1.5	SAM15		CIMMYT
ILHYB0514	CIMMYT Harare	Zimbabwe	LN	19-Nov-04	2.2			CIMMYT
ILPOP0520	CIMMYT Harare	Zimbabwe	LN	25-Nov-04	2.7	ZM621		CIMMYT
QHYB0515	CIMMYT Harare	Zimbabwe	LN	19-Dec-04	1.3	CZH01008		CIMMYT
EIHYB0523	Harare	Zimbabwe	LN	5-Nov-04	1.3	ZS257	ZS255	D. Muungani, X. Mhike
EPOP0526	Harare	Zimbabwe	LN	5-Nov-04	1.5	KATUMANI		D. Muungani, X. Mhike
ILHYB0520	Harare	Zimbabwe	LN	5-Nov-04	1.9			D. Muungani, X. Mhike
ILPOP0524	Harare	Zimbabwe	LN	5-Nov-04	1.5	WINTER SYNTHETIC(3)		D. Muungani, X. Mhike
QHYB0521	Harare	Zimbabwe	LN	5-Nov-04	1.8	003WH25		D. Muungani, X. Mhike
ILHYB0530	Bembeke	Malawi	LpH	15-Dec-04	2.5			D. Muungani, X. Mhike
ILPOP0539	Bembeke	Malawi	LpH	14-Dec-04	1.1	MASIKA		D. Muungani, X. Mhike

Trial Name	Location	Country	Env	Planting Date	GY(t/ha)	Local Check1	Local Check2	Collaborator
ILPOP0544	Lunyangwa	Malawi	LpH	22-Dec-04	3.1	MASIKA		A. Thulu
EIHYB0532	Kasama	Zambia	LpH	31-Dec-04	3.5	GV470	GV640	K. Mwansa
EPOP0533	Kasama	Zambia	LpH	30-Dec-04	3.5	MMV400		K. Mwansa
ILHYB0526	Kasama	Zambia	LpH	29-Dec-04	4.5			K. Mwansa
ILPOP0531	Kasama	Zambia	LpH	30-Dec-04	1.9	POP10		K. Mwansa
ILHYB0563	Bako	Ethiopia	MAEA	10-Jun-05	13.7			Koste
ILPOP0578	Bako	Ethiopia	MAEA	10-Jun-05	7.1	SYN[SZ/Elite01]		D. Wegary
EIHYB0543	Bungoma	Kenya	MAEA	16-Apr-05	6.2	WH101	WH105	S. Esmail
EPOP0545	Bungoma	Kenya	MAEA	15-Apr-05	5.3	WS202		S. Esmail
ILHYB0542	Bungoma	Kenya	MAEA	16-Apr-05	3.6			S. Esmail
ILPOP0552	Bungoma	Kenya	MAEA	15-Apr-05	5.1	P3DF		S. Esmail
QHYB0541	Bungoma	Kenya	MAEA	16-Apr-05	5.3	WHQ503		S. Esmail
EIHYB0542	Kitale	Kenya	MAEA	22-Apr-05	5.5	WH002	WH105	S. Esmail
EIHYB0565		Uganda	MAEA	31-Mar-05	4.7	2H	SALONGO	G. Bigirwa
EPOP0572		Uganda	MAEA	1-Apr-05	5.0	L4		G. Bigirwa
ILHYB0564		Uganda	MAEA	31-Mar-05	4.5			G. Bigirwa
ILPOP0579		Uganda	MAEA	1-Apr-05	4.3	L1		G. Bigirwa
EIHYB0517	CIMMYT Harare	Zimbabwe	MSV	19-Nov-04	6.3	CZH01008	CZH02008	CIMMYT
EPOP0518	CIMMYT Harare	Zimbabwe	MSV	19-Nov-04	6.4	SAM15		CIMMYT
ILPOP0519	CIMMYT Harare	Zimbabwe	MSV	19-Nov-04	6.8	ZM621		CIMMYT
QHYB0514	CIMMYT Harare	Zimbabwe	MSV	19-Nov-04	7.7	CZH01008		CIMMYT
ILHYB0513	CIMMYT Harare	Zimbabwe	MSV	19-Nov-04	5.3	CZH01011		CIMMYT

4. Collaborators

Country	Institute	Collaborator	Address	Email	Telephone	Fax
Angola	Instituto de Investigacao Agronomica	P. Salvador	Caixa Postal 2104, Avenida Deolinda Rodrigues Km 5, Luanda		+244 92 374 6423	
Angola	Instituto de Investigacao Agronomica	J. Franco	Caixa Postal 2104, Avenida Deolinda Rodrigues Km 5, Luanda		+244 92 374 6424	
Angola	Instituto de Investigacao Agronomica	O. Morias	Caixa Postal 2104, Avenida Deolinda Rodrigues Km 5, Luanda		+244 92 374 6425	
Angola	Instituto de Investigacao Agronomica	W. Jesus	Caixa Postal 2104, Avenida Deolinda Rodrigues Km 5, Luanda		+244 92 374 6426	
Angola	Instituto de Investigacao Agronomica	M. Junior	Caixa Postal 2104, Avenida Deolinda Rodrigues Km 5, Luanda		+244 92 374 6427	
Angola	Instituto de Investigacao Agronomica	F. Sito	Caixa Postal 2104, Avenida Deolinda Rodrigues Km 5, Luanda	fsito@nexus.ao	+244 92 374 6428	
Angola	Instituto de Investigacao Agronomica	V. Kuanzambi	Caixa Postal 2104, Avenida Deolinda Rodrigues Km 5, Luanda		+244 92 374 6429	
Ethiopia	EARO, Bako Agricultural Research Centre	Koste	P.O. Box 3, Bako			+251 1 611 221
Ethiopia	EARO, Bako Agricultural Research Centre	D. Wegary	P.O. Box 3, Bako			+251 1 611 222
Kenya	Western Seed	S. Esmail	P.O. Box 49464, Nairobi	western@swiftkenya.com	+254 2 890804	+254 2 891444
Kenya	CIMMYT-Kenya	A. Diallo	P.O. Box 25171, Nairobi	a.diallo@cgiar.org	254 20 7224600	254 20 7224601/7224001
Kenya	CIMMYT-Kenya	M. Banziger	P.O. Box 25171, Nairobi	m.banziger@cgiar.org	254 20 7224600	254 20 7224601/7224001
Lesotho	Agriculture Research Division	M. Liphoto	P.O. Box 829, Maseru	mphilphoto@yahoo.co.uk	266-22-326042/312395	+266-22-310362
Malawi	Ministry of Agriculture, Chitala Research Station	M. Kalowa	P. O. Box 158, Lilongwe, Chitala	maizeagronomy@malawi.net		
Malawi	Ministry of Agriculture, Chitala Research Station	A. Chimphamba	P. O. Box 158, Lilongwe, Chitala	maizeagronomy@malawi.net		
Malawi	Ministry of Agriculture, Chitedze Research Station	K. Kaonga	P.O. Box 158, Lilongwe	maizeagronomy@malawi.net	265 1 707222	265 1 707019
Malawi	Ministry of Agriculture, Chitedze Research Station	G. Nkhane	P.O. Box 158, Lilongwe	maizeagronomy@malawi.net	265 1 707222	265 1 707019
Malawi	Ministry of Agriculture, Bvumbwe Research Station	W. Paduwa	P.O. Box 5748, Limbe	maizeagronomy@malawi.net	265 1 707222	265 1 707019
Malawi	Ministry of Agriculture, Lunyangwa Research Station	A. Thulu	P. O. Box 158, Lilongwe, Bolero/Lunyangwa	maizeagronomy@malawi.net		
Mauritius	M.S.I.R.I	N. Govindan	Reduit	fbnas@msiri.intnet.mu		

Country	Institute	Collaborator	Address	Email	Telephone	Fax
Mozambique	INIA, Sussundenga Research Station	D. Mariote	P.O. Box 42, Chimoio, Manica Province	mariotedavid@hotmail.com	258 82 483628 or 82 410509	
Mozambique	INIA, Sussundenga Research Station	C. Allino	P.O. Box 42, Chimoio, Manica Province	mariotedavid@hotmail.com	257 82 483628 or 82 410509	
Mozambique	INIA, Sussundenga Research Station	M. Temo	P.O. Box 42, Chimoio, Manica Province	mariotedavid@hotmail.com	258 82 483628 or 82 410509	
South Africa	PANNAR Pty. Ltd., Research Department	M. Barrow	P.O. Box 19, Greytown	research@pannar.co.za	27-3341-39624	27-3341-71208
South Africa	ARC Grain Crops Institute	D. Fourie	Private Bag X1251, Potchefstroom 2520	drieke@iggz.agric.za	+27 18 299 6100	+27 18 294 7146
South Africa	Nelson Genetics	P. Nelson	P.O. Box 67281, Brianston 2021	pnelson@mweb.co.za	+27 11 7067257	+27 11 463 5667
South Africa	Capstone Seeds	A. Taylor	P.O. Box 302, Howick 3290	mail@capstone.co.za	+27 33 3304474	+27 33 3303252
South Africa	Monsanto	J. Rossouw	P.O. Box 7424, Vermuelen Street, Pett 1512, Gauteng	johannes.d.rossouw@monsanto.com	27 11 7488300	27 11 7488353
Swaziland	Ministry of Agriculture, Malkerns Research Station	V. Simelane	P.O. Box 4, Malkerns		+268 40 42731/4	+268 50 53103
Tanzania	Agricultural Research Institute Katrin	A. Liampawe	Private Bag Katrin, Ifakara, Morogoro			
Tanzania	Agricultural Research Institute-Ilonga	J. Assenga	P.O. Box Ilonga, Kilosa			
Tanzania	Selian Agricultural Research Institute	K. K'itenge	P.O. Box 6024, Arusha	sari@yako.habari.co.tz	+255 27 2503883	+255 27 2508242/8557
Tanzania	Selian Agricultural Research Institute	P. Matowo	P.O. Box 6024, Arusha	sari@yako.habari.co.tz	+255 27 2503883	+255 27 2508242/8557
Uganda	Namulonge Agriculture Research Institute	G. Bigirwa	P.O. Box 7084, Kampala	naari@naro.bushnet.net	+256 41 341554	+256 41 321070
Zambia	Ministry of Agriculture, Golden Valley Research Centre	C. Mungoma	P.O. Box 54, Fringilla	maize@zamnet.zm	+260 1 213829/278130	+260 1 233 832
Zambia	Ministry of Agriculture, Golden Valley Research Centre	K. Mwanza	P.O. Box 35441, Lusaka	maize@zamnet.zm	+260 1 213829/278131	+260 1 233 833
Zambia	Zamseed, Zambia	B. N. Verma	P.O. Box 35441, Lusaka	servema@zamnet.zm	+260 1 243762/241283	+260 1 248028
Zambia	Zamseed, Zambia	R. Matole	P.O. Box 35441, Lusaka	servema@zamnet.zm	+260 1 243762/241284	+260 1 248029
Zimbabwe	ACFD, Zimbabwe	C. Mutengwa	P.O. Box A469, Harare	mutengwah@yahoo.com	+263 4 860 421	
Zimbabwe	Agricultural Research and Extension	D. Muungani	P.O. Box CY550, Harare	deanmuungani@yahoo.co.uk	+263 4 704 531	+263 4 728317
Zimbabwe	Agricultural Research and Extension	X. Mhike	P.O. Box CY550, Harare	xmhike@yahoo.co.uk	+263 4 704 531	+263 4 728317
Zimbabwe	ART Farm	L. Mutemeri	P.O. Box MP84, Harare	artfarm@africaonline.co.zw	860412/091220082	

Country	Institute	Collaborator	Address	Email	Telephone	Fax
Zimbabwe	CIMMYT-Zimbabwe	B. Vivek	P.O. Box MP163, Harare	b.vivek@cgiar.org	+263 4 301807	+263 4 301327
Zimbabwe	CIMMYT-Zimbabwe	S. Mawere	P.O. Box MP163, Harare	s.mawere@cgiar.org	+263 4 301807	+263 4 301327
Zimbabwe	CIMMYT-Zimbabwe	M. Masukume	P.O. Box MP163, Harare	m.masukume@cgiar.org	+263 4 301807	+263 4 301327
Zimbabwe	CIMMYT-Zimbabwe	N. Darnu	P.O. Box MP163, Harare	n.darnu@cgiar.org	+263 4 301807	+263 4 301327
Zimbabwe	CIMMYT-Zimbabwe	S. Chisoro	P.O. Box MP163, Harare	s.chisoro@cgiar.org	+263 4 301807	+263 4 301327
Zimbabwe	CIMMYT-Zimbabwe	J. MacRobert	P.O. Box MP163, Harare	j.macrobert@cgiar.org	+263 4 301807	+263 4 301327
Zimbabwe	CIMMYT-Zimbabwe	C. Magorokosho	P.O. Box MP163, Harare	c.magorokosho@cgiar.org	+263 4 301807	+263 4 301327
Zimbabwe	PANNAR	B. Cowley	P.O. Box 99, Ruwa	research@pannar.co.zw	+263 73 2598	
Zimbabwe	PIONEER Overseas Corporation	G. Mutseyekwa	P Bag BW6237, Harare	Gilbert.Mutseyekwa@pioneer.com	+263 4 860 478/860411	263 4 860411/860478
Zimbabwe	SEED-CO	E. Tembo	P.O. Box WGT64, Harare	elliott@seedcogroup.com	+263 4 308 891/8	+263 4 304 841
Zimbabwe	SEED-CO	M. Caulfield	P.O. Box WGT64, Harare	mikeca@seedcogroup.com	+263 4 308 891/8	+263 4 304 841
Zimbabwe	SEED-CO	P. Rupernde	P.O. Box WGT64, Harare	paulru@seedcogroup.com	+263 4 308 891/8	+263 4 304 841
Zimbabwe	SEED-CO	W. Chivasa	P.O. Box WGT64, Harare	walerchi@seedcogroup.com	+263 4 308 891/9	+263 4 304 842

5. Summary Results

EPOPO5: Results of evaluation of early maturing OPVs from CIMMYT, Western Seed, South Africa and Zimbabwe across 30 sites in eastern and southern Africa, 2004/05. Individual sites results on pages 28-30 (Tables 3C-3G). Color legend on page 3.

Table 3A

Entry	Name	Pedigree	Origin	Comments	Across		Mid Alt		Mid Alt Humid		Lowland Trop		Managed Stress		Anth Date
					RelGY	Rank	E. Africa	W. Africa	Hot	Dry	Dry	N Stress	Low pH		
					Avg	StdDev	u/ha	u/ha	A	B	C	D	E	u/ha	d
Entries with anthesis date between 60 - 63 days															
6	ZM305	ZM305	CIMMYT	Non-QPM OPV	92	3	5.1	1.1	1.7	1.7	0.5	1.0	0.8	2.8	62.6
1	WS103	WS103	Western Seed	Non-QPM OPV	56	3	2.9	4.1	0.9	0.9	0.2	1.1	0.7	1.8	60.2
Maturity group average															
					74	3	4.0	2.7	1.3	1.3	0.3	1.0	0.7	2.3	61.4
Entries with anthesis date between 63 - 66 days															
11	VP047	VP047	CIMMYT	Non-QPM OPV	113	8	5.8	3.9	1.7	1.7	0.6	1.0	1.1	4.7	64.1
5	ZM307	V032	CIMMYT	Non-QPM OPV	107	5	3.7	3.7	1.8	1.8	0.8	1.2	0.9	3.6	64.9
8	VP041	VP041	CIMMYT	Non-QPM OPV	106	10	4.6	3.8	1.6	1.6	0.7	1.5	1.0	3.9	63.8
4	SAM63	SAM63	South Africa	Non-QPM OPV	91	13	4.3	3.4	1.6	1.6	0.6	1.0	0.7	3.3	65.0
19	SynG15QSR	SynG15QSR	CIMMYT	QPM OPV	71	18	3.7	3.1	1.4	1.4	0.4	0.8	0.7	2.6	66.2
Maturity group average															
					98	11	4.8	3.4	1.6	1.6	0.6	1.1	0.9	3.6	64.8
Entries with anthesis date 66-68 days															
7	ZM401	Syn01E2	CIMMYT	Non-QPM OPV	116	7	5.6	4.1	1.9	1.9	0.7	1.1	1.0	4.8	66.7
13	ZM521	ZM521	CIMMYT	Non-QPM OPV	110	8	5.4	4.1	2.0	2.0	0.6	1.1	1.2	3.9	68.0
16	01SADVI	01SADVI	CIMMYT	Non-QPM OPV	111	8	5.8	4.1	2.0	2.0	0.6	0.6	1.0	3.7	68.0
12	ZM421	ZM421	CIMMYT	Non-QPM OPV	109	9	4.7	3.8	2.1	2.1	1.0	0.9	1.0	3.4	67.4
14	ZM423	ZM423	CIMMYT	Non-QPM OPV	104	9	6.2	4.0	1.8	1.8	0.8	0.9	0.8	4.2	68.2
3	01SynZime	01SynZime	Zimbabwe	Non-QPM OPV	102	10	5.3	3.9	2.0	2.0	0.3	0.7	1.1	3.5	67.7
10	VP043	VP043	CIMMYT	Non-QPM OPV	98	12	4.9	3.9	1.5	1.5	0.5	1.0	0.6	3.4	67.0
20	Local Check	Local Check	Various	Local Check	89	14	4.7	3.4	1.3	1.3	0.7	1.1	0.8	2.7	67.8
2	WS202	WS202	Western Seed	Non-QPM OPV	86	14	4.6	3.3	1.5	1.5	0.3	0.7	0.9	2.9	67.6
Maturity group average															
					103	10	5.2	3.9	1.8	1.8	0.6	0.9	0.9	3.6	67.6
Entries with anthesis date > 68 days															
15	ZM523	ZM523	CIMMYT	Non-QPM OPV	122	5	6.6	4.6	2.4	2.4	0.4	0.6	1.2	3.6	70.0
17	02SADVE	02SADVE	CIMMYT	Non-QPM OPV	117	6	5.8	4.3	1.9	1.9	0.7	0.9	0.9	3.8	68.5
18	02SADVE2	02SADVE2	CIMMYT	Non-QPM OPV	100	10	4.6	3.8	2.2	2.2	0.4	0.6	1.0	3.4	68.5
9	VP042	VP042	CIMMYT	Non-QPM OPV	99	11	6.3	4.0	1.7	1.7	0.4	0.6	0.9	3.5	68.8
Maturity group average															
					100	8	5.9	4.2	2.1	2.1	0.5	0.7	1.0	3.6	68.9
Mean															
					100	10	5.15	3.70	1.75	1.75	0.55	0.91	0.91	3.46	66.6
LSD (0.05)															
					16	4	1.09	0.38	0.46	0.46	0.34	0.36	0.28	1.09	0.7
Min															
					56	5	2.94	2.07	0.37	0.37	0.21	0.59	0.62	1.78	60.2
Max															
					122	18	6.84	4.60	2.44	2.44	0.96	1.45	1.25	4.85	70.0
NumSignificantSites															
					19	19	2	8	2	2	1	1	3	1	23

EPOP05: Results of evaluation of early maturing OPVs from CIMMYT, South Africa and Western Seed across 30 sites in eastern and southern Africa, 2004/05.
Individual sites results on pages 26-30 (Tables 3C-3G). Color legend on page 3.

Table 3B

Entry	Name	Pedigree	Origin	Comments	Across		Ear Position	Lodging		Ear Rot	GLS	P.sorg	E.tarc	Grain Text	MSV	
					RelGY	Rank		Root	Stem							
					Avg	StdDev	d	cm	%	%	%	1-5	1-5	1-5	1-5	
Entries with anthesis date between 60 - 63 days																
6	ZM305	ZM305	CIMMYT	Non-QPM OPV	92	13	52.6	188.3	0.41	10.9	5.8	1.8	1.7	2.4	7.5	2.5
1	WS103	WS103	Western Seed	Non-QPM OPV	56	18	60.2	158.8	0.48	17.5	15.4	1.5	1.8	2.2	2.9	3.4
Maturity group average																
Entries with anthesis date between 63 - 66 days																
11	VP047	VP047	CIMMYT	Non-QPM OPV	113	8	64.1	167.9	0.42	7.2	5.1	1.5	1.5	2.7	3.1	2.0
5	ZM307	V032	CIMMYT	Non-QPM OPV	107	9	64.9	180.9	0.42	4.6	7.2	1.5	1.7	2.0	2.8	2.4
8	VP041	VP041	CIMMYT	Non-QPM OPV	106	10	63.8	173.4	0.44	4.9	13.7	1.7	1.8	2.6	2.6	2.1
4	SAM63	SAM63	South Africa	Non-QPM OPV	91	13	65.0	167.5	0.44	4.9	6.8	1.5	1.4	2.1	3.1	2.4
19	SynG15QSR	SynG15QSR	CIMMYT	QPM OPV	71	18	66.2	174.9	0.47	5.0	7.5	1.5	2.1	3.1	3.5	2.2
Maturity group average																
Entries with anthesis date 66-68 days																
7	ZM401	Syn01E2	CIMMYT	Non-QPM OPV	116	7	66.7	181.7	0.45	3.0	12.4	1.5	2.0	2.3	3.1	2.1
13	ZM521	ZM521	CIMMYT	Non-QPM OPV	110	8	68.0	186.0	0.48	5.3	16.1	1.5	1.5	3.0	2.9	2.5
16	01SADVI	01SADVI	CIMMYT	Non-QPM OPV	111	8	68.0	188.0	0.43	1.5	12.3	1.5	1.5	2.5	2.8	2.6
12	ZM421	ZM421	CIMMYT	Non-QPM OPV	109	9	67.4	179.5	0.45	9.8	17.1	1.5	1.6	2.2	2.2	1.9
14	ZM423	ZM423	CIMMYT	Non-QPM OPV	104	9	68.2	185.6	0.48	4.1	9.3	1.5	1.7	1.9	2.8	2.5
3	01SynZimE	01SynZimE	Zimbabwe	Non-QPM OPV	102	10	67.7	179.6	0.48	6.0	16.9	1.5	1.8	2.2	2.9	2.1
10	VP043	VP043	CIMMYT	Non-QPM OPV	98	12	67.0	182.1	0.49	4.1	16.2	1.5	1.4	2.3	3.0	2.5
20	Local Check	Local Check	Various	Local Check	89	14	67.8	188.3	0.54	5.7	13.1	1.5	1.5	2.0	3.7	3.5
2	WS202	WS202	Western Seed	Non-QPM OPV	86	14	67.6	176.9	0.49	7.7	14.9	1.5	1.4	2.3	2.7	2.4
Maturity group average																
Entries with anthesis date > 68 days																
15	ZM523	ZM523	CIMMYT	Non-QPM OPV	122	5	70.0	192.8	0.50	4.6	15.8	1.5	1.6	2.1	3.0	2.1
17	02SADVE	02SADVE	CIMMYT	Non-QPM OPV	117	6	68.5	188.8	0.48	3.1	5.0	1.5	1.1	1.9	2.9	2.1
18	02SADVE2	02SADVE2	CIMMYT	Non-QPM OPV	100	10	68.5	181.8	0.46	3.1	12.1	1.5	1.5	1.7	2.6	2.3
9	VP042	VP042	CIMMYT	Non-QPM OPV	99	11	68.8	183.8	0.44	4.8	12.5	1.5	1.5	2.1	3.2	2.5
Maturity group average																
Mean																
					100	10	66.6	179.3	0.46	6.2	12.2	1.5	1.5	2.3	2.8	2.4
LSD (0.05)																
					16	4	0.7	6.2	0.04	4.4	5.8	0.2	0.3	0.3	0.3	0.4
Min																
					56	5	60.2	158.8	0.41	1.5	5.0	1.5	1.3	1.7	1.9	1.9
Max																
					122	18	70.0	192.8	0.54	29.3	17.5	1.8	2.1	3.3	3.7	3.5
NumSignificantSites																
					19	19	23	10	6	4	4	1	1	4	2	3

ILPOP05: Results of evaluation of intermediate to late maturing OPVs from CIMMYT, South Africa, Pannar, Western Seed Co and Nelson Genetics across 37 sites in eastern and southern Africa, 2004/05
Individual sites results on pages 31-36 (Tables 4C-4H). Color legend on page 3. Table 4A

Entry	Name	Pedigree	Origin	Comments	RelIGY	Across			Agro-Ecological Zone: Southern Africa							Managed	Anth		
						%	Avg	StdDev	Mid Alt		Mid Alt Humid		Lowland Trop		Highlands				
									E Africa	W Africa	A	B	C	Dry	E			F	G
Entries with anthesis date between 65 - 69 days																			
11	98SADVI	01SynZimIL	CIMMYT	Non-QPM OPV	108	6	5.5	2.3	1.9	1.9	2.1	1.2	4.5	1.2	68.3				
10	01SynZimIL	Tanzania	Zimbabwe	Non-QPM OPV	100	7	4.7	4.4	2.4	1.4	2.2	0.9	4.6	0.9	68.3				
5	TMV-1 DR C1	WS 909	Tanzania	Non-QPM OPV	96	6	4.7	4.3	2.3	1.2	1.6	4.1	1.0	67.3					
1	WS 909	MSIRI3C	Western Seed	Non-QPM OPV	94	6	5.2	3.9	2.2	1.4	1.8	3.3	1.2	68.0					
7	MSIRI3C		Mauritius	Non-QPM OPV	89	6	4.4	3.9	1.9	1.5	1.7	3.1	1.1	66.8					
Maturity group average																			
					98	6	5.1	4.3	2.2	1.5	1.8	3.9	1.1	66.1					
Entries with anthesis date between 69 - 72 days																			
15	03SADVI	02SADVL	CIMMYT	Non-QPM OPV	119	6	6.3	5.0	1.9	1.9	2.2	3.7	1.5	70.3					
13	ZM721	Afric1	CIMMYT	Non-QPM OPV	116	7	5.8	3.1	2.6	1.1	2.0	3.7	1.4	71.3					
2	Afric1		Nelson Genetics	Non-QPM OPV	119	8	7.2	5.9	2.7	1.7	1.2	4.6	1.5	70.7					
12	ZM625		CIMMYT	Non-QPM OPV	116	8	5.9	3.7	3.8	1.6	1.5	2.8	1.5	70.0					
6	KILIMA DR C1		Tanzania	Non-QPM OPV	104	11	6.1	3.9	2.3	1.5	1.4	4.4	1.2	71.5					
19	VP046		CIMMYT	Non-QPM OPV	107	12	6	5.5	4.7	2.5	1.4	2.5	3.6	0.9	70.4				
24	KilaleGLS/Ecuador/GLSC0		Various	Local Check	96	15	5.7	4.4	1.8	1.5	1.6	3.4	1.4	70.7					
22	SZSYN01		CIMMYT	Non-QPM OPV	97	6	4.9	4.4	1.9	1.1	2.0	5.0	1.2	68.7					
23	SYN[SZE]ite01		CIMMYT	Non-QPM OPV	96	15	5.1	4.1	2.1	1.4	1.9	3.7	1.2	71.5					
3	Nelson's Choice		Nelson Genetics / Capstone Seeds	Non-QPM OPV	89	7	5.8	3.9	1.1	1.1	1.3	2.6	1.2	71.6					
20	OBATANPA-ZMSR		CIMMYT	QPM OPV	89	17	4.6	4.2	2.1	0.9	1.6	3.6	0.9	69.9					
8	SAM4		Angola	Non-QPM OPV	88	18	4.9	4.0	2.0	1.2	1.7	3.6	0.9	70.4					
Maturity group average																			
					103	12	5.6	4.7	2.3	1.4	1.7	3.9	1.2	70.7					
Entries with anthesis date > 72 days																			
16	ZM623		CIMMYT	Non-QPM OPV	113	8	6.1	5.1	2.6	1.4	1.8	4.2	1.1	72.7					
14	02SADVL2		CIMMYT	Non-QPM OPV	114	8	5.7	3.8	2.5	1.3	1.3	4.2	1.3	72.3					
17	VP044		CIMMYT	Non-QPM OPV	107	11	6	5.7	4.8	3.7	1.5	4.2	0.9	72.1					
18	VP045		CIMMYT	Non-QPM OPV	100	12	6	5.6	3.8	2.6	1.7	4.4	1.0	73.1					
4	Okavango		Capstone Seeds	Non-QPM OPV	82	17	5.4	4.4	1.9	1.0	1.2	4.0	0.8	71.9					
21	PAN11		Pannar	Non-QPM OPV	91	3	4.9	4.0	2.2	1.3	1.5	4.0	1.0	72.4					
9	SAM1066		South Africa	Non-QPM OPV	69	22	4.4	3.5	1.9	0.8	1.7	3.7	0.9	73.0					
Maturity group average																			
					97	14	5.4	4.5	2.2	1.3	1.5	4.1	1.0	73					
Mean																			
					100	13	5.46	4.54	2.27	1.41	1.67	3.97	1.15	70.7					
LSD (0.05)																			
					13	4	0.87	0.47	0.34	0.49	0.56	0.87	0.34	0.6					
Min																			
					6	3	4.36	3.43	1.38	0.81	0.44	2.60	0.75	66.8					
Max																			
					119	22	6.99	5.55	3.10	1.84	2.52	5.51	1.76	73.1					
NumSignificantSites																			
					22	22	22	22	22	22	22	22	22	22	22				

ILP005: Results of evaluation of intermediate to late maturing OPVs from CIMMYT, South Africa, Pannar, Western Seed Co and Nelson Genetics across 37 sites in eastern and southern Africa, 2004/05. Individual sites results on pages 31-36 (Tables 4C-4H). Color legend on page 3. Table 4B

Entry	Name	Pedigree	Origin	Comments	RelIG		Across		Ear	Lodging		Ears/Plant	Husk Cover	Ear Rot	GLS	P-sorg	Etlure	Grain Text	MSV	
					%	StdDev	Avg	Rank		Root	Stem									Plant
Entries with anthesis date between 66 - 69 days																				
11	96SADVI		CIMMYT	Non-OPM OPV	108	9	6	69.3	172.2	0.46	14.0	8.8	0.85	4.8	1.0	1.7	1.4	2.1	2.7	2.7
10	01SynZimIL		Zimbabwe	Non-OPM OPV	100	13	7	68.3	172.4	0.40	16.0	10.1	0.78	7.8	2.9	1.4	1.5	2.3	2.5	2.7
5	TMV-1 DR C1		Tanzania	Non-OPM OPV	96	15	6	67.3	178.8	0.43	15.7	9.4	0.83	2.9	3.3	2.1	2.0	2.2	2.3	1.8
1	WS 909		Western Seed	Non-OPM OPV	94	15	6	69.0	170.6	0.41	16.7	7.8	0.83	8.5	1.5	1.8	1.7	2.3	2.7	2.3
7	MSIRI3C		Mauritius	Non-OPM OPV	89	18	6	66.8	160.8	0.45	1.7	2.9	0.83	7.7	0.3	1.9	1.7	2.3	2.5	1.7
Maturity group average																				
Entries with anthesis date between 69 - 72 days																				
15	03SADVI		CIMMYT	Non-OPM OPV	119	6	6	70.3	170.4	0.44	15.7	10.4	0.89	3.8	1.0	1.4	1.5	2.0	2.5	2.5
13	ZM721		CIMMYT	Non-OPM OPV	116	7	7	71.3	176.2	0.44	14.1	9.6	0.89	3.8	1.0	1.4	1.5	2.0	2.5	2.5
2	Afric1		Nelson Genetics	Non-OPM OPV	119	8	7	70.7	183.4	0.45	10.3	10.3	0.72	5.2	1.1	1.9	1.7	2.0	2.3	2.0
12	02SADVI		CIMMYT	Non-OPM OPV	116	8	6	70.0	175.9	0.41	10.6	9.4	0.84	4.2	2.0	1.3	1.3	2.2	2.9	2.3
6	KILIMA DR C1		Tanzania	Non-OPM OPV	104	11	6	71.5	182.2	0.45	12.4	9.2	0.74	2.9	1.6	1.4	1.5	1.7	2.3	2.7
19	VP046		CIMMYT	Non-OPM OPV	107	12	6	70.4	180.5	0.45	14.3	13.0	0.80	7.8	1.1	1.5	1.5	2.2	2.3	2.3
24	KilaleGLSEcuadorGLSC0 F2		CIMMYT	Non-OPM OPV	101	13	7	71.1	182.4	0.46	14.3	8.4	0.74	9.1	0.3	1.3	1.4	2.0	2.8	2.7
25	Local Check		Various	Local Check	96	15	7	70.7	179.6	0.46	13.4	11.4	0.75	8.6	0.2	1.3	1.6	2.1	2.8	2.9
22	SZSYN01		CIMMYT	Non-OPM OPV	97	15	6	69.7	171.4	0.43	17.7	11.9	0.82	5.9	1.1	1.7	1.6	1.9	2.7	2.6
23	SYN(SZ/E)ie01		CIMMYT	Non-OPM OPV	96	15	6	71.5	174.0	0.42	12.4	8.1	0.82	3.5	3.5	1.4	1.3	2.3	2.3	2.7
3	Nelson's Choice		Nelson Genetics / Capstone Seeds	Non-OPM OPV	89	16	7	71.6	175.4	0.46	12.2	12.7	0.73	8.1	1.4	1.4	2.0	2.0	1.1	2.5
20	OBATANPA-ZMSR		CIMMYT	OPM OPV	89	17	6	69.9	174.3	0.41	16.6	8.9	0.80	7.1	3.5	1.8	1.8	2.3	2.8	2.6
8	SAM4		Angola	Non-OPM OPV	88	18	5	70.4	169.8	0.48	20.1	14.3	0.80	9.1	0.3	1.9	1.7	2.2	2.5	2.4
Maturity group average																				
Entries with anthesis date > 72 days																				
16	ZM623		CIMMYT	Non-OPM OPV	113	8	4	72.7	176.2	0.44	10.1	8.3	0.84	5.5	0.7	1.3	1.3	2.0	2.9	2.4
14	02SADVL2		CIMMYT	Non-OPM OPV	114	8	5	72.3	178.3	0.45	10.6	8.7	0.83	6.4	0.8	1.4	1.4	2.0	2.4	2.5
17	VP044		CIMMYT	Non-OPM OPV	107	11	6	72.1	183.6	0.49	13.2	11.3	0.82	4.6	1.9	1.7	1.4	2.0	2.4	2.4
18	VP045		CIMMYT	Non-OPM OPV	100	12	6	73.1	181.4	0.46	11.1	11.0	0.75	7.8	1.0	1.9	1.4	2.2	3.0	2.3
4	Okavango		Capstone Seeds	Non-OPM OPV	82	17	9	71.9	198.2	0.51	19.9	15.0	0.85	7.4	2.4	2.5	1.6	1.8	1.3	1.9
21	PAN11		Pannar	Non-OPM OPV	91	17	3	72.4	168.8	0.46	13.4	9.9	0.83	5.1	0.9	1.6	1.4	2.3	2.7	2.6
9	SAM1066		South Africa	Non-OPM OPV	69	22	4	73.0	167.4	0.43	9.0	10.2	0.81	3.9	1.7	1.5	1.7	2.3	3.0	1.9
Maturity group average																				
Mean					101	12	5	72.4	180.7	0.47	13.2	10.7	0.8	5.8	1.4	1.5	1.5	2.1	2.8	2.6
LSD (0.05)					100	13	6	70.7	176.1	0.45	14.9	10.9	0.79	5.7	1.7	1.6	1.6	2.1	2.6	2.4
Min					13	4	1	6.6	5.0	0.03	5.7	3.4	0.06	4.6	1.7	0.3	0.4	0.3	0.3	0.5
Max					69	6	3	66.8	160.8	0.40	8.8	7.8	0.59	1.1	0.2	1.2	1.3	1.7	1.8	1.4
NumSignificantSites					119	22	9	73.1	198.2	0.51	34.0	25.9	0.93	12.7	4.6	2.1	2.0	2.8	3.5	4.0

ElIHYB05: Results of evaluation of early to intermediate maturing hybrids from CIMMYT, Zimbabwe, Monsanto, Nelson Genetics, Panmar, Pioneer, Seed Co and Zamseed across 33 sites in eastern and southern Africa, 2004/05. Individual sites results on pages 37-41 (Tables 5C to 5G). Color legend on page 3. Table 5A

Entry	Name	Pedigree	Origin	Comments	RelQY		Across		Rank		Agro-Ecological Zone: Southern Africa						Anth Date	
					%	Avg	StdDev	Mid Alt		Mid Alt Humid		Lowland Trop		Highlands		Managed Stress		
								E. Africa	u/ha	Warm	A	B	C	D	E	F		N Stress
Entries with anthesis date between 60 - 60 days																		
27	CZH04012	CZL04008/CZL04009//ZEWBc1F2	CIMMYT	Non-QPM Hybrid	95	24	10	3.9	4.2	3.3	0.7	4.2	4.2	1.2	4.1	1.1	3.4	60.3
Entries with anthesis date between 63 - 66 days																		
18	CZH04001	CML395/CML444//CZL04001	CIMMYT	Non-QPM Hybrid	116	12	7	8.8	8.3	3.9	1.4	4.6	0.7	4.3	1.7	3.8	65.9	
6	SC403	SC403	SeedCo	Non-QPM Hybrid	107	15	8	5.0	3.2	4.0	1.0	4.3	0.7	3.7	1.5	3.6	63.6	
20	CZH04004	CML312/CML442//CZL04004	CIMMYT	Non-QPM Hybrid	110	15	10	3.1	5.2	4.0	1.0	4.3	0.7	3.7	1.5	3.0	66.0	
23	CZH03005	CML395/CML444//CZL03004	CIMMYT	Non-QPM Hybrid	109	15	10	5.8	4.9	3.9	1.3	3.7	1.4	3.9	0.9	3.8	65.1	
25	CZH02002	CML443/CML445/CZL02002	CIMMYT	Non-QPM Hybrid	108	17	9	4.8	4.8	3.5	1.1	4.0	1.1	4.2	0.8	3.4	65.7	
8	SC525	SC525	SeedCo	Non-QPM Hybrid	104	17	9	5.1	3.3	3.4	1.0	4.5	1.3	4.5	0.9	3.3	65.0	
31	CZH04016	CML312/CML442//CZL04010	CIMMYT	Non-QPM Hybrid	102	17	9	5.2	4.8	3.8	0.8	4.3	1.2	4.9	0.8	3.4	65.4	
7	SC411	SC411	SeedCo	Non-QPM Hybrid	98	19	8	4.9	3.1	3.6	1.1	3.6	0.4	4.7	1.2	3.7	65.5	
3	DK6031	DK6031	Monsanto	Non-QPM Hybrid	101	19	9	5.4	4.9	3.0	0.8	4.1	0.8	4.8	1.0	3.0	66.4	
33	CZH01028	CML181/CML182//CZL01006	CIMMYT	CPM Hybrid	100	20	10	3.7	4.8	3.7	0.9	3.5	0.6	3.9	1.0	2.9	66.1	
19	CZH04002	CML312/CML442//CZL04002	CIMMYT	Non-QPM Hybrid	102	20	10	5.0	4.6	3.9	1.3	2.7	0.6	3.1	0.9	2.9	63.4	
35	Local Check2	Local Check2	Various	Local Check2	94	21	12	6.1	4.4	2.8	1.1	2.6	0.9	4.6	0.8	4.5	66.3	
30	CZH04014	CZL00034/CZL00007//CZL99014	CIMMYT	Non-QPM Hybrid	98	21	12	4.4	4.4	3.1	1.1	4.5	0.8	3.9	1.0	2.6	65.1	
22	CZH03002	CML312/CML442//CZL03002	CIMMYT	Non-QPM Hybrid	97	21	8	5.3	5.0	3.3	0.8	3.5	0.9	4.0	1.0	2.6	65.2	
12	ZAM04333	ZAM04333	ZamSeed	Non-QPM Hybrid	95	21	9	4.3	4.8	3.7	0.9	4.3	0.8	3.2	1.0	3.5	64.4	
15	013WH10	013WH10	Zimbabwe	Non-QPM Hybrid	96	22	10	4.4	4.3	3.7	0.9	3.7	0.9	4.3	1.2	3.1	63.4	
9	SC513	SC513	SeedCo	Non-QPM Hybrid	91	23	9	5.3	4.4	3.3	0.6	4.0	0.3	4.9	1.3	3.9	66.4	
2	CAP341NG	CAP341NG	Nelson Genetics / Capstone Seeds	Non-QPM Hybrid	87	23	9	4.7	4.7	3.3	0.9	4.4	0.3	4.3	0.8	3.5	65.5	
34	Local Check1	Local Check1	Various	Local Check1	74	25	12	6.4	4.5	1.8	0.6	3.0	0.3	2.7	0.7	3.0	66.5	
29	CZH04013	CZL00034/CZL00007//CZL99014/CZL00008	CIMMYT	Non-QPM Hybrid	89	25	6	4.9	4.6	3.2	1.0	3.8	0.8	4.2	0.7	1.7	64.3	
Entries with anthesis date > 67 days																		
14	ZAM04510	ZAM04510	ZamSeed	Non-QPM Hybrid	108	12	9	6.1	5.8	4.2	0.7	4.5	0.4	3.7	1.4	3.6	67.1	
1	WH403	WH403	Western Seed	Non-QPM Hybrid	108	12	11	3.2	5.5	4.2	1.1	3.9	0.1	4.8	3.1	3.6	68.5	
32	CZH04017	CML395/CML444//CZL04011	CIMMYT	Non-QPM Hybrid	105	12	11	6.0	5.2	4.0	1.2	5.1	0.2	3.3	0.6	3.3	68.7	
4	DKC80-33	DKC80-33	Monsanto	Non-QPM Hybrid	108	14	8	6.1	5.4	3.5	0.9	4.4	2.7	5.1	1.4	3.5	67.5	
21	CZH04005	CML395/CML444//CZL03005//CZL02003	CIMMYT	Non-QPM Hybrid	106	14	8	5.4	5.3	4.0	1.0	3.2	0.5	5.1	0.9	3.8	67.5	
26	CZH03010	CML441/CML442//CZL03007	CIMMYT	Non-QPM Hybrid	102	14	9	5.5	5.1	4.1	1.2	5.2	2.8	4.3	4.3	4.3	68.0	
17	013WH07	013WH07	Zimbabwe	Non-QPM Hybrid	100	15	11	5.6	5.5	4.1	0.8	3.9	0.9	5.2	0.9	4.0	70.3	
5	30G97	30G97	Pioneer	Non-QPM Hybrid	104	16	8	3.3	5.0	3.9	1.0	4.3	0.4	4.7	3.3	2.8	68.6	
16	013WH31	013WH31	Zimbabwe	Non-QPM Hybrid	99	16	12	5.0	5.1	3.8	0.9	5.2	0.2	3.5	0.7	4.0	69.1	
10	ZAM02309	ZAM02309	ZamSeed	Non-QPM Hybrid	97	17	10	5.9	5.3	3.6	0.6	4.7	0.2	4.9	1.3	2.7	68.4	
24	CZH03007	CML395/CML444//CZL03006	CIMMYT	Non-QPM Hybrid	107	17	10	5.8	4.8	4.0	1.1	3.9	0.3	4.4	1.2	3.2	68.4	
11	ZAM03512	ZAM03512	ZamSeed	Non-QPM Hybrid	95	18	10	3.4	5.3	3.7	0.7	4.1	0.2	3.3	0.8	3.4	67.8	
28	CZH03006	CML395/CML444//CZL03005	CIMMYT	Non-QPM Hybrid	96	18	11	6.0	5.2	4.0	0.8	3.2	0.5	4.9	0.7	3.3	67.2	
13	ZAM04334	ZAM04334	ZamSeed	Non-QPM Hybrid	90	21	10	6.1	4.6	3.1	0.8	4.8	0.0	4.5	0.8	3.6	68.6	
Maturity group average																		
Mean					100	15	10	5.9	5.2	3.9	0.9	4.5	0.3	4.7	1.0	3.8	68.3	
LSD (0.05)					8	4	1	0.70	0.52	0.69	0.47	1.34	0.44	1.30	0.34	1.46	0.7	
Min					74	12	6	3.86	4.19	1.77	0.55	2.62	0.04	2.73	0.46	1.73	60.3	
Max					116	25	12	6.52	5.78	4.33	1.56	6.21	1.25	5.56	1.50	5.17	70.3	
NumSignificantSites																		
					19	19	19	3	6	2	2	1	1	1	1	2	1	28

EIH9B05: Results of evaluation of early to intermediate maturing hybrids from CIMMYT, Zimbabwe, Monsanto, Nelison Genetics, Panmar, Pioneer, Seed Co and Zamseed across 33 sites in eastern and southern Africa, 2004/05. Individual sites results on pages 37-41 (Tables 5C to 5G). Color legend on page 3.

Table 5B

Entry	Name	Pedigree	Origin	Comments	Across		Anth. Date	Ear. Position	Lodging Root	Lodging Stem	Earrel Plant	Husk Cover	Ear Rot	GLS	Pa.org	E.turc	Grain Text	PLS	
					RelYG	Rank													
Entries with anthesis date between 60 - 69 days																			
27	CZF04012	CZL04008/CZL04009/ZE9B61F2	CIMMYT	Non-OPM Hybrid	95	24	10	60.3	0.38	14.2	5.4	0.83	4.0	0.0	1.9	1.7	1.9	2.2	2.0
Maturity group average																			
95	24	10	60.3	0.38	14.2	5.4	0.83	4.0	0.0	1.9	1.7	1.9	2.2	2.0					
Entries with anthesis date between 63 - 66 days																			
18	CZF04001	CML395/CML444/CZL04001	CIMMYT	Non-OPM Hybrid	116	12	7	65.9	0.49	6.4	16.7	0.89	4.8	0.9	1.3	1.6	2.3	2.5	1.9
6	SC403	SC403	SeedCo	Non-OPM Hybrid	107	15	8	63.6	0.40	19.0	15.6	0.79	7.4	0.9	1.2	1.7	1.7	2.3	2.4
20	CZF04004	CML312/CML442/CZL04004	CIMMYT	Non-OPM Hybrid	110	15	10	66.0	0.42	7.7	7.7	0.82	7.4	0.9	1.5	1.7	1.9	2.1	1.8
23	CZF03005	CML395/CML444/CZL03004	CIMMYT	Non-OPM Hybrid	109	15	10	65.1	0.45	7.7	11.3	0.80	9.5	0.9	1.6	1.8	2.1	2.5	1.7
25	CZF02002	CML443/CML445/CZL02002	CIMMYT	Non-OPM Hybrid	108	17	9	65.7	0.45	8.6	10.1	0.82	4.5	2.4	1.4	1.7	1.7	2.1	2.3
8	SC525	SC525	SeedCo	Non-OPM Hybrid	104	17	9	65.0	0.44	7.1	10.1	0.83	6.8	1.0	1.6	1.5	1.8	2.5	1.7
31	CZF04016	CML312/CML442/CZL04010	CIMMYT	Non-OPM Hybrid	102	17	9	65.4	0.43	6.2	19.0	0.80	7.7	0.8	1.7	1.3	2.3	3.0	2.2
7	SC411	SC411	SeedCo	Non-OPM Hybrid	98	19	8	65.5	0.46	3.8	18.9	0.76	8.3	2.6	1.2	1.1	1.8	3.1	1.9
3	DK6031	DK6031	Monsanto	Non-OPM Hybrid	101	19	9	66.4	0.45	9.5	15.8	0.82	7.4	0.9	1.3	1.7	1.7	2.1	1.8
33	CZF01028	CML181/CML182/CZL01006	CIMMYT	OPM Hybrid	100	20	10	66.1	0.42	5.7	18.1	0.78	7.4	0.9	1.4	1.6	2.2	2.1	2.5
19	CZF04002	CML312/CML442/CZL04002	CIMMYT	Non-OPM Hybrid	102	20	10	63.4	0.41	5.4	11.5	0.78	7.3	0.9	1.7	1.1	2.1	1.5	1.5
35	Local Check2	Local Check2	Various	Local Check2	94	21	12	66.3	0.43	5.4	7.5	0.77	6.6	1.8	1.5	1.3	1.6	2.2	1.7
30	CZF04014	CZL00034/CZL0007/CZL96014	CIMMYT	Non-OPM Hybrid	98	21	12	65.1	0.41	12.5	13.4	0.80	4.9	1.8	1.5	1.9	1.7	2.1	2.1
22	CZF03002	CML312/CML442/CZL03002	CIMMYT	Non-OPM Hybrid	97	21	8	65.2	0.43	5.1	15.7	0.82	12.6	0.9	1.6	1.9	2.8	1.4	1.4
12	ZAM04333	ZAM04333	ZamSeed	Non-OPM Hybrid	95	21	9	64.4	0.40	8.8	7.7	0.82	13.1	0.9	1.3	1.9	1.8	2.1	1.6
15	013WH10	013WH10	Zimbabwe	Non-OPM Hybrid	96	22	10	63.4	0.44	12.5	10.8	0.84	7.9	3.5	1.4	1.9	2.2	3.0	2.1
9	SC513	SC513	SeedCo	Non-OPM Hybrid	91	23	9	66.4	0.45	11.7	17.5	0.71	4.5	1.7	1.1	1.6	1.1	2.8	2.0
2	CAP341NG	CAP341NG	Nelson Genetics / Capstone Seeds	Local Check1	87	23	9	65.5	0.44	7.2	11.2	0.79	3.5	4.0	1.5	1.6	2.1	1.7	1.7
34	Local Check1	Local Check1	Various	Local Check1	74	25	12	66.5	0.45	9.5	8.4	0.68	6.3	0.0	1.2	1.7	2.1	2.3	1.5
29	CZF04013	CZL00034/CZL00007/CZL96014/CZL00008	CIMMYT	Non-OPM Hybrid	89	25	6	64.3	0.42	10.1	20.1	0.78	8.9	3.6	1.7	1.8	1.9	2.8	2.0
Maturity group average																			
98	19	9	65.3	0.43	7.5	13.4	0.79	7.8	1.8	1.4	1.6	1.9	2.6	1.8					
Entries with anthesis date > 67 days																			
14	ZAM04510	ZAM04510	ZamSeed	Non-OPM Hybrid	108	12	9	67.1	0.44	7.9	9.7	0.76	8.3	0.0	1.3	1.9	1.9	2.7	2.2
1	WH403	WH403	Western Seed	Non-OPM Hybrid	108	12	11	68.5	0.46	9.9	10.1	0.78	8.2	0.0	1.7	1.7	1.9	2.6	1.9
32	CZF04017	CML395/CML444/CZL04011	CIMMYT	Non-OPM Hybrid	105	12	11	68.7	0.50	13.5	13.5	0.89	5.5	0.0	1.8	1.7	2.1	2.4	1.3
4	DKC80-33	DKC80-33	Monsanto	Non-OPM Hybrid	108	14	8	67.5	0.46	14.4	12.9	0.85	7.5	0.0	1.3	1.5	1.7	2.9	1.5
21	CZF04005	CML395/CML444/CZL03006/CZL02003	CIMMYT	Non-OPM Hybrid	106	14	8	67.5	0.47	8.0	14.6	0.80	11.7	0.0	1.8	1.6	2.4	2.5	1.7
26	CZF03010	CML441/CML442/CZL03007	CIMMYT	Non-OPM Hybrid	102	14	9	68.0	0.44	7.7	18.1	0.76	5.5	0.0	1.6	1.3	2.3	2.1	1.7
17	013WH07	013WH07	Zimbabwe	Non-OPM Hybrid	100	15	11	70.3	0.47	7.3	10.1	0.74	5.5	0.0	1.3	1.6	2.0	3.1	3.2
5	30C87	30C87	Pioneer	Non-OPM Hybrid	104	16	8	68.6	0.45	8.0	13.2	0.81	4.0	0.8	1.2	1.1	1.1	2.5	1.8
16	013WH31	013WH31	Zimbabwe	Non-OPM Hybrid	99	16	12	69.1	0.45	7.3	13.4	0.68	3.1	0.0	1.6	2.0	1.1	2.7	1.6
10	ZAM02309	ZAM02309	ZamSeed	Non-OPM Hybrid	97	17	10	68.4	0.47	13.3	12.4	0.75	6.4	2.4	1.3	1.6	1.9	3.7	1.5
24	CZF03007	CML395/CML444/CZL03006	CIMMYT	Non-OPM Hybrid	107	17	10	68.4	0.47	6.4	10.1	0.79	7.9	0.0	1.3	1.5	2.0	2.0	1.4
11	ZAM03512	ZAM03512	ZamSeed	Non-OPM Hybrid	95	18	10	67.8	0.46	7.3	10.1	0.69	9.2	0.9	1.3	1.5	1.7	2.4	1.6
28	CZF03006	CML395/CML444/CZL03005	CIMMYT	Non-OPM Hybrid	96	18	11	67.2	0.45	6.2	17.2	0.72	4.9	0.0	1.5	1.7	1.7	2.5	1.6
13	ZAM04334	ZAM04334	ZamSeed	Non-OPM Hybrid	90	21	10	68.6	0.46	7.0	11.9	0.71	3.1	2.3	1.4	1.7	2.0	2.3	1.5
Maturity group average																			
102	15	10	68.3	0.46	7.6	13.4	0.75	5.5	0.9	1.4	1.6	1.9	2.5	1.6					
18	18	10	65.3	0.44	7.8	13.2	0.78	6.8	1.4	1.4	1.4	1.6	1.9	2.5	1.6				
8	4	1	0.7	0.02	4.8	4.6	0.06	3.2	3.0	0.3	0.4	0.3	0.4	0.3	0.7				
Min	74	12	60.3	0.38	2.8	4.7	0.66	2.9	0.0	1.1	1.0	1.4	1.8	1.2					
Max	115	25	70.3	0.50	14.4	22.1	0.88	20.8	8.9	1.8	2.1	2.6	3.7	2.5					
NumSignificantSites																			
19	19	19	28	18	8	9	10	6	1	5	3	3	5	1	3	3	3	5	1

ILHYB05

ILHYB05: Results of evaluation of intermediate to late maturing hybrids from CIMMYT, South Africa, Monsanto, Nelson Genetics, Pannar, Pioneer, Seedco and Zamseed across 28 sites in eastern and southern Africa, 2004/05. Individual sites results on pages 42-47 (Tables 6C-6H). Color legend on page 3. Table 6A

Agro-Ecological Zone: Southern Africa

Table 6A

Entry	Name	Pedigree	Origin	Comments	Across			Mid AR			Mid AR Humid			Lowland Tropical			Highlands		Managed Stress		Anth
					RelGY	Rank	StdDev	E. Africa	Warm	Hot	Dry	Humid	Dry			N Stress	Low pH	Date			
					%	Avg	StdDev	t/ha	A	B	C	D	E	F	t/ha	t/ha	d				
Entries with anthesis date between 68 - 71 days																					
28	SAM17	SAM17	South Africa	Non-QPM	118	16	15	7.8	4.9	3.1	2.5	4.6	3.0	2.2	3.8	4.6	68.5				
29	CZH00025	CML440/CML444/CML445	CIMMYT	Non-QPM	100	24	15	7.4	5.2	4.2	2.4	2.8	2.6	5.3	1.2	3.3	70.9				
31	CZH03012	CML395/CML444/CZL03009	CIMMYT	Non-QPM	101	26	14	6.9	5.4	5.0	2.9	1.8	2.6	4.8	1.4	2.9	71.1				
46	CZH04003	CML312/CML442/CZL04003	CIMMYT	Non-QPM	102	29	14	6.9	5.8	4.2	2.8	3.5	1.9	4.8	1.6	3.3	69.8				
3	CAP311	CAP311	Nelson Genetics / Capstone Seeds	Non-QPM	89	35	13	6.1	5.1	4.2	2.3	3.5	2.3	4.6	1.2	3.2	68.8				
Maturity group average					102	26	14	7.0	5.8	4.6	2.6	3.5	2.5	5.1	1.4	3.5	69.8				
Entries with anthesis date between 72 - 73 days																					
30	CZH02019	CML444/CML197/CML488	CIMMYT	Non-QPM	114	15	11	6.9	5.5	5.4	2.8	3.8	2.5	4.6	1.1	4.3	73.1				
15	30G19	30G19	Pioneer	Non-QPM	105	19	13	6.8	6.2	5.7	2.7	4.5	1.5	5.0	1.1	5.3	73.1				
45	CZH03025	CZL03013/CML444/CZL00029/C ML390	CIMMYT	Non-QPM	106	20	10	8.2	6.0	5.8	2.4	4.6	2.3	4.6	1.4	4.4	73.2				
11	SC635	SC635	SeedCo	Non-QPM	107	20	9	8.6	5.9	5.9	2.5	5.8	2.0	4.2	1.2	4.1	72.6				
37	CZH04007	CML489/CML444/CZL04006	CIMMYT	Non-QPM	107	21	13	8.2	5.9	5.5	2.7	5.1	2.9	4.6	1.8	4.4	72.0				
33	CZH03022	CML312/CML444/CML488	CIMMYT	Non-QPM	105	22	13	8.4	6.1	5.2	3.1	3.5	3.5	4.4	1.0	5.9	72.3				
38	CZH04008	CML444/CML395/CZL04007	CIMMYT	Non-QPM	107	22	13	8.5	6.1	4.9	3.1	4.1	2.8	4.0	1.2	3.7	72.2				
35	CZH03030	CML444/CML395/CZL03014	CIMMYT	Non-QPM	104	22	15	5.9	5.8	5.7	2.7	2.6	1.8	5.8	1.7	2.7	72.2				
42	CZH04018	CML202/CML444/CZL04006	CIMMYT	Non-QPM	104	22	11	8.4	5.7	5.9	2.8	3.8	2.6	5.9	1.2	3.6	73.0				
18	ZAM03505	ZAM03505	ZamSeed	Non-QPM	99	25	12	7.6	5.7	5.6	2.5	3.0	1.8	4.7	0.8	6.0	73.2				
32	CZH03014	CML488/CML444/CML312/CML4 42	CIMMYT	Non-QPM	98	27	9	7.3	6.1	5.7	2.9	4.3	1.8	4.0	1.1	3.6	71.8				
39	CZH04009	CML488/CML441/CZL03007	CIMMYT	Non-QPM	98	28	13	7.6	5.1	6.0	2.4	4.4	2.3	4.6	1.4	3.9	71.7				
47	CZH01024	CZL01006/CML176/CML181	CIMMYT	QPM Hybrid	97	30	11	7.9	5.4	4.6	3.0	3.6	1.8	4.1	1.3	3.6	72.2				
44	CZH04020	CZL02014/CML197/CML488	CIMMYT	Non-QPM	90	30	13	8.5	5.3	5.7	2.0	4.6	1.2	4.1	1.1	3.9	73.1				
9	SC627	SC627	SeedCo	Non-QPM	94	32	14	7.8	5.6	4.8	1.7	4.2	1.2	3.0	1.2	3.2	73.0				
5	CAP441NG	CAP441NG	Nelson Genetics / Capstone Seeds	Non-QPM	89	34	13	6.6	5.0	4.5	2.4	3.8	2.0	4.2	0.9	3.5	71.6				
24	ZAM04316	ZAM04316	ZamSeed	Non-QPM	85	35	13	8.0	5.2	3.7	1.8	4.2	2.5	3.4	0.7	3.3	72.9				
6	DK8051	DK8051	Monsanto	Non-QPM	83	37	15	6.7	5.9	5.0	2.2	2.4	1.4	3.9	0.8	3.8	73.1				
Maturity group average					99	26	12	8.1	5.8	5.2	2.5	4.2	2.1	4.4	1.2	4.0	69.2				
Entries with anthesis date greater than 73 days																					
13	SC719	SC719	SeedCo	Non-QPM	124	9	12	8.7	5.8	5.4	3.5	4.8	2.7	4.1	1.3	6.7	76.5				
8	DKC80-73	DKC80-73	Monsanto	Non-QPM	115	14	13	9.6	6.2	5.6	3.5	4.6	1.2	5.1	1.6	4.7	73.9				
23	ZAM03530	ZAM03530	ZamSeed	Non-QPM	108	18	12	9.7	6.1	6.8	2.7	4.1	2.6	5.0	1.1	4.5	74.6				
21	ZAM03518	ZAM03518	ZamSeed	Non-QPM	106	19	13	8.8	6.1	6.8	2.6	4.5	1.5	5.0	0.8	4.8	75.2				
22	ZAM03508	ZAM03508	ZamSeed	Non-QPM	105	19	11	8.8	6.2	5.0	2.6	3.1	2.1	5.2	1.1	4.4	74.0				
2	WH502	WH502	Western Seed	Non-QPM	104	21	12	8.9	6.0	5.2	2.5	3.7	2.8	6.3	1.0	4.6	73.8				
43	CZH04019	CML395/CML444/CZL04006	CIMMYT	Non-QPM	107	22	12	8.7	6.1	5.6	3.1	4.9	1.9	4.1	0.9	3.8	73.5				
36	CZH04006	CZL04005/CML445/CML312	CIMMYT	Non-QPM	106	22	12	8.3	6.3	5.1	2.7	3.1	2.1	5.0	1.3	4.3	74.1				
1	WH505	WH505	Western Seed	Non-QPM	102	22	14	8.7	6.3	5.5	3.0	5.1	1.5	5.0	0.8	3.0	74.9				
26	013WH01	013WH01	Zimbabwe	Non-QPM	99	22	14	8.8	6.2	6.2	2.8	4.7	1.5	3.5	0.8	3.9	76.0				
19	ZAM04502	ZAM04502	ZamSeed	Non-QPM	103	23	13	7.7	6.4	5.8	2.5	4.4	1.7	3.4	1.3	3.6	74.7				
27	013WH03	013WH03	Zimbabwe	Non-QPM	97	24	15	7.0	6.3	7.1	2.6	4.3	2.0	5.0	0.8	3.9	74.3				
17	30V53	30V53	Pioneer	Non-QPM	96	24	14	6.9	6.1	5.6	2.3	3.4	1.5	4.2	1.0	4.5	75.0				
10	SC637	SC637	SeedCo	Non-QPM	102	25	15	8.4	6.0	4.2	2.3	5.0	2.5	4.4	1.0	4.5	74.4				
25	ZAM03538	ZAM03538	ZamSeed	Non-QPM	98	25	13	7.9	6.0	4.8	2.4	3.6	1.5	4.5	1.3	4.7	74.3				
20	ZAM04507	ZAM04507	ZamSeed	Non-QPM	99	26	12	8.0	5.6	6.1	3.5	4.1	1.6	3.9	1.1	4.0	74.5				
14	30N67	30N67	Pioneer	Non-QPM	94	26	14	7.6	6.0	6.0	2.6	4.2	1.8	3.9	0.9	3.8	75.5				
48	CZH99050	CML144/CML159/CML181	CIMMYT	QPM Hybrid	98	26	15	7.9	5.6	4.3	3.1	3.5	1.7	4.9	1.2	3.9	73.6				
34	CZH03029	CML444/CML395/CZL03015	CIMMYT	Non-QPM	101	27	12	7.5	5.7	4.8	2.9	3.8	1.7	5.2	1.0	4.5	73.8				
16	30B35	30B35	Pioneer	Non-QPM	96	27	12	8.2	5.5	6.6	2.6	4.3	1.6	4.2	1.0	4.5	73.9				
12	SC715	SC715	SeedCo	Non-QPM	94	28	15	8.3	6.0	7.0	2.0	4.2	1.2	4.3	1.0	3.7	77.0				
49	Local Check	Local Check	Various	Local Check	90	29	15	7.6	5.5	3.9	2.3	0.3	2.8	3.8	1.1	4.3	73.8				
41	CZH04011	CML444/CZL00003/CZL04005	CIMMYT	Non-QPM	96	30	15	9.0	5.5	4.8	2.8	2.6	1.5	4.7	1.2	3.2	75.2				
7	DK8071	DK8071	Monsanto	Non-QPM	94	31	13	7.4	5.2	5.9	2.2	4.1	1.5	5.4	1.4	3.4	76.3				
40	CZH04010	CML489/CML444/CZL04005	CIMMYT	Non-QPM	90	34	16	6.8	5.0	3.7	3.0	2.7	1.5	3.5	1.6	2.7	75.4				
4	CAP614	CAP614	Nelson Genetics / Capstone	Non-QPM	74	41	7	6.9	5.9	3.6	2.0	3.8	1.1	3.6	0.8	2.9	73.5				
Maturity group average					100	24	13	8.2	6.0	5.5	2.7	4.0	1.8	4.5	1.1	4.1	74.7				
Mean					100	25	13	8.02	5.86	5.31	2.62	4.05	1.98	4.53	1.14	3.97	73.4				
LSD (0.05)					9	6	2	1.19	0.52	1.30	0.82	1.28	0.78	1.44	0.45	1.22	0.6				
Min					74	9	7	6.15	4.82	2.63	1.88	0.34	1.05	2.99	0.65	2.88	68.5				
Max					124	41	16	9.76	7.28	7.38	3.54	6.41	3.00	6.24	1.75	5.88	77.0				
NumSignificantSites					21	21	21	3	7	1	2	1	1	1	2	2	20				

ILHYB05: Results of evaluation of intermediate to late maturing hybrids from CIMMYT, South Africa, Monsanto, Nelson Genetics, Pannar, Pioneer, Seedco and Zamseed across 28 sites in eastern and southern Africa, 2004/05. Individual sites results on pages 42-47 (Tables 6C-6H). Color legend on page 3.

Table 8B

Entry	Name	Origin	Comments	Across			Anth Date	Plant Height	Ear Position	Lodging		Ears/ Plant	Husk Cover	Ear Rot	GLS 1-5	P.org 1-5	E.burc 1-5	Grain Text	MSV 1-5
				RelGY	Rank					Root	Stem								
				%	Avg	StdDev													
Entries with anthesis date between 68 - 71 days																			
28	SAM17	South Africa	Non-QPM	118	16	15	68.5	196.0	0.42	4.0	11.6	0.95	2.1	3.1	1.8	1.7	1.8	2.2	1.8
29	CZH00025	CIMMYT	Non-QPM	100	24	15	70.9	180.0	0.46	10.7	11.2	0.89	8.9	2.3	1.3	1.2	2.3	2.7	2.2
31	CZH03012	CIMMYT	Non-QPM	101	26	14	71.1	182.4	0.42	8.6	7.7	0.91	8.8	2.2	1.6	1.4	2.1	2.7	2.1
46	CZH04003	CIMMYT	Non-QPM	102	29	14	69.8	181.9	0.40	4.4	4.8	0.90	9.7	2.2	1.7	1.4	2.1	3.3	2.0
3	CAP311	Nelson Genetics / Capstone Seeds	Non-QPM	89	35	13	68.8	182.8	0.44	6.6	6.6	0.88	10.4	4.1	2.3	1.4	2.2	3.3	3.0
Maturity group average				102	26	14	69.8	184.6	0.43	10.0	7.1	0.91	9.0	2.8	1.8	1.4	2.1	3.2	2.2
Entries with anthesis date between 72 - 73 days																			
30	CZH02019	CIMMYT	Non-QPM	114	15	11	73.1	197.8	0.48	7.5	11.4	0.89	6.3	5.1	1.4	1.3	1.8	2.8	2.2
15	30G19	Pioneer	Non-QPM	105	19	13	73.1	211.2	0.44	8.0	4.6	0.83	4.4	3.3	1.2	1.9	1.8	2.8	1.8
45	CZH03025	CIMMYT	Non-QPM	106	20	10	73.2	194.6	0.46	2.7	9.7	0.90	5.8	1.1	1.6	1.4	2.0	3.1	2.9
11	SC635	SeedCo	Non-QPM	107	20	9	72.6	201.2	0.48	5.2	19.2	0.84	11.0	3.7	1.3	1.9	1.9	3.8	1.9
37	CZH04007	CIMMYT	Non-QPM	107	21	13	72.0	199.4	0.45	8.6	6.5	0.91	8.5	2.7	1.3	1.2	2.1	3.2	1.1
33	CZH03022	CIMMYT	Non-QPM	105	22	13	72.3	193.9	0.48	7.3	9.9	0.86	6.5	5.8	1.7	1.2	1.9	3.0	1.8
38	CZH04008	CIMMYT	Non-QPM	107	22	13	72.2	200.8	0.47	5.9	11.2	0.89	4.0	2.6	1.5	1.5	2.0	3.7	1.7
35	CZH03030	CIMMYT	Non-QPM	104	22	15	72.2	194.6	0.44	6.9	8.7	0.89	7.6	1.5	1.7	1.3	1.8	2.9	1.9
42	CZH04018	CIMMYT	Non-QPM	104	22	11	73.0	200.1	0.47	8.6	19.8	0.85	8.0	2.3	1.6	1.4	1.9	3.2	3.8
18	ZAM03505	ZamSeed	Non-QPM	99	25	12	73.2	213.8	0.49	4.4	14.0	0.85	7.4	2.7	2.0	1.7	1.9	3.2	1.5
32	CZH03014	CIMMYT	Non-QPM	98	27	9	71.8	190.3	0.44	10.7	9.9	0.88	8.2	2.9	1.5	1.4	2.0	3.3	2.0
39	CZH04009	CIMMYT	Non-QPM	98	28	13	71.7	191.8	0.46	9.7	6.2	0.94	8.2	3.8	1.5	1.7	2.1	2.1	3.8
47	CZH01024	CIMMYT	QPM Hybrid	97	30	11	72.2	196.0	0.43	12.5	10.6	0.98	7.0	5.5	1.5	1.6	1.8	3.0	2.3
44	CZH04020	CIMMYT	Non-QPM	90	30	13	73.1	185.8	0.49	7.5	7.6	0.88	8.4	1.9	1.3	1.6	1.9	2.5	1.2
9	SC627	SeedCo	Non-QPM	94	32	14	73.0	201.5	0.47	3.7	8.4	0.84	6.9	4.7	1.4	1.7	1.9	3.3	1.6
5	CAP441NG	Nelson Genetics / Capstone Seeds	Non-QPM	89	34	13	71.6	199.7	0.48	3.8	14.6	0.87	6.3	3.3	1.7	2.1	2.1	2.1	2.3
24	ZAM04316	ZamSeed	Non-QPM	85	35	13	72.9	201.5	0.45	2.7	6.6	0.86	4.4	4.8	1.8	1.9	1.8	2.8	1.3
6	DK8051	Monsanto	Non-QPM	83	37	15	73.1	179.0	0.45	11.1	7.9	0.85	9.8	5.7	1.6	1.4	1.8	3.8	1.5
Maturity group average				99	26	12	72.6	197.4	0.46	7.0	11.8	0.89	7.9	3.0	1.5	1.5	1.9	3.2	1.7
Entries with anthesis date greater than 73 days																			
13	SC719	SeedCo	Non-QPM	124	9	12	76.5	226.5	0.52	3.8	7.8	0.87	4.4	1.3	1.5	1.4	1.7	2.8	2.1
8	DKC80-73	Monsanto	Non-QPM	115	14	13	73.9	185.6	0.44	4.6	12.7	0.95	3.6	2.5	1.5	1.3	1.9	3.5	2.4
23	ZAM03530	ZamSeed	Non-QPM	108	18	12	74.6	223.0	0.52	7.6	14.2	0.82	5.8	3.3	1.6	1.6	1.8	2.8	1.9
21	ZAM03518	ZamSeed	Non-QPM	106	19	13	75.2	230.3	0.52	5.4	13.0	0.80	5.8	3.2	1.4	1.8	2.0	2.7	1.7
22	ZAM03508	ZamSeed	Non-QPM	105	19	11	74.0	206.8	0.49	5.1	13.7	0.81	5.7	2.6	1.5	1.9	2.1	3.3	1.4
2	WH502	Western Seed	Non-QPM	104	21	12	73.8	207.8	0.49	1.8	2.3	0.89	5.7	3.7	2.1	1.9	1.8	3.7	1.9
43	CZH04019	CIMMYT	Non-QPM	107	22	12	73.5	203.8	0.47	10.4	18.6	0.87	6.0	1.7	1.4	1.4	2.0	3.1	1.1
36	CZH04006	CIMMYT	Non-QPM	106	22	12	74.1	202.0	0.43	5.8	6.0	0.87	6.5	1.7	1.5	1.1	1.8	2.5	2.3
1	WH505	Western Seed	Non-QPM	102	22	14	74.9	204.8	0.48	7.3	6.2	0.81	7.5	2.0	1.5	1.4	2.0	3.4	3.4
26	013WH01	Zimbabwe	Non-QPM	89	22	14	76.0	236.3	0.50	10.7	16.8	0.82	6.4	5.3	1.5	1.4	1.8	3.3	1.5
19	ZAM04502	ZamSeed	Non-QPM	103	23	13	74.7	212.2	0.49	7.4	14.1	0.87	8.5	3.3	1.5	1.5	1.9	3.6	1.7
27	013WH03	Zimbabwe	Non-QPM	97	24	15	74.3	220.3	0.50	3.9	6.9	0.82	4.6	4.8	1.8	1.8	2.1	3.5	2.8
17	30V53	Pioneer	Non-QPM	96	24	14	75.0	220.6	0.49	6.8	9.0	0.85	4.7	3.0	1.5	1.2	1.9	2.6	1.4
10	SC637	SeedCo	Non-QPM	102	25	15	74.4	216.6	0.47	4.3	15.7	0.83	4.3	4.2	1.5	1.4	1.8	3.2	1.2
25	ZAM03538	ZamSeed	Non-QPM	98	25	13	74.3	221.7	0.50	4.8	14.9	0.85	5.8	4.1	1.4	1.4	1.8	3.0	1.6
20	ZAM04507	ZamSeed	Non-QPM	99	26	12	74.5	214.5	0.49	9.5	18.8	0.86	6.7	2.7	1.3	1.3	2.2	3.5	1.5
14	30N67	Pioneer	Non-QPM	94	26	14	75.5	217.2	0.47	5.3	19.0	0.84	4.4	3.6	1.7	1.5	2.2	3.1	1.2
48	CZH99050	CIMMYT	QPM Hybrid	98	26	15	73.6	193.2	0.44	11.8	8.1	0.81	6.2	5.2	1.7	1.3	1.8	3.1	3.8
34	CZH03029	CIMMYT	Non-QPM	101	27	12	73.8	207.2	0.50	11.4	16.2	0.84	4.8	1.2	1.6	1.2	1.8	3.4	1.9
16	30B35	Pioneer	Non-QPM	96	27	12	73.9	206.9	0.46	9.3	13.7	0.86	4.1	1.4	1.3	1.3	1.7	3.1	1.5
12	SC715	SeedCo	Non-QPM	94	28	15	77.0	208.9	0.51	6.5	18.8	0.84	7.6	6.8	1.5	1.4	1.7	3.8	2.8
49	Local Check	Various	Local Check	90	29	15	73.8	197.0	0.46	12.3	13.4	0.83	3.7	3.1	1.8	1.1	1.8	2.8	2.1
41	CZH04011	CIMMYT	Non-QPM	96	30	15	75.2	209.7	0.47	3.9	6.0	0.80	5.5	2.7	1.4	1.3	1.8	3.6	2.6
7	DK8071	Monsanto	Non-QPM	94	31	13	76.3	195.8	0.48	11.1	14.8	0.85	4.5	1.7	1.5	1.3	1.9	2.5	2.3
40	CZH04010	CIMMYT	Non-QPM	90	34	16	75.4	196.3	0.45	5.5	6.0	0.89	6.8	2.3	1.6	1.3	1.8	3.3	2.1
4	CAP614	Nelson Genetics / Capstone Seeds	Non-QPM	74	41	7	73.5	190.4	0.47	4.5	14.2	0.83	5.1	3.5	1.5	2.0	1.9	3.3	2.8
Maturity group average				100	24	13	74.7	209.8	0.48	7.0	12.2	0.87	6.5	3.1	1.5	1.5	1.9	3.1	2.0
Mean				100	25	13	73.4	202.7	0.47	7.3	11.5	0.88	7.2	3.0	1.6	1.5	1.9	3.1	1.9
LSD (0.05)				9	6	2	0.6	5.3	0.02	4.6	4.7	0.05	2.5	2.2	0.4	0.4	0.3	0.4	1.1
Min				74	9	7	68.5	179.0	0.40	1.8	2.2	0.76	3.7	0.6	1.2	1.1	1.6	2.0	0.9
Max				124	41	16	77.0	236.3	0.52	21.6	28.9	1.00	15.8	10.6	2.3	2.2	2.9	4.3	4.3
NumSignificantSites				21	21	21	20	21	16	8	8	13	7	7	2	3	6	5	1

QHBY05: Results of evaluation of Quality Protein Maize Hybrids from CIMMYT and Seed Co and one OPV from CIMMYT across 25 sites in eastern and southern Africa, 2004/05. Individual site results on pages 48-51 (Tables 7C-7F). Color legend on page 3.

Table 7A

Entry	Name	Pedigree	Origin	Comments	Across		Mid Alt		Mid Alt Humid		Lowland Trop		Managed	Anth Date	
					RelGY	Rank	E Africa	W Warm	Hot	Dry	Humid	Dry			N Stress
					%	Avg	StdDev	A	B	C	D	E			uha
Entries with anthesis date between 62 - 63 days															
21	SC403	SC403	SeedCo	Non-QPM Hybrid	112	9	6	3.1	3.5	2.9	4.2	2.9	2.1	62.9	
1	SynG15CSR	SynG15CSR	CIMMYT	QPM OPV	68	23	3	2.5	2.4	2.4	2.8	2.3	0.9	63.4	
Maturity group average															
Entries with anthesis date between 65 - 69 days															
7	CZH04034	CML181dent/WW01408//CZL04021	CIMMYT	QPM Hybrid	112	8	4	5.8	4.0	3.0	4.9	2.6	1.7	68.0	
10	CZH04025	CML144/CML159//CZL04016	CIMMYT	QPM Hybrid	114	9	6	7.0	3.6	3.8	4.4	3.1	1.5	67.4	
22	SC635	SC635	SeedCo	Non-QPM Hybrid	112	9	7	6.2	3.9	2.8	5.3	2.2	1.2	67.4	
19	03C3490	03C3490	SeedCo	QPM Hybrid	105	10	8	5.6	3.7	3.1	5.2	2.2	1.0	68.1	
17	CZH04032	CML181dent/WW01408//CZL03018	CIMMYT	QPM Hybrid	107	11	7	7.9	3.5	2.7	3.8	1.9	1.5	68.3	
23	SC633	SC633	SeedCo	Non-QPM Hybrid	100	11	9	3.2	3.3	3.1	5.4	1.5	0.7	68.0	
11	CZH04026	GQL5/CML176//CZL04017	CIMMYT	QPM Hybrid	105	12	7	4.7	5.2	3.1	5.3	2.5	1.4	65.9	
8	CZH04023	CML144/CML159//CZL04014	CIMMYT	QPM Hybrid	104	12	6	4.6	5.4	2.3	4.6	2.7	1.3	66.9	
12	CZH04035	CML181dent/CML182//CZL04021	CIMMYT	QPM Hybrid	105	12	7	6.3	3.7	3.3	3.5	2.1	1.4	67.5	
16	CZH04031	CML181dent/CML182//CZL03018	CIMMYT	QPM Hybrid	101	13	6	5.3	2.9	2.9	3.3	2.3	1.5	67.5	
5	CZH03035	CML144/CZL03016//CZL04018	CIMMYT	QPM Hybrid	101	14	6	6.3	3.5	2.4	4.5	2.1	1.1	66.7	
2	CZH01031	CZL01005/CML181//CML176	CIMMYT	QPM Hybrid	98	14	7	5.7	3.3	3.6	4.2	2.2	1.7	68.3	
13	CZH01025	GQL5/CML176//CZL04019	CIMMYT	QPM Hybrid	102	14	8	5.1	3.0	3.0	4.5	2.9	1.1	65.9	
18	CZH04033	CML182/WW01408//CZL04021	CIMMYT	QPM Hybrid	96	16	6	4.9	3.2	2.6	4.0	2.3	1.7	68.7	
14	CZH04029	CML144/CML159//CZL04020	CIMMYT	QPM Hybrid	94	16	6	5.2	4.9	3.1	4.9	2.2	1.1	68.7	
Maturity group average															
Entries with anthesis date > 69 days															
20	03C2893	03C2893	SeedCo	QPM Hybrid	107	10	7	5.9	3.5	2.9	3.7	1.8	1.1	69.7	
6	CZH04021	CML144/CML159//CZL04012	CIMMYT	QPM Hybrid	98	12	7	5.8	3.0	3.3	4.8	2.3	0.8	69.2	
24	SC715	SC715	SeedCo	Non-QPM Hybrid	97	13	8	2.8	6.0	3.1	4.5	3.3	1.3	72.0	
25	Local Check	Local Check	Various	Local Check	90	14	8	3.3	5.8	3.1	0.2	2.2	1.1	69.4	
4	CZH03033	CML144/CML159//CZL03018	CIMMYT	QPM Hybrid	100	14	6	6.7	5.3	3.2	4.3	2.5	1.4	69.5	
9	CZH04024	CML144/CML159//CZL04015	CIMMYT	QPM Hybrid	96	14	5	4.7	5.5	2.8	5.2	2.2	1.1	70.1	
15	CZH04030	CML144/CML159//CZL04021	CIMMYT	QPM Hybrid	87	18	3	3.7	5.1	2.6	3.8	2.1	0.6	69.2	
Maturity group average															
Mean															
LSD (0.05)															
Min															
Max															
NumSignificantSites															

QHYB05: Results of evaluation of Quality Protein Maize Hybrids from CIMMYT and Seed Co and one OPV from CIMMYT across 25 sites in eastern and southern Africa, 2004/05. Individual site results on pages 48-51 (Tables 7C-7F). Color legend on page 3.

Table 7B

Entry	Name	Pedigree	Origin	Comments	Across		Plant		Ear		Lodging		Ears/		Husk	Cover	Ear	GLS	P.sorg	E.turc	Grain	MSY
					RelGY	Rank	Date	Height	Position	Root	Stem	Plant	#	%								
					Avg	StdDev	d	cm	0-1	%	%	%	%	%	%	%	%	1-5	1-5	1-5	1-5	1-5
Entries with anthesis date between 62 - 63 days																						
21	SC403	SC403	SeedCo	Non-OPM Hybrid	112	9	6	62.9	186.4	0.43	18.9	5.0	0.94	15.3	7.4	3.8	1.7	1.1	1.5	2.6	2.7	
1	SynG15QSR	SynG15QSR	CIMMYT	OPM OPV	68	23	3	63.4	167.7	0.40	22.4	11.0	0.87	2.1	6.2	2.3	2.7	2.1	1.5	2.6	2.6	
Maturity group average																						
Entries with anthesis date between 65 - 69 days																						
7	CZH04034	CML181denWW01408/CZL04021	CIMMYT	OPM Hybrid	112	8	4	68.0	189.6	0.49	18.8	15.8	1.01	13.7	6.2	1.4	1.4	1.4	1.6	2.8	3.0	
10	CZH04025	CML144/CML159/CZL04016	CIMMYT	OPM Hybrid	114	9	6	67.4	183.5	0.46	25.5	15.5	1.01	13.7	6.3	1.4	1.4	1.4	1.5	2.3	3.1	
22	SC635	SC635	SeedCo	Non-OPM Hybrid	112	9	7	67.4	190.4	0.48	18.0	15.1	0.90	13.5	2.1	1.5	1.5	1.7	1.5	1.7	2.3	
19	03C3490	03C3490	SeedCo	OPM Hybrid	105	10	8	68.1	193.4	0.47	19.5	17.2	0.95	22.5	4.0	1.3	1.7	1.7	1.6	2.8	2.3	
17	CZH04032	CML181denWW01408/CZL03018	CIMMYT	OPM Hybrid	107	11	7	68.3	179.9	0.47	14.8	17.2	1.00	18.0	3.1	1.1	1.1	1.7	1.5	2.8	3.2	
23	SC633	SC633	SeedCo	Non-OPM Hybrid	100	11	9	68.0	191.9	0.43	13.5	13.2	0.83	22.6	8.2	1.6	1.4	1.4	1.6	1.5	2.0	
11	CZH04026	QGL5/CML176/CZL04017	CIMMYT	OPM Hybrid	105	12	7	65.9	178.5	0.44	29.9	15.6	0.92	13.5	2.2	1.5	1.3	1.8	2.4	2.3	3.4	
8	CZH04023	CML144/CML159/CZL04014	CIMMYT	OPM Hybrid	104	12	6	66.9	184.0	0.45	29.9	18.4	1.04	15.5	5.8	1.9	1.5	1.6	2.4	2.4	3.4	
12	CZH04035	CML181denCML182/CZL04021	CIMMYT	OPM Hybrid	105	12	6	67.5	188.0	0.46	24.8	17.0	1.02	16.4	9.0	1.4	1.6	1.8	1.8	2.9	2.4	
16	CZH04031	CML181denCML182/CZL03018	CIMMYT	OPM Hybrid	101	13	6	67.5	181.3	0.44	21.0	8.4	1.02	17.2	3.5	1.7	1.7	1.2	2.7	3.0	2.4	
5	CZH03035	CML144/CZL03016/CZL03018	CIMMYT	OPM Hybrid	101	14	6	68.7	182.3	0.44	24.9	20.3	0.95	20.3	4.2	1.5	1.8	1.6	1.6	1.6	2.9	
2	CZH01031	CZL01005/CML181/CML176	CIMMYT	OPM Hybrid	98	14	7	68.3	178.4	0.46	23.4	12.4	0.95	20.3	4.7	1.4	1.3	1.8	1.8	2.9	2.7	
3	CZH01025	CZL01006/CML176/CML182	CIMMYT	OPM Hybrid	102	14	8	65.9	176.6	0.44	33.7	16.7	0.98	19.0	5.7	1.5	1.5	1.9	1.9	2.7	2.8	
13	CZH04028	QGL5/CML176/CZL04019	CIMMYT	OPM Hybrid	96	16	6	68.7	181.6	0.43	28.3	13.5	0.96	19.7	4.0	1.5	1.6	1.7	1.7	2.6	2.7	
18	CZH04033	CML182/W01408/CZL04021	CIMMYT	OPM Hybrid	94	16	6	68.7	184.2	0.47	17.4	16.6	0.94	20.5	8.5	2.0	2.0	2.0	2.6	2.7	2.7	
14	CZH04029	CML144/CML159/CZL04020	CIMMYT	OPM Hybrid	91	17	7	68.7	177.3	0.45	30.6	17.6	0.91	19.8	5.3	1.4	1.1	1.7	1.7	2.3	2.8	
Maturity group average																						
Entries with anthesis date > 69 days																						
20	03C2883	03C2883	SeedCo	OPM Hybrid	107	10	7	68.7	192.3	0.46	13.9	9.9	0.86	11.5	3.7	1.5	1.1	1.1	1.5	3.1	2.9	
6	CZH04021	CML144/CML159/CZL04012	CIMMYT	OPM Hybrid	98	12	7	69.2	194.7	0.46	17.6	18.8	0.88	9.4	4.7	1.7	2.1	1.8	2.6	2.8	2.8	
24	SC715	SC715	SeedCo	Non-OPM Hybrid	97	13	8	72.0	192.9	0.50	18.7	12.3	0.83	15.7	4.9	1.5	3.1	1.7	2.3	2.9	2.9	
25	Local Check	Local Check	Various	Local Check	90	14	8	69.4	181.2	0.48	12.2	8.7	0.81	8.0	3.4	1.5	1.7	2.1	2.9	2.4	2.4	
4	CZH03033	CML144/CML159/CZL03018	CIMMYT	OPM Hybrid	100	14	6	69.5	184.5	0.45	26.3	8.7	0.88	8.4	2.8	1.4	1.7	1.8	2.1	3.6	3.6	
9	CZH04024	CML144/CML159/CZL04015	CIMMYT	OPM Hybrid	96	14	5	70.1	200.7	0.46	28.3	14.3	0.89	10.1	5.1	1.3	1.5	1.8	2.5	3.2	3.2	
15	CZH04030	CML144/CML159/CZL04021	CIMMYT	OPM Hybrid	87	18	3	69.2	186.7	0.46	30.8	13.5	0.97	13.5	7.9	1.3	1.9	1.8	2.1	3.1	3.2	
Maturity group average																						
Mean					100	13	7	68.0	185.1	0.46	22.8	13.5	0.94	15.2	5.2	1.5	1.6	1.6	1.7	2.6	2.9	
LSD (0.05)					10	3	1	0.7	4.9	0.02	7.4	4.0	0.06	5.6	3.7	0.4	0.5	0.3	0.4	0.9	0.9	
Min					68	8	3	62.9	167.7	0.40	12.2	5.9	0.81	5.6	2.1	1.1	1.1	1.1	1.2	1.5	1.4	
Max					114	23	9	72.0	200.7	0.50	39.5	21.9	1.04	32.5	9.0	2.3	2.7	2.7	2.1	3.6	4.7	
NumSignificantSites					14	14	14	22	15	12	4	9	9	9	5	2	3	2	4	4	4	

6. Individual Site Results

EPOPO5: Results of evaluation of early maturing OPVs from CIMMYT, South Africa and Western Seed across 30 sites in eastern and southern Africa, 2004/05.

Table 3C

Entry	Name	Pedigree	Origin	Comments	Across			Mid Altitudes Eastern Africa - Grain Yields			Mid Altitude Humid Warm (Zone A) - Grain Yields						
					RelGY	Rank	StdDev	Grain/Yield	RankNo	#	Grain/Yield	RankNo	#	Grain/Yield	RankNo	#	
Entries with anthesis date between 60 - 63 days																	
6	ZM305		CIMMYT	Non-QPM OPV	92	13	3	5.1	11	5.2	11	5.1	10	3.3	14	6.6	12
1	WS103		Western Seed	Non-QPM OPV	56	18	3	2.9	20	3.5	19	2.4	20	2.1	20	7.0	9
Maturity group averages																	
Entries with anthesis date between 63 - 66 days																	
11	VP047		CIMMYT	Non-QPM OPV	113	8	5	5.9	6	6.1	6	5.7	5	3.9	9	6.4	14
5	ZM307		CIMMYT	Non-QPM OPV	107	9	5	5.7	6	6.2	5	5.2	6	3.7	11	4.3	20
8	VP041		CIMMYT	Non-QPM OPV	106	10	5	4.6	15	5.3	10	4.0	19	3.6	12	7.6	3
4	SAM63		South Africa	Non-QPM OPV	91	13	5	4.3	17	3.7	18	4.8	15	3.4	11	7.1	7
19	SyrG15QSR		CIMMYT	QPM OPV	71	18	2	3.7	19	3.3	20	4.1	18	2.5	18	5.9	17
Maturity group average																	
Entries with anthesis date 66-68 days																	
7	ZM401	Syr01E2	CIMMYT	Non-QPM OPV	116	7	4	5.6	7	5.0	12	6.1	2	4.1	7	7.5	5
13	ZM521		CIMMYT	Non-QPM OPV	110	8	4	5.4	9	5.7	8	5.1	9	4.1	8	7.5	4
16	01SADVI		CIMMYT	Non-QPM OPV	111	8	4	5.8	6	5.8	7	5.8	4	4.1	8	5.6	18
12	ZM421		CIMMYT	Non-QPM OPV	109	9	6	4.7	16	4.7	15	4.7	16	3.8	9	7.9	2
14	ZM423		CIMMYT	Non-QPM OPV	104	9	5	6.2	6	7.2	1	5.1	11	4.0	9	6.6	11
3	01SynZImE		Zimbabwe	Non-QPM OPV	102	10	5	5.3	8	5.5	9	5.2	7	3.9	9	7.4	6
10	VP043		CIMMYT	Non-QPM OPV	98	12	5	4.9	14	4.8	14	5.0	13	3.9	9	7.1	8
20	Local Check		Various	Local Check	89	14	6	4.7	15	4.6	16	4.9	14	3.4	14	6.5	13
2	WS202		Western Seed	Non-QPM OPV	86	14	4	4.6	13	4.1	17	5.1	8	3.3	15	8.2	1
Maturity group average																	
Entries with anthesis date > 68 days																	
15	ZM523		CIMMYT	Non-QPM OPV	122	5	5	6.8	2	6.8	2	6.9	1	4.6	4	6.2	15
17	02SADVE		CIMMYT	Non-QPM OPV	117	6	4	5.8	8	6.6	4	5.1	12	4.6	3	5.4	19
18	02SADVE2		CIMMYT	Non-QPM OPV	100	10	6	4.6	15	4.8	13	4.4	17	3.8	10	6.2	16
9	VP042		CIMMYT	Non-QPM OPV	99	11	6	6.3	3	6.7	3	5.8	3	4.0	10	6.8	10
Maturity group average																	
Mean					100	10	5	5.15	11	5.21	11	5.02	11	3.70	10	6.70	11
1-SD (0.05)					16	4	1	1.05	5	1.19	6	1.09	6	0.36	4	2.40	7
Min					55	5	2	2.94	2	3.19	1	2.42	1	2.07	1	4.32	1
Max					122	18	6	6.84	20	7.24	20	6.86	20	6.60	20	8.24	20
NumSignificantSites					19	19	19	2	2	1	1	1	1	8	8	8	0

EPO05: Results of evaluation of early maturing OPVs from CIMMYT, South Africa and Western Seed Co across 30 sites in eastern and southern Africa, 2004/05. Table 3D

Entry	Name	Across		Cela Ang		Malange Ang		Chlanga Ang		Maseru Les		Machache Les		ART Farm Harare Zim		Gwebi Zim		
		ReIGY	Rank	GrainYield	RankNo	GrainYield	RankNo	GrainYield	RankNo	GrainYield	RankNo	GrainYield	RankNo	GrainYield	RankNo	GrainYield	RankNo	
		%	Avg	StdDev	t/ha	#	t/ha	#	t/ha	#	t/ha	#	t/ha	#	t/ha	#	t/ha	#
Entries with anthesis date between 60 - 63 days																		
6	ZM305	92	13	3	2.1	14	1.3	10	2.0	10	2.4	10	1.1	16	7.0	18	8.0	12
1	WS103	56	18	3	0.8	20	0.8	19	1.1	18	1.8	18	0.4	20	5.3	20	3.7	19
	Maturity group average	74	16	3	1.5	17	1.0	15	1.6	14	2.1	14	0.8	18	6.1	19	4.8	18
Entries with anthesis date between 63 - 66 days																		
11	VP047	113	8	5	2.7	7	1.4	5	2.7	4	1.9	17	1.9	5	7.6	15	5.8	16
5	ZM307	107	9	5	2.2	12	1.2	12	1.5	16	3.1	6	2.3	2	8.6	12	5.9	15
8	VP041	106	10	5	2.5	10	1.8	2	1.9	11	3.1	4	1.5	8	8.4	13	5.9	14
4	SAM63	91	13	5	1.2	18	1.4	6	1.7	13	3.6	2	1.6	7	7.6	16	4.9	17
19	SynG15QSR	71	18	2	1.0	19	1.0	16	1.3	17	2.1	16	0.8	18	6.0	19	3.6	20
	Maturity group average	98	11	4	1.9	13	1.3	8	1.8	12	2.8	9	1.6	8	7.7	15	5.2	16
Entries with anthesis date 66-68 days																		
7	ZM401	116	7	4	2.8	8	1.6	3	2.4	8	4.2	1	1.7	6	8.4	6	8.4	10
13	ZM521	110	8	4	2.6	9	1.3	9	1.6	14	2.4	9	1.3	14	9.3	8	6.6	8
16	01SADVI	111	8	4	2.8	6	1.1	14	3.1	1	3.5	3	1.4	11	9.4	5	6.6	9
12	ZM421	109	9	6	2.2	12	1.8	1	2.1	8	2.1	14	0.6	19	8.4	14	6.8	6
14	ZM423	104	9	5	3.0	2	1.1	15	2.2	8	2.3	13	1.3	12	9.3	7	6.9	5
3	01SynZimE	102	10	5	2.9	5	1.2	11	2.2	7	2.1	15	1.3	13	9.3	9	6.8	7
10	VP043	98	12	5	2.1	15	1.2	13	1.6	15	1.4	19	2.0	4	8.7	11	7.0	4
20	Local Check	89	14	6	1.5	17	0.6	20	1.0	19	1.3	20	3.2	1	10.2	3	4.2	18
2	WS202	86	14	4	1.9	16	0.8	18	1.0	20	2.3	12	1.5	10	7.5	17	6.0	13
	Maturity group average	103	10	5	2.4	10	1.2	12	1.9	11	2.4	12	1.6	10	9.1	8	6.4	9
Entries with anthesis date > 68 days																		
15	ZM523	122	5	5	3.0	2	1.4	7	2.9	2	3.1	5	1.6	8	9.9	4	7.6	3
17	02SADVE	117	6	4	3.0	4	1.4	4	2.9	3	2.8	8	2.0	3	10.3	1	7.9	2
18	02SADVE2	100	10	6	3.0	1	1.3	8	1.7	12	2.9	7	0.9	17	9.0	10	6.4	11
9	VP042	89	11	6	2.4	11	0.9	17	2.4	5	2.4	11	1.2	15	10.2	2	7.9	1
	Maturity group average	109	6	5	2.8	5	1.3	9	2.5	6	2.8	8	1.4	11	9.9	4	7.4	4
	Mean	100	10	5	2.28	10	1.22	11	1.95	11	2.55	11	1.48	11	8.58	11	6.12	11
	LSD (0.05)	18	4	1	0.98	6	0.45	6	1.08	6	1.71	6	0.78	6	1.42	6	1.17	6
	Min	58	5	2	0.34	1	0.62	1	0.96	1	1.32	1	0.43	1	5.28	1	3.59	1
	Max	122	18	6	3.03	20	1.83	20	3.14	20	4.15	20	3.22	20	10.30	20	7.92	20
	NumSignificantSites	19	19	19	1	1	1	1	1	1	0	1	1	1	1	1	1	1

EPOP05: Results of evaluation of early maturing OPVs from CIMMYT, South Africa and Western Seed Co across 39 sites in eastern and southern Africa, 2004/05.

Table 3E

Entry	Name	Mid Altitude Humid Warm (Zone A) - Grain Yields				Mid Altitude Humid Hot (Zone B) - Grain Yields				Mid Altitude Dry (Zone C) - Grain Yields												
		Mount Makulu Zam	Golden Valley Zam	Zamsseed Farm Zam	Across	Across	Katrin Tan	Susauendanga Moz	Across	Across	Makoholi Zim											
RelGY	Rank	GrainYield	RankNo	u/ha	#	GrainYield	RankNo	u/ha	#	GrainYield	RankNo	u/ha	#									
	%	Avg	StdDev	u/ha	#	u/ha	#	u/ha	#	u/ha	#	u/ha	#									
Entries with anthesis date between 60 - 63 days																						
6	ZM305	92	13	3	3.5	18	7	3.1	16	1.7	12	3.1	12	0.2	12	0.5	12	0.5	12	2.9	14	
1	WS103	56	18	3	2.7	20	0.4	18	20	0.9	20	1.6	20	0.1	19	0.2	20	0.2	20	2.0	20	
	Maturity group average	74	18	3	3.1	19	0.5	13	2.4	1.3	16	2.4	16	0.2	16	0.3	16	0.3	16	2.5	17	
Entries with anthesis date between 63 - 66 days																						
11	VP047	113	8	5	5.5	2	0.5	11	3.3	1.7	12	3.1	13	0.2	10	0.6	9	0.6	9	2.4	18	
5	ZM307	107	9	5	4.9	5	3.2	10	3.4	1.8	8	3.2	11	0.3	4	0.8	3	0.8	3	3.1	11	
8	VP041	108	10	5	3.8	17	0.6	9	3.1	1.7	11	3.0	14	0.3	7	0.7	4	0.7	4	3.2	10	
4	SAM63	91	13	5	4.7	8	0.9	1	4.3	6	1.6	2.9	15	0.2	8	0.6	8	0.6	8	3.2	9	
19	SynG15QSR	71	18	2	3.1	19	0.4	19	2.8	1.4	18	2.6	18	0.2	18	0.4	14	0.4	14	2.1	19	
	Maturity group average	98	11	4	4.4	10	0.6	10	3.4	1.6	12	2.9	14	0.2	9	0.8	8	0.8	8	2.8	13	
Entries with anthesis date 66-68 days																						
7	ZM401	116	7	4	4.4	11	0.4	17	4.5	1.8	10	3.6	7	0.2	13	0.7	6	0.7	6	3.4	7	
13	ZM521	110	8	4	5.4	3	0.8	3	4.7	2.0	10	3.9	4	0.2	16	0.8	11	0.8	11	3.4	6	
16	01SADVI	111	8	4	4.1	13	0.8	4	4.2	2.0	10	3.7	6	0.2	14	0.6	10	0.6	10	2.8	17	
12	ZM421	109	9	6	4.9	4	0.5	12	3.9	2.1	6	4.0	3	0.2	9	1.0	1	1.0	1	3.2	8	
14	ZM423	104	9	5	4.2	12	0.5	13	3.6	1.8	8	3.4	9	0.3	6	0.8	2	0.8	2	2.8	15	
3	01SynZimE	102	10	5	4.6	9	0.3	20	3.4	1.4	20	3.7	5	0.3	3	0.3	19	0.3	19	3.4	5	
10	VP043	98	12	5	4.7	7	0.9	2	4.3	5	1.5	2.8	16	0.2	11	0.5	13	0.5	13	3.1	12	
20	Local Check	89	14	6	3.9	14	0.5	14	2.6	1.3	20	2.6	19	0.1	20	0.7	7	0.7	7	3.9	1	
2	WS202	86	14	4	3.9	15	0.6	8	3.8	1.5	16	2.8	17	0.2	15	0.3	18	0.3	18	2.8	16	
	Maturity group average	103	10	5	4.5	10	0.6	10	3.9	1.8	11	3.4	10	0.2	12	0.8	10	0.8	10	3.2	10	
Entries with anthesis date > 68 days																						
15	ZM523	122	5	5	5.8	1	0.8	5	4.5	2.4	2	4.6	1	0.3	2	0.4	14	0.4	14	3.6	3	
17	02SADVE	117	6	4	4.9	6	0.5	16	4.8	1.9	7	3.8	8	0.3	5	0.7	5	0.7	5	3.6	2	
18	02SADVE2	100	10	6	4.4	10	0.5	15	3.4	2.2	2	4.0	2	0.3	1	0.4	17	0.4	17	3.5	4	
8	VP042	99	11	6	3.8	16	0.8	6	3.5	1.1	14	3.3	10	0.2	17	0.4	16	0.4	16	3.0	13	
	Maturity group average	109	8	5	4.7	8	0.6	11	4.1	2.1	6	3.9	5	0.3	6	0.5	13	0.5	13	3.4	6	
	Mean	100	10	5	4.35	11	0.59	11	3.65	1.75	11	3.27	11	0.23	11	0.55	10	0.55	10	3.06	11	
	LSD (0.05)	16	4	1	1.36	6	0.52	3	1.16	0.46	5	0.92	6	0.06	6	0.34	6	0.34	6	1.01	6	
	Min	56	5	2	2.69	1	0.34	1	1.62	1	0.37	2	1.39	1	0.14	1	0.21	1	0.21	1	2.03	1
	Max	122	18	6	5.76	20	0.89	20	4.81	2.44	20	4.59	20	0.31	20	0.95	20	0.95	20	3.88	20	
	NumSignificantSites	19	19	19	1	1	0	0	1	2	2	1	2	1	1	1	1	1	1	1	0	

EPOP05: Results of evaluation of early maturing OPVs from CIMMYT, South Africa and Western Seed Co across 30 sites in eastern and southern Africa, 2004/05. Table 3F

Entry	Name	Across			Mid Altitude Dry (Zone C) - Grain Yields				Lowland Tropical Dry (Zone E) - Grain Yields				Highlands (Zone F) - Grain Yields					
		RelIGY	Rank	StdDev	Kadoma Zim	Makoholi Zim	Baka Mal	Across	Chiredzi Zim	Nanga Zam	Mahobong Les	GrainYield	RankNo	GrainYield	RankNo	GrainYield	RankNo	
Entries with anthesis date between 60 - 63 days																		
6	ZM305	92	13	3	0.5	12	11	13	3.8	18	1.0	10	1.0	10	1.7	5	4.0	7
1	WS103	56	18	3	0.2	20	1.2	9	4.0	15	1.1	5	1.1	5	1.8	4	3.0	14
Maturity group average																		
74		74	16	3	0.3	16	1.1	11	3.9	17	1.0	8	1.0	8	1.8	5	3.5	11
Entries with anthesis date between 63 - 66 days																		
11	VP047	113	8	5	0.6	9	1.3	7	5.6	4	1.0	7	1.0	7	2.1	3	4.1	6
5	ZM307	107	9	5	0.8	3	1.3	5	5.6	6	1.2	2	1.2	2	1.0	15	2.8	15
8	VP041	106	10	5	0.7	4	1.2	10	4.9	9	1.5	1	1.5	1	1.4	9	3.1	13
4	SAM63	91	13	5	0.6	8	1.0	14	6.0	2	1.0	8	1.0	8	2.1	2	4.5	2
19	SynG15QSR	71	18	2	0.4	14	1.3	6	4.6	12	0.8	14	0.8	14	0.8	19	2.3	20
Maturity group average																		
98		98	11	4	0.6	8	1.2	8	5.3	7	1.1	6	1.1	6	1.5	10	3.4	11
Entries with anthesis date 66-68 days																		
7	ZM401	116	7	4	0.7	6	1.5	2	5.8	7	1.1	3	1.1	3	1.0	14	4.4	4
13	ZM521	110	8	4	0.6	11	0.9	19	3.7	18	1.1	6	1.1	6	0.8	18	2.8	16
16	01SADVI	111	6	4	0.6	10	1.4	4	4.8	10	0.8	17	0.6	17	1.1	13	3.5	11
12	ZM421	109	9	6	1.0	1	0.9	17	3.8	17	0.9	11	0.8	11	1.4	8	3.7	10
14	ZM423	104	9	5	0.8	2	0.9	18	4.3	14	0.9	13	0.9	13	1.2	12	3.4	12
3	01SynZimE	102	10	5	0.3	19	1.0	16	6.1	1	0.7	16	0.7	16	1.7	6	2.6	19
10	VP043	98	12	5	0.5	13	1.3	8	5.8	3	1.0	9	1.0	9	0.9	16	3.8	8
20	Local Check	89	14	6	0.7	7	1.1	12	4.3	13	1.1	4	1.1	4	1.4	7	4.6	1
2	WS202	86	14	4	0.3	18	1.1	11	4.6	11	0.7	15	0.7	15	1.4	10	2.6	18
Maturity group average																		
103		103	10	5	0.6	10	1.1	12	4.8	11	0.9	10	0.9	10	1.2	12	3.5	11
Entries with anthesis date > 68 days																		
15	ZM523	122	5	5	0.4	14	0.7	20	3.9	16	0.6	18	0.6	18	1.2	11	4.1	5
17	02SADVE	117	6	4	0.7	5	1.0	15	5.6	5	0.9	12	0.8	12	0.9	17	3.7	9
18	02SADVE2	100	10	6	0.4	17	1.8	1	5.2	8	0.8	20	0.6	20	2.1	1	4.4	3
8	VP042	99	11	6	0.4	16	1.5	3	3.6	20	0.6	19	0.6	19	0.6	20	2.7	17
Maturity group average																		
109		109	8	5	0.5	13	1.3	10	4.6	12	0.7	17	0.7	17	1.2	12	3.7	9
100	Mean	100	10	5	0.55	10	1.18	11	4.78	11	0.91	11	0.91	11	1.33	11	3.53	11
16	LSD (0.05)	16	4	1	0.34	6	0.67	6	2.10	6	0.36	6	0.36	6	1.01	6	1.80	6
56	Min	56	5	2	0.21	1	0.74	1	3.59	1	0.59	1	0.59	1	0.62	1	2.34	1
122	Max	122	18	6	0.96	20	1.77	20	6.05	20	1.45	20	1.45	20	2.09	20	4.58	20
19	NumSignificantSites	19	19	19	1	0	0	0	0	0	1	1	1	1	0	0	0	0

EP0105: Results of evaluation of early maturing OPVs from CIMMYT, South Africa and Western Seed Co across 30 sites in eastern and southern Africa, 2004/05.

Table 3G

Entry	Name	Across	Rank	MSV - Grain Yields			N Stress - Grain Yields			Low pH - Grain Yields			Zone E			N Stress			Low pH							
				GrainYield	RankNo	#	GrainYield	RankNo	#	GrainYield	RankNo	#	GrainYield	RankNo	#	Leaf	Plant	Senes	Leaf	Plant	Senes	Leaf	Plant	Senes	ASI	ASI
Entries with anthesis date between 60 - 63 days																										
6	ZM305	92	13	3	5.9	15	8	14	1.2	17	10	18	0.7	14	10	0.4	10	2.8	17	0.62	6.6	-1.3	0.55	7.1	3.0	2.3
1	WS103	56	18	3	1.2	20	0.7	17	1.3	16	0.6	20	0.5	17	0.2	18	1.8	20	0.76	7.3	-1.3	0.42	7.7	1.7	1.7	
Maturity group average																										
74		16	3	3.5	18	0.7	15	1.2	17	0.8	19	0.6	16	1.6	0.3	14	2.3	19	0.69	6.9	-1.3	0.48	7.4	2.3	2.0	
Entries with anthesis date between 63 - 66 days																										
11	VP047	113	8	5	7.2	8	1.1	5	1.9	2	1.3	15	1.0	8	0.5	5	4.7	1	0.72	6.3	3.3	0.64	6.8	4.7	1.7	
5	ZM307	107	9	5	7.4	6	0.9	10	1.6	4	1.7	6	0.6	15	0.4	11	3.6	8	0.76	6.0	1.7	0.72	6.9	2.3	1.7	
8	VP041	106	10	5	8.7	12	1.0	9	1.7	5	1.6	8	0.9	9	0.4	12	3.9	5	0.84	6.0	0.7	0.85	7.1	2.3	1.7	
4	SAM63	91	13	5	5.5	16	0.7	17	1.1	19	1.9	3	0.8	12	0.2	19	3.3	15	0.70	5.8	2.7	0.78	7.2	3.0	1.7	
19	SynG15QSR	71	16	2	5.7	17	0.7	17	1.2	18	0.9	18	0.7	13	0.2	20	2.6	19	0.59	5.7	2.3	0.62	7.1	1.3	1.7	
Maturity group average																										
98		11	4	6.5	12	0.9	11	1.5	10	1.5	10	0.8	11	0.3	13	3.6	10	0.72	6.0	2.1	0.88	7.0	2.7	1.7		
Entries with anthesis date 66-69 days																										
7	ZM401	116	7	4	7.5	5	1.0	7	1.5	12	1.5	12	1.0	5	0.6	3	4.6	2	0.70	5.8	2.0	0.76	6.1	2.3	1.3	
13	ZM521	110	8	4	7.3	7	1.2	7	1.6	7	2.0	2	1.5	1	0.3	14	3.9	4	0.73	5.7	1.7	0.74	6.5	1.7	2.3	
16	01SADVI	111	8	4	6.2	3	1.0	7	1.6	11	1.4	14	1.0	6	0.5	4	3.7	7	0.50	5.1	4.3	0.73	6.1	5.3	2.0	
12	ZM421	109	9	6	7.6	4	1.0	8	1.6	8	1.7	7	0.8	16	0.7	1	3.4	13	0.66	5.5	2.3	0.73	6.8	1.7	1.7	
14	ZM423	104	9	5	7.0	10	0.8	15	1.8	10	1.6	11	0.5	18	0.2	17	4.2	3	0.59	5.9	4.7	0.68	5.7	2.0	2.0	
3	01SynZimE	102	10	5	6.5	13	1.1	8	1.7	6	1.5	13	1.3	3	0.3	15	3.5	11	0.50	6.0	3.7	0.64	6.4	3.0	2.3	
10	VP043	98	12	5	6.3	14	0.6	14	0.9	20	1.7	5	0.4	20	0.6	2	3.4	14	0.60	5.8	3.7	0.65	6.9	4.0	1.7	
20	Local Check	89	14	8	3.2	19	0.8	13	1.5	13	1.1	17	0.4	19	0.4	7	2.7	18	0.84	5.1	2.3	0.48	6.2	3.0	1.3	
2	WS202	86	14	4	5.9	16	0.9	9	1.6	9	1.8	4	0.9	10	0.4	9	2.9	16	0.59	5.7	2.7	0.61	6.4	2.7	1.3	
Maturity group average																										
103		10	5	6.6	10	0.9	10	1.5	11	1.6	9	0.8	11	0.4	8	3.6	10	0.61	5.6	3.0	0.67	6.3	2.9	1.8		
Entries with anthesis date > 69 days																										
15	ZM523	122	5	5	9.2	1	1.2	3	1.9	1	1.6	9	1.4	2	0.4	6	3.6	9	0.38	5.3	6.7	0.80	5.1	3.0	2.0	
17	02SADVE	117	6	4	8.3	2	0.9	12	1.3	15	1.2	16	1.0	7	0.4	13	3.8	6	0.65	5.2	3.3	0.67	5.6	2.3	2.0	
16	02SADVE2	100	10	6	7.1	9	1.0	7	1.8	3	2.1	1	0.9	11	0.4	8	3.4	12	0.54	5.8	8.3	0.78	6.9	3.3	1.7	
9	VP042	89	11	6	7.0	10	0.9	11	1.4	14	1.6	10	1.1	4	0.3	16	3.5	10	0.33	5.1	8.7	0.59	5.8	4.0	2.0	
Maturity group average																										
109		8	5	7.9	6	1.0	8	1.8	8	1.6	8	1.1	6	0.4	11	3.6	11	0.48	5.3	7.3	0.71	5.9	3.2	1.9		
Main		109	10	5	6.54	10	0.91	11	1.50	11	1.60	11	0.85	11	0.33	11	3.46	11	0.62	5.6	3.2	0.66	6.5	2.8	1.5	
LS0 (0.05)		16	4	1	1.89	9	2.26	4	0.34	6	0.20	6	0.41	6	0.25	8	1.09	6	0.23	6.7	5.6	9.19	6.7	2.7	1.0	
Min		56	5	2	1.16	1	0.62	3	0.85	1	0.60	1	0.46	1	0.15	1	1.78	1	0.33	5.1	1.3	0.42	5.1	1.1	1.1	
Max		122	16	6	9.22	20	1.25	17	1.93	20	2.08	20	1.46	20	0.65	20	4.65	20	0.64	7.3	6.7	0.80	7.7	5.3	2.3	
NormSignificantStress																										
19		19	19	19	1	1	3	3	1	0	0	1	1	1	1	1	1	1	1	1	0	0	1	1	0	0

ILPOP05: Results of evaluation of intermediate to late maturing OPVs from CIMMYT, South Africa, Panmar, Western Seed Co and Nelson Genetics across 37 sites in eastern and southern Africa, 2004/05.

Entry	Name	Pedigree	Origin	Comments	Across			Across			Across			Across			Across			Across					
					RelGY	Rank	StdDev	t/ha	GrainYield	RankNo	#	t/ha	GrainYield	RankNo	#	t/ha	GrainYield	RankNo	#	t/ha	GrainYield	RankNo	#	t/ha	GrainYield
Entire with anthesis date between 66 - 69 days																									
11	98SADVI	98SADVI	CIMMYT	Non-OPM	108	9	6	55	14	5.4	11	7.4	9	3.8	21	5.1	8	3.0	9	2.1	12				
10	01SynZmil	01SynZmil	Zimbabwe	Non-OPM	100	13	7	5.7	12	5.3	12	7.8	5	3.9	20	4.4	14	3.0	10	1.9	18				
5	TWA-1 DR C1	TWA-1 DR C1	Tanzania	Non-OPM	96	15	6	4.7	19	4.3	21	5.3	24	4.4	12	4.3	14	2.8	13	2.4	2				
1	WS 908	WS 908	Western Seed	Non-OPM	94	15	6	5.2	15	4.1	23	6.7	17	4.9	6	3.9	18	2.2	23	2.2	5				
7	MSIR3C	MSIR3C	Mauritius	Non-OPM	89	18	6	4.4	21	3.8	24	5.1	25	4.3	13	3.6	21	2.4	21	2.6	1				
Maturity group average																									
Entire with anthesis date between 69 - 72 days																									
15	03SADVI	03SADVI	CIMMYT	Non-OPM	119	6	6	6.3	5	5.8	7	7.9	4	5.1	4	5.0	8	3.9	3	2.2	4				
13	ZM721	02SADVL	CIMMYT	Non-OPM	116	7	7	5.8	11	5.7	8	7.9	3	3.7	22	5.1	7	3.5	4	2.3	3				
2	Afrc1	Afrc1	Nelson Genetics	Non-OPM	119	8	7	7.0	1	6.2	2	9.2	1	5.6	1	5.6	7	5.5	1	1.8	20				
12	02SADVI	02SADVI	CIMMYT	Non-OPM	116	8	6	5.9	9	5.1	16	7.8	6	5.0	5	5.3	6	3.0	11	2.1	8				
6	KILIMA DR C1	KILIMA DR C1	Tanzania	Non-OPM	104	11	6	6.1	7	6.4	1	7.2	11	4.6	8	4.9	10	2.3	22	2.0	17				
19	VPO46	VPO46	CIMMYT	Non-OPM	107	12	6	5.5	13	5.1	15	6.5	18	4.8	7	4.7	11	3.2	7	2.1	9				
24	KilimGLS/EcuadorGLSC0	KilimGLS/EcuadorGLSC0 F2	CIMMYT	Non-OPM	101	13	7	5.8	10	6.0	4	7.2	12	4.3	14	5.0	8	3.4	5	1.9	19				
25	Local Check	Local Check	Various	Local Check	96	15	7	5.7	12	6.0	5	7.1	13	4.0	19	4.4	15	1.6	25	1.8	22				
22	SZSYN01	SZSYN01	CIMMYT	Non-OPM	97	15	6	4.9	17	5.3	13	5.3	23	4.2	16	4.4	14	2.7	16	2.2	7				
23	SYNISZ/Eth01	SYNISZ/Eth01	CIMMYT	Non-OPM	95	15	6	5.1	18	4.2	22	6.7	16	4.3	15	4.1	19	2.8	12	2.1	10				
3	Nelson's Choice	Nelson's Choice	Nelson Genetics / Capstone Seeds	Non-OPM	89	16	7	5.8	9	5.4	10	7.5	7	4.5	10	3.9	18	2.5	18	1.8	23				
20	OBATANPA-ZMSR	OBATANPA-ZMSR	CIMMYT	OPM OPV	89	17	6	4.6	21	3.2	25	7.0	15	3.6	23	4.2	15	2.5	19	1.8	21				
8	SAM4	SAM4	Angola	Non-OPM	88	18	5	4.9	17	4.5	19	5.7	22	4.4	11	4.0	17	2.7	14	2.2	6				
Maturity group average																									
Entire with anthesis date > 72 days																									
16	ZM23	ZM23	CIMMYT	Non-OPM	113	8	4	6.1	7	6.2	3	7.0	14	5.2	3	5.1	6	3.3	6	2.1	11				
14	02SADVL2	02SADVL2	CIMMYT	Non-OPM	114	6	5	5.7	11	5.9	6	6.4	19	4.7	8	5.0	7	4.0	2	2.0	13				
17	VPO44	VPO44	CIMMYT	Non-OPM	107	11	6	5.7	10	4.5	19	7.4	10	5.2	2	4.6	13	2.4	20	2.0	15				
18	VPO45	VPO45	CIMMYT	Non-OPM	100	12	6	5.6	13	5.2	14	7.4	8	4.1	17	4.8	10	3.1	8	1.7	25				
4	Okavango	Okavango	Capstone Seeds	Non-OPM	82	17	9	5.4	12	5.5	9	9.0	2	1.7	25	4.4	15	2.5	17	2.0	16				
21	PAN11	PAN11	Panmar	Non-OPM	91	17	3	4.9	18	4.7	17	5.8	20	4.0	18	2.7	15	2.0	14	2.0	14				
9	SAM1066	SAM1066	South Africa	Non-OPM	89	22	4	4.4	21	4.7	18	5.8	21	2.6	24	3.4	22	2.0	24	1.7	24				
Maturity group average																									
Mean																									
LSD (0.05)																									
Min																									
Max																									
NonSignificant Sites																									

ILPOP05: Results of evaluation of intermediate to late maturing OPVs from CIMMYT, South Africa, Panmar, Western Seed Co and Nelson Genetics across 37 sites in eastern and southern Africa, 2004/05. Table 4D

Entry	Name	Across		Cacuso Ang		Cela Ang		Machacha Les		Maseru Les		ART Farm Harare Zim		Mbawa Mal		Byumbwe Mal	
		RelGY	Rank	GrainYield	RankNo	GrainYield	RankNo	GrainYield	RankNo	GrainYield	RankNo	GrainYield	RankNo	GrainYield	RankNo	GrainYield	RankNo
%	Avg	StdDev	t/ha	#	t/ha	#	t/ha	#	t/ha	#	t/ha	#	t/ha	#	t/ha	#	#
Entries with anthesis date between 66 - 68 days																	
11	98SADVI	108	6	6.7	21	3.3	15	3.3	5	9.5	9	9.5	3	7.8	3	5.5	5
10	01SynZmill	100	7	7.1	14	2.7	20	2.0	23	2.8	11	7.9	20	6.7	17	4.9	13
5	TMAV-1 DR C1	96	6	6.3	23	2.6	15	1.5	18	2.1	21	7.8	21	6.0	18	5.1	11
1	WS 909	94	6	7.1	17	2.7	13	2.6	3	2.6	16	7.0	23	5.7	19	4.8	14
7	MSIR3C	89	6	7.0	18	2.3	18	2.5	4	3.4	1	6.1	25	4.8	24	4.3	21
98	14	6	7.1	16	14	1.9	13	2.8	11	7.7	20	6.2	16	4.9	16	4.9	13
Entries with anthesis date between 69 - 72 days																	
15	03SADVI	119	6	6.7	21	3.3	5	1.2	21	3.3	4	9.8	2	7.1	11	5.9	2
13	ZM721	116	7	7.1	14	2.7	14	1.5	19	2.9	9	9.8	1	8.5	2	6.0	1
2	Afnc1	119	8	6.2	24	1.9	22	1.5	16	2.7	13	9.7	3	8.6	1	5.3	9
12	02SADVI	116	6	7.2	13	3.1	7	1.8	11	2.3	19	9.3	10	7.5	7	5.9	3
6	KILIMA DR C1	104	11	7.9	6	3.7	1	2.1	7	2.9	10	9.0	12	6.9	14	5.5	7
19	VP046	107	6	7.6	8	3.0	8	1.9	8	3.3	6	8.8	14	6.7	16	4.6	16
24	KilaleGLSEcuadorGLSCO	101	13	7.1	16	3.3	6	2.5	5	2.7	14	9.6	5	7.6	6	5.4	8
25	Local Check	96	15	7.6	9	1.2	25	2.1	6	1.4	25	9.2	11	6.9	13	4.8	15
22	SZSYN01	97	15	7.2	12	2.9	9	1.8	12	2.6	15	8.3	18	6.8	15	4.5	18
23	SYN(SZElite01)	96	15	6.4	22	1.8	23	0.8	25	1.7	23	8.5	16	7.0	12	3.8	24
3	Nelson's Choice	88	16	8.2	2	2.8	11	1.5	16	3.3	3	8.8	14	5.6	20	3.8	23
20	OBATANPA-ZMSR	89	17	7.4	10	2.1	19	2.8	2	2.5	17	9.0	13	5.3	22	4.2	22
8	SAM4	88	18	7.9	4	2.7	12	1.7	14	2.0	22	7.7	22	4.8	23	4.5	18
103	12	6	7.3	12	12	2.7	12	1.8	12	2.6	14	9.0	11	6.9	12	4.9	13
Entries with anthesis date > 72 days																	
16	ZM623	113	8	7.1	15	3.3	4	1.8	13	2.1	20	9.5	8	7.7	4	5.6	4
14	02SADVL2	114	8	7.7	7	3.4	2	1.8	10	2.8	12	8.1	19	7.5	8	5.2	10
17	VP044	107	11	7.3	11	2.6	16	1.2	21	2.4	18	9.5	7	7.4	9	4.6	17
18	VP045	100	12	8.0	3	2.9	10	2.9	1	2.9	8	9.6	6	7.6	5	5.0	12
4	Okavango	82	17	7.9	5	1.6	24	1.0	24	1.6	24	9.7	4	7.3	10	5.5	5
21	PAN11	91	17	6.7	20	2.5	17	1.9	9	3.1	7	8.3	17	5.5	21	4.3	20
9	SAM1066	68	22	5.8	25	2.0	21	1.4	20	3.3	2	6.8	24	4.6	25	3.5	25
97	14	5	7.2	12	12	2.6	13	1.7	14	2.6	13	8.8	12	6.8	12	4.8	13
100	13	6	7.23	13	2.64	1.78	13	1.78	13	2.64	13	8.70	13	6.72	13	4.89	13
13	4	1	1.96	7	0.85	1.50	7	1.50	7	1.52	7	1.52	7	1.23	7	1.01	7
69	6	3	5.82	1	1.22	0.78	1	0.78	1	1.40	1	6.13	1	4.93	1	3.48	1
119	25	9	8.33	25	3.69	2.90	25	2.90	25	3.39	25	9.82	25	8.04	25	5.88	25
22	22	22	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
NumSignificantSites																	

ILPOP05: Results of evaluation of intermediate to late maturing OPVs from CIMMYT, South Africa, Pannar, Western Seed Co and Nelson Genetics across 37 sites in eastern and southern Africa, 2004/05. Table 4E

Entry	Name	Across			Mid Altitude Humid Warm (Zone A)-			Mid Altitude warm (Zone B) - Grain Yields			Susundenge Moz			Angonia Moz						
		RelGY	Rank	Avg	Zamseed Farm Zam	Zamseed Farm Zam	Across	Makera Zam	Makoka Mal	Kabrin Tan	GrainYield	RankNo	Uha	#	Uha	RankNo	GrainYield	RankNo	Uha	#
Entries with anthesis date between 66 - 88 days																				
11	98SADVI	108	9	6	4.2	2	2.3	22	2.3	11	1.1	3	1.1	11	5.1	13	2.7	12	1.3	16
10	01SynZmil	100	13	7	3.8	5	2.8	12	2.4	13	0.7	24	1.1	13	5.1	12	3.4	6	1.5	12
5	TM-1 DR C1	96	15	6	2.3	20	3.6	3	2.3	14	1.0	18	0.9	19	5.7	7	2.4	19	1.6	7
1	WS 909	94	15	6	3.0	13	2.1	24	2.2	11	1.1	5	1.3	7	4.4	19	2.8	11	1.5	11
7	MSIR3C	89	18	6	2.2	22	2.8	13	1.9	16	1.0	12	1.3	6	4.3	21	1.7	25	1.4	15
98	Maturity group average ^a	98	14	6	3.1	12	2.7	15	2.2	13	1.0	12	1.1	11	4.9	14	2.6	15	1.5	12
Entries with anthesis date between 69 - 72 days																				
15	03SADVI	119	6	6	2.9	15	2.4	20	3.1	6	0.9	20	1.5	1	7.6	1	3.6	5	1.8	3
13	ZM721	116	7	7	3.0	11	2.5	18	2.6	9	1.0	17	1.4	5	4.5	18	4.1	1	1.8	4
2	Afrc1	119	8	7	5.0	1	2.7	14	2.7	9	1.0	8	1.1	12	6.9	2	3.1	7	1.3	18
12	02SADVI	116	8	6	3.9	4	4.1	2	2.8	5	1.1	2	1.2	9	6.2	5	3.9	2	1.6	8
6	KILIMA DR C1	104	11	6	3.9	3	3.0	9	2.3	11	1.0	10	1.0	16	5.3	11	2.9	10	1.5	10
19	VP046	107	12	6	3.1	10	3.3	7	2.5	11	1.0	19	1.5	2	6.2	4	2.9	9	1.2	19
24	KialeCL(Ecuador)GLSC0	101	13	7	2.2	23	3.3	6	2.2	16	1.0	16	0.9	18	5.5	9	2.3	21	1.3	17
25	Local Check	96	15	7	2.9	14	4.5	1	1.8	17	1.0	13	1.1	14	3.1	23	2.6	13	1.1	20
22	SZSYN01	97	15	6	3.1	9	2.7	15	1.9	21	0.9	22	0.8	22	4.8	17	2.3	22	0.8	24
23	SYN(SZE)ite01]	96	15	6	2.1	25	2.3	21	2.1	15	0.9	21	1.0	17	4.3	20	2.5	15	2.0	2
3	Nelson's Choice	88	16	7	2.6	17	1.3	25	1.8	17	1.1	4	0.6	23	3.6	22	2.6	14	1.0	23
20	OBATANPA-ZMSR	89	17	6	3.2	8	3.5	4	2.1	18	1.0	15	0.8	21	5.7	8	2.0	23	1.0	22
8	SAM4	88	18	5	2.3	21	3.2	8	2.0	21	0.8	23	0.9	20	5.0	15	2.4	20	0.8	25
103	Maturity group average	103	12	6	3.1	12	3.0	12	2.3	14	1.0	15	1.1	14	5.3	12	2.9	12	1.3	15
Entries with anthesis date > 72 days																				
16	ZM623	113	8	4	3.5	7	2.8	11	2.6	7	1.0	7	1.2	8	5.1	14	3.7	4	2.0	1
14	02SADVL2	114	8	5	3.6	6	3.4	5	2.5	7	1.0	9	1.4	4	5.5	10	3.1	8	1.8	5
17	VP044	107	11	6	3.0	12	2.8	10	2.7	7	1.0	14	1.4	3	6.0	6	3.7	3	1.5	9
18	VP045	100	12	6	2.7	16	2.7	16	2.6	8	1.1	6	1.1	10	6.7	3	2.5	16	1.7	6
4	Okavango	82	17	9	2.1	24	2.2	23	1.6	16	1.2	1	0.5	25	2.5	25	2.5	17	1.5	14
21	PAN11	91	17	3	2.4	19	2.4	19	2.2	15	1.0	11	1.1	15	4.9	16	2.5	18	1.5	13
9	SAM1066	69	22	4	2.6	18	2.6	17	1.4	24	0.7	25	0.6	24	2.9	24	1.7	24	1.1	21
97	Maturity group average	97	14	5	2.8	15	2.7	14	2.2	12	1.0	10	1.0	13	4.8	14	2.8	13	1.6	10
Mean		100	13	6	3.04	13	2.85	13	2.27	13	0.98	13	1.00	13	5.07	13	2.80	13	1.42	13
LSD (0.05)		13	4	1	1.44	7	1.08	7	0.59	5	0.22	7	0.59	7	1.23	7	0.74	7	0.64	7
Min		69	6	3	2.14	1	1.28	1	1.38	5	0.72	1	0.55	1	2.50	1	1.70	1	0.80	1
Max		119	22	9	4.98	25	4.46	25	3.10	24	1.20	25	1.55	25	7.59	25	4.15	25	2.02	25
NumSignificantSites		22	22	22	1	1	1	1	5	5	1	1	1	1	1	1	1	1	1	1

ILPOP05- Results of evaluation of intermediate to late maturing OPVs from CIMMYT, South Africa, Panar, Western Seed Co and Nelson Genetics across 37 sites in eastern and southern Africa, 2004/05. Table 4F

Entry	Name	Across			Mid Altitude Dry (Zone C) - Grain Yields			Lowland Tropical Dry (Zone E) - Grain Yields												
		RelGY	Rank	SidDev	GrainYield	RankNo	#	uha	GrainYield	RankNo	#	uha	GrainYield	RankNo	#	uha	GrainYield	RankNo	#	uha
Entries with anthesis date between 66 - 68 days																				
11	96SADVI	108	9	6	1.8	2	3.3	21	2.1	15	1.8	2	0.7	6	2.1	5	2.4	3	1.7	7
10	01SynZimL	100	13	7	1.4	14	4.6	9	1.9	21	1.4	14	1.0	1	2.2	4	2.3	5	2.1	3
5	TMV-1DR C1	96	15	6	1.2	20	3.6	17	2.7	3	1.2	20	0.5	15	1.6	11	2.1	8	1.2	14
1	WS 909	94	15	6	1.4	16	5.3	3	3.2	1	1.4	16	0.6	8	1.6	12	2.1	7	1.1	17
7	MSRI3C	89	18	6	1.5	12	2.9	25	2.0	17	1.5	12	0.7	5	1.7	14	1.9	16	1.5	11
Maturity group average																				
96		96	14	6	1.5	13	3.9	15	2.4	11	1.5	13	0.7	7	1.8	9	2.1	8	1.5	10
Entries with anthesis date between 69 - 72 days																				
15	03SADVI	119	6	6	1.8	1	3.6	15	2.6	4	1.8	1	0.6	10	2.2	3	2.5	1	1.9	5
13	ZM721	116	7	7	1.8	3	3.7	14	2.6	5	1.8	3	0.8	2	2.0	6	2.5	2	1.5	10
2	Afrc1	119	8	7	1.7	6	4.0	12	2.4	8	1.7	6	0.4	20	1.2	21	1.9	17	0.6	24
12	02SADVI	116	8	6	1.6	8	3.2	22	3.0	2	1.5	8	0.7	4	1.5	18	1.9	15	1.1	20
6	KILIMA DR C1	104	11	6	1.5	11	3.8	13	1.9	19	1.5	11	0.3	21	1.4	19	1.7	21	1.1	16
19	VP046	107	12	6	1.4	15	2.9	24	1.7	24	1.4	15	0.5	14	2.5	4	2.2	6	2.8	1
24	KilaleGLS/EcuadorGLSCO	101	13	7	1.2	19	4.6	8	2.3	10	1.2	19	0.3	22	1.4	20	1.8	18	1.0	21
25	Local Check	96	15	7	1.5	10	3.1	23	2.5	6	1.5	10	0.4	19	1.6	14	2.1	9	1.1	18
22	SZSYN01	97	15	6	1.1	22	4.1	11	2.1	14	1.1	22	0.5	13	2.0	8	2.0	12	2.1	4
23	SYNSZE[le01]	96	15	6	1.4	17	4.5	5	2.0	16	1.4	17	0.5	12	1.9	7	2.3	4	1.5	9
3	Nelson's Choice	89	16	7	1.7	5	3.4	20	1.8	22	1.7	5	0.6	9	1.3	20	1.4	24	1.2	15
20	OBATANFA-ZMSR	89	17	6	0.9	24	3.6	16	2.2	12	0.9	24	0.5	16	1.6	14	1.9	14	1.3	13
8	SAM4	88	18	5	1.2	21	4.5	7	2.5	7	1.2	21	0.1	25	1.7	14	1.7	22	1.7	6
Maturity group average																				
103		103	12	6	1.4	12	3.8	15	2.3	11	1.4	12	0.5	14	1.7	13	2.0	13	1.5	12
Entries with anthesis date > 72 days																				
16	ZM623	113	8	4	1.4	13	3.4	19	2.2	11	1.4	13	0.8	3	1.8	11	2.0	13	1.6	8
14	02SADVL2	114	8	5	1.6	7	4.9	4	1.8	23	1.6	7	0.6	7	1.8	11	2.1	10	1.5	12
17	VP044	107	11	6	1.5	9	5.4	2	2.4	9	1.5	9	0.4	17	2.1	7	2.0	11	2.2	2
18	VP045	100	12	6	1.7	4	5.7	1	1.9	18	1.7	4	0.3	23	1.4	21	1.7	20	1.0	22
4	Okavango	82	17	9	1.0	23	4.6	6	1.9	20	1.0	23	0.4	18	1.2	23	1.4	23	0.9	23
21	PAN11	91	17	3	1.3	18	3.5	18	2.2	13	1.3	18	0.5	11	1.5	19	1.8	19	1.1	19
9	SAM1066	69	22	4	0.8	25	4.5	10	1.7	25	0.8	25	0.2	24	0.4	25	0.5	25	0.3	25
Maturity group average																				
97		97	14	5	1.3	14	4.6	9	2.0	17	1.3	14	0.5	15	1.5	17	1.7	17	1.2	16
Mean		100	13	6	1.41	13	4.03	13	2.22	13	1.41	13	0.52	13	1.57	13	1.53	13	1.41	13
LSD (0.05)		13	4	1	0.49	7	1.88	7	0.90	7	0.49	7	0.54	7	0.56	7	0.52	7	1.00	7
Min		69	6	3	0.81	1	2.85	1	1.71	1	0.81	1	0.12	1	0.44	3	0.54	1	1.35	1
Max		119	22	9	1.54	25	5.70	25	3.17	25	1.84	25	0.85	25	2.52	25	2.49	25	2.32	25
NumSignificantSites		22	22	22	1	1	0	0	0	0	1	1	0	0	2	2	1	1	1	1

ILPOP05: Results of evaluation of intermediate to late maturing OPVs from CIMMYT, South Africa, Pannar, Western Seed Co and Nelson Genetics across 37 sites in eastern and southern Africa, 2004/05. Table 4G

Entry	Name	Across				Highlands (Zone F) - Grain Yields				MSY - Grain Yields				N Stress - Grain Yields						
		RelGY	Rank	Avg	StdDev	GrainYield	RankNo	u/ha	#	GrainYield	RankNo	u/ha	#	GrainYield	RankNo	u/ha	#			
Entries with anthesis date between 68 - 69 days																				
108	11 98SADVI		6	9	6	4.5	6	4.5	6	4.0	1	6.5	16	6.6	16	1.2	13	3.0	8	
100	10 01S/mZmIL		7	13	4	4.6	4	4.6	4	2.4	17	5.0	22	5.0	22	0.9	21	2.9	10	
96	5 TMV-1 DR C1		6	15	11	4.1	11	4.1	11	2.2	21	7.1	10	7.1	10	1.0	16	2.1	23	
84	1 WS 909		6	15	21	3.3	21	3.3	21	2.6	14	5.2	21	5.2	21	1.2	12	3.1	7	
89	7 MSIR13C		6	18	8	3.1	22	3.1	22	1.8	25	6.2	18	6.2	18	1.1	13	2.4	19	
98	Maturity group average		6	14	13	3.9	13	3.9	13	2.6	16	6.0	17	6.0	17	1.1	15	2.7	13	
Entries with anthesis date between 69 - 72 days																				
119	15 03SADVI		6	6	16	3.7	16	3.7	16	2.7	12	7.4	7	7.4	7	1.5	4	4.2	1	
116	13 ZM721		7	7	2	5.5	2	5.5	2	2.7	11	8.2	5	8.2	5	1.4	6	3.3	4	
119	2 Alt1		7	8	5	4.6	5	4.6	5	2.8	10	11.5	1	11.5	1	1.5	5	2.9	11	
116	12 02SADVI		6	8	23	2.8	23	2.8	23	3.0	8	8.4	3	8.4	3	1.8	2	3.0	9	
104	6 KILIMA DR C1		6	10	7	4.4	7	4.4	7	2.5	15	4.7	23	4.7	23	1.2	11	2.7	12	
107	19 VP046		6	12	6	3.6	18	3.6	18	3.2	4	7.3	9	7.3	9	0.9	20	3.5	2	
101	24 KitaleGLS/EcuadorGLSC0		7	13	11	4.1	11	4.1	11	3.1	6	9.5	2	9.5	2	1.0	17	3.3	3	
96	25 Local Check		7	15	20	3.4	20	3.4	20	3.1	5	6.8	15	6.8	15	1.4	12	3.2	5	
97	22 SZSYN01		6	15	3	5.0	3	5.0	3	3.0	7	7.4	8	7.4	8	1.2	11	2.6	13	
96	23 SYN SZE flee01		6	15	15	3.7	15	3.7	15	2.4	18	8.1	6	8.1	6	1.2	11	2.6	15	
89	3 Nelson's Choice		7	16	24	2.6	24	2.6	24	1.9	24	7.1	11	7.1	11	1.2	12	2.2	21	
89	20 OBATANPA-ZMSR		6	17	17	3.6	17	3.6	17	2.0	23	8.3	4	8.3	4	0.9	22	2.5	16	
88	8 SAMA		5	18	19	3.6	19	3.6	19	2.5	16	5.9	19	5.9	19	0.9	21	2.4	20	
103	Maturity group average		6	12	14	3.9	14	3.9	14	2.7	12	7.7	9	7.7	9	1.2	12	3.0	10	
Entries with anthesis date > 72 days																				
113	16 ZM623		4	8	1	5.5	1	5.5	1	2.0	22	7.1	12	7.1	12	1.1	11	3.1	6	
114	14 02SADVI L2		5	8	9	4.2	9	4.2	9	3.4	2	6.5	17	6.5	17	1.5	4	2.4	18	
107	17 VP044		6	11	6	4.2	10	4.2	10	3.4	3	6.9	14	6.9	14	0.9	18	2.2	22	
18	18 VP045		6	12	8	4.4	8	4.4	8	3.0	9	4.2	24	4.2	24	1.0	16	2.6	14	
82	4 Okavango		9	17	14	4.0	14	4.0	14	2.6	13	1.2	25	1.2	25	0.8	17	1.9	24	
91	21 PAN11		3	17	13	4.0	13	4.0	13	2.4	19	7.0	13	7.0	13	1.0	18	2.5	17	
69	9 SAM1066		4	22	25	2.6	25	2.6	25	2.2	20	5.8	20	5.8	20	0.9	17	1.7	25	
97	Maturity group average		5	14	11	4.1	11	4.1	11	2.7	13	5.5	18	5.5	18	1.0	14	2.4	18	
100	Mean		6	13	13	3.97	13	3.97	13	2.68	13	6.78	13	6.78	13	1.15	13	2.74	13	
12	LSD (0.05)		1	4	7	0.87	7	0.87	7	1.71	7	1.95	7	1.95	7	0.34	6	1.17	7	
69	Min		3	6	2.60	1	2.60	1	2.60	1	1.78	1	1.17	1	1.17	1	0.75	2	1.88	1
119	Max		9	22	5.51	25	5.51	25	5.51	4.95	25	11.49	25	11.49	25	1.76	22	4.20	25	
22	NumSignificantSites		22	22	1	1	1	1	1	0	1	1	1	1	1	2	2	2	0	

EIHYB05: Results of evaluation of early to intermediate maturing hybrids from CIMMYT, Zimbabwe, Monsanto, Nelson Genetics, Pannar, Pioneer, Seed Co and Zamseed across 33 sites in eastern and southern Africa, 2004/05.

Table 5C

Entry	Name	Pedigree	Origin	Comments	Across			Across			Uga			Burgoma Ken			Mid Altitudes Eastern Africa - Grain Yields			Mid Altitudes Highveld Warm (Zone A) - Grain Yields			Maturity Avg
					ReIDY	Rank	StDev	%	Avg	StDev	Rank	GrainYield	RankNo	GrainYield	RankNo	GrainYield	RankNo	GrainYield	RankNo	GrainYield	RankNo	GrainYield	
Entries with anthracnose data between 60 - 60 days																							
27	CZH04012	CZL04060CZL040009/ZEWBc1F2	CIMMYT	Non-OPM	95	24	10	3.9	34	3.4	34	4.4	35	3.7	34	4.2	24	2.5	31	1.7	5		
Maturity group average																							
Entries with anthracnose data between 63 - 68 days																							
18	CZH04001	CML395CML444CZL04001	CIMMYT	Non-OPM	118	12	7	5.8	16	17	17	5.4	25	6.3	1	5.3	11	3.1	18	1.1	26		
6	SC403	SC403	SeedCo	Non-OPM	107	15	8	5.0	24	4.9	26	5.6	21	4.6	24	5.2	13	3.4	1.1	1.5	12		
20	CZH04004	CML312CML442CZL04004	CIMMYT	Non-OPM	110	15	10	5.6	18	4.7	27	7.5	6	4.7	21	5.2	16	4.3	2	1.5	13		
23	CZH03005	CML395CML444CZL03004	CIMMYT	Non-OPM	109	15	10	5.6	15	6.0	12	5.9	19	4.8	15	4.9	20	3.4	10	1.0	31		
25	CZH02002	CML443CML445CZL02002	CIMMYT	Non-OPM	108	17	9	5.8	15	6.3	10	6.6	13	4.6	23	4.6	19	3.3	12	1.8	3		
8	SC525	SC525	SeedCo	Non-OPM	104	17	8	5.1	23	5.7	15	5.3	28	4.3	26	5.3	13	3.0	2.1	1.2	23		
31	CZH04016	CML312CML442CZL04010	CIMMYT	Non-OPM	102	17	9	5.2	10	5.0	24	5.7	20	5.0	10	4.8	22	2.5	30	1.0	32		
7	SC411	SC411	SeedCo	Non-OPM	88	19	8	4.9	25	5.5	19	5.4	26	3.8	31	5.1	17	2.7	27	1.2	25		
3	DK8031	DK8031	Moncanto	Non-OPM	101	19	9	5.4	21	5.3	22	6.1	18	4.7	22	4.9	16	3.8	7	1.5	14		
33	CZH01028	CML181CML182CZL01008	CIMMYT	OPM Hybrid	100	20	10	5.7	15	4.6	28	7.2	10	5.2	5	4.8	21	2.7	25	1.1	29		
19	CZH04002	CML312CML442CZL04002	CIMMYT	Non-OPM	102	20	10	5.0	25	5.2	23	5.5	24	4.3	27	4.6	21	3.1	19	1.7	4		
35	Local Check2	Local Check2	Various	Local Check2	94	21	12	6.1	13	7.0	3	8.5	1	2.7	35	4.4	28	2.3	33	1.0	30		
30	CZH04014	CZL0034CZL0007CZL04014	CIMMYT	Non-OPM	98	21	12	4.4	28	3.2	35	5.8	23	4.4	25	4.4	28	3.3	4	1.7	7		
22	CZH03002	CML312CML442CZL03002	CIMMYT	Non-OPM	97	21	8	5.3	20	4.6	28	6.5	15	4.8	18	5.0	19	4.1	3	1.3	19		
12	ZAM04033	ZAM04033	ZamSeed	Non-OPM	95	21	8	4.3	31	3.7	32	4.8	32	4.3	28	4.8	21	3.8	8	1.3	17		
15	013WH10	013WH10	Various	Non-OPM	96	22	10	4.4	26	3.7	33	4.4	33	4.3	11	4.3	28	2.9	23	2.0	1		
9	SC513	SC513	SeedCo	Non-OPM	81	23	8	5.3	19	5.6	22	4.7	20	4.4	20	4.4	25	32	0.8	33			
2	CAP241NG	CAP241NG	research partners / Pan-Africa Cereals	Non-OPM	87	23	8	4.4	31	4.9	25	4.5	34	3.8	33	4.7	21	1.7	34	1.7	8		
34	Local Check1	Local Check1	Various	Local Check1	74	25	12	6.4	12	7.3	1	8.1	2	3.8	32	4.5	24	1.6	35	1.2	27		
29	CZH04019	CZL0094CZL0007CZL04019	CIMMYT	Non-OPM	88	25	8	4.9	24	4.4	31	5.4	27	4.8	14	4.6	27	2.6	28	1.3	16		
Maturity group average																							
Entries with anthracnose data > 67 days																							
14	ZAM04010	ZAM04010	ZamSeed	Non-OPM	108	12	9	6.1	10	6.0	13	7.3	8	5.0	8	5.8	6	3.6	8	1.3	18		
1	WH403	WH403	Western Seed	Non-OPM	108	12	11	6.5	6	6.3	9	8.0	3	5.1	7	5.5	14	4.7	1	1.3	21		
32	CZH04017	CML395CML444CZL04011	CIMMYT	Non-OPM	105	12	11	6.0	10	6.7	7	6.2	17	5.2	6	5.2	12	3.2	17	0.9	35		
4	DKC80-33	DKC80-33	Moncanto	Non-OPM	108	14	6	6.1	14	6.7	6	7.4	7	4.0	28	5.4	10	3.9	5	1.9	2		
21	CZH04005	CML395CML444CZL03005CZL03003	CIMMYT	Non-OPM	106	14	8	5.4	18	6.2	11	5.2	29	4.9	13	5.3	11	3.2	14	1.3	20		
26	CZH03010	CML4410CML442CZL03007	CIMMYT	Non-OPM	102	14	0	5.5	16	5.7	18	5.2	30	5.7	2	5.1	14	2.7	26	1.7	6		
17	013WH07	013WH07	Zimbabwe	Non-OPM	100	15	11	5.6	17	5.6	18	6.5	14	4.8	18	5.5	10	3.7	6	1.6	10		
5	SC037	SC037	Pioneer	Non-OPM	104	16	8	6.5	5	7.0	2	7.5	5	5.0	9	5.0	19	3.2	15	1.4	15		
16	013WH051	013WH051	Zimbabwe	Non-OPM	99	16	12	5.0	21	4.5	30	5.0	31	5.6	3	5.1	15	2.6	29	1.5	11		
10	ZAM02308	ZAM02308	ZamSeed	Non-OPM	97	17	10	5.8	10	5.8	14	6.7	12	5.2	4	5.3	14	2.8	24	1.2	22		
24	CZH03007	CML395CML444CZL03006	CIMMYT	Non-OPM	107	17	10	5.5	16	5.5	21	7.0	11	4.8	17	4.8	23	3.2	16	1.2	26		
11	ZAM03812	ZAM03812	ZamSeed	Non-OPM	95	18	10	6.4	9	6.4	8	8.0	4	4.8	16	5.3	14	3.3	13	0.8	34		
28	CZH03006	CML395CML444CZL03005	CIMMYT	Non-OPM	96	18	11	6.0	11	6.7	5	6.3	16	4.8	12	5.2	15	3.0	22	1.6	9		
13	ZAM04034	ZAM04034	ZamSeed	Non-OPM	90	21	10	8.1	14	7.0	3	7.3	9	4.0	30	4.6	24	3.1	20	1.2	24		
Maturity group average																							
Mean					100	15	10	5.9	13	6.1	12	6.7	14	4.0	13	5.2	14	3.3	15	1.4	19		
1.0 SD					4	1	1	0.47	7	0.54	18	0.52	18	0.48	10	0.52	6	0.48	10	0.75	10		
Min					74	13	8	3.83	4	3.17	1	4.43	1	2.89	1	4.19	1	1.80	1	0.91	1		
Max					116	25	12	6.51	34	7.33	35	8.49	35	6.31	35	5.78	28	4.72	35	2.00	35		
NonSignificant/na																							

EIHYB05: Results of evaluation of early to intermediate maturing hybrids from CIMMYT, Zimbabwe, Monsanto, Neison Genetics, Panmar, Pioneer, Seed Co and Zamseed across 33 sites in eastern and southern Africa, 2004/05.

Table 5D

Entry	Name	Across		Cacare Ang		Chianga Ang		Shamva Zim		Mid Altitude Humid Warm (Zone A) - Grain Yields		Mount Mambasa Zim		Zamseed Farm Zim		Areyani		Chitasa Mal		Mid Altitude Warm (Zone B) - Grain Yields		Ketin Tan		
		ReIGY	Rank	GrainYield	RankNo	GrainYield	RankNo	GrainYield	RankNo	GrainYield	RankNo	GrainYield	RankNo	GrainYield	RankNo	GrainYield	RankNo	GrainYield	RankNo	GrainYield	RankNo	GrainYield	RankNo	GrainYield
Entries with maturity date between 59 - 60 days																								
Maturity group average																								
Entries with maturity date between 60 - 66 days																								
Maturity group average																								
Entries with maturity date > 67 days																								
Maturity group average																								
14	ZAM04510	108	12	67	22	13	8	35	5	104	10	95	1	25	7	51	4	42	9	51	17	60	5	
1	NH003	108	12	56	29	13	7	35	8	113	1	35	3	13	34	35	3	42	8	48	24	56	10	
32	CZ040617	105	12	86	4	12	10	35	9	95	21	84	4	23	11	47	9	40	18	47	28	60	3	
4	DK08033	108	14	89	3	12	13	32	14	105	8	83	7	27	3	41	24	35	25	52	15	48	22	
21	CZ040605	108	14	98	1	8	29	32	15	96	16	79	11	33	1	48	11	40	16	57	5	58	7	
26	CZ030010	102	14	66	24	0.6	31	34	11	96	17	81	8	21	16	48	6	41	10	44	31	56	11	
17	03WH007	100	15	65	25	1.4	6	36	6	105	9	68	31	27	4	56	1	42	11	53	12	62	2	
5	SC097	104	16	71	19	2.1	1	27	31	104	11	74	17	22	14	41	26	39	14	42	35	58	9	
16	03WH031	99	16	74	16	0.8	28	40	2	97	15	83	6	22	12	40	28	38	20	55	8	55	12	
10	ZAM02109	97	17	84	9	1.1	15	29	22	109	5	87	2	20	23	47	7	36	17	44	30	49	19	
24	CZ030707	107	17	82	10	2.0	2	27	29	84	22	77	14	18	28	37	31	40	18	50	21	60	6	
11	ZAM03512	95	18	10	36	7	15	4	32	116	112	2	81	9	22	13	38	30	37	15	53	10	48	
28	CZ03006	99	18	61	12	0.6	33	38	3	108	6	78	12	20	22	40	27	40	18	57	4	60	4	
13	ZAM0434	90	21	64	27	0.8	25	23	33	95	16	70	26	21	17	36	32	31	27	53	11	39	32	
Maturity group average																								
100	Mean	10	7.28	16	1.04	16	3.05	18	5.59	16	7.48	18	2.10	18	4.34	18	2.65	16	2.65	16	3.18	18	4.58	16
8	1SD (0.85)	4	1	3.06	10	1.21	10	0.51	10	1.02	10	1.07	10	0.29	10	0.29	10	1.00	10	1.15	10	1.30	10	
74	Min	12	6	0.41	1	1.21	1	1.21	1	6.59	1	1.62	1	3.29	1	1.77	8	4.19	1	2.08	1	2.08	1	
116	Max	35	12	9.78	35	2.11	35	2.98	35	11.26	35	9.47	35	3.32	35	5.61	35	4.33	35	6.38	35	8.77	35	
NumSignificantSites																								
19		19	19	0	0	0	0	1	1	1	1	1	1	1	1	1	1	2	2	2	0	0	1	

EIHYB05: Results of evaluation of early to intermediate maturing hybrids from CIMMYT, Zimbabwe, Monsanto, Nelson Genetics, Panmar, Pioneer, Seed Co and Zamseed across 33 sites in eastern and southern Africa, 2004/05. Color legend on page 3.

Entry	Mid Altitude Warm (Zone B) - Grain Yields			Mid Altitude Dry (Zone C) - Grain Yields			Lowland Tropical Humid (Zone D) - Grain Yields			Lowland Tropical Dry (Zone E) - Grain Yields		
	GrainYield	Rank	%	GrainYield	Rank	%	GrainYield	Rank	%	GrainYield	Rank	%
27 CZH04012	18	17	21	20	26	28	20	26	20	18	18	12
16 CZH04001	22	5	23	18	18	14	5	32	42	18	42	18
6 SC403	20	11	28	3	10	17	10	10	50	5	50	18
20 CZH04004	22	7	27	4	10	19	6	31	43	16	43	15
23 CZH03085	10	15	10	13	5	37	8	2	37	28	37	26
25 CZH03002	9	28	1	15	5	31	25	14	7	40	22	40
8 SC525	17	19	22	23	10	18	30	28	45	10	45	10
31 CZH04018	15	25	26	7	6	28	21	6	49	6	49	6
7 SC411	19	8	21	25	13	11	15	34	16	12	7	10
33 CZH01028	10	20	10	14	28	23	17	9	35	31	35	31
19 CZH04002	20	10	17	18	31	1	1	1	20	33	27	33
35 Lcs-11Chc-12	12	12	18	16	21	25	11	13	26	34	28	34
30 CZH04014	11	33	28	2	11	17	25	34	15	4	11	45
22 CZH03002	8	13	30	22	22	8	22	35	9	30	35	30
12 ZAM04333	14	27	19	34	7	26	35	11	6	23	17	43
15 013WH10	12	31	24	14	6	31	9	3	44	13	44	13
9 SC513	9	23	9	12	31	24	14	6	31	9	3	26
2 CAP341NG	23	9	21	10	24	16	9	17	34	13	34	13
34 Local Check1	15	24	15	35	6	31	40	3	5	27	0	34
29 CZH04013	17	20	20	31	10	17	34	14	8	15	11	19
18 CZH04010	18	16	24	16	10	18	9	18	40	20	40	20
18 ZAM04510	16	23	25	12	7	27	38	30	5	12	45	12
1 WH403	10	35	27	5	11	10	35	6	7	16	15	4
32 CZH04017	18	13	19	33	1	12	10	35	7	0	7	16
4 DKC80-33	11	11	27	0	9	19	32	22	6	22	11	16
21 CZH04005	8	26	2	21	24	10	18	31	24	9	13	22
26 CZH03010	14	17	22	8	12	9	34	12	10	9	14	9
17 013WH07	15	18	14	23	20	8	22	27	32	13	12	39
5 30GP97	8	12	32	23	19	10	14	35	8	9	12	11
16 013WH04	22	6	21	28	0	8	18	30	27	6	24	13
10 Pioneer04	10	22	4	24	15	6	33	18	0	33	0	7
24 CZH04007	17	10	21	8	20	30	15	3	39	25	39	25
11 ZAM03510	15	26	26	9	0	26	34	15	3	17	41	19
28 CZH03002	11	13	29	19	32	6	21	41	2	32	32	32
13 ZAM04004	21	9	22	21	0	8	22	31	48	7	48	7
10 Pioneer04	15	17	12	23	0	9	18	33	16	45	14	35
100	15	16	26	18	0	9	18	33	16	45	14	35
4	1	1	1	1	1	1	1	1	1	1	1	1
7	4	1	1	1	1	1	1	1	1	1	1	1
115	12	6	1	1	1	1	1	1	1	1	1	1
19	19	19	19	19	19	19	19	19	19	19	19	19

EIH05: Results of evaluation of early to intermediate maturing hybrids from CIMMYT, Zimbabwe, Monsanto, Nelson Genetics, Panmar, Pioneer, Seed Co and Zamseed across 33 sites in eastern and southern Africa, 2004/05. Table 5F

Entry	Name	Lowland/Tropical Dry (Zone E) - Grain Yields					Highlands (Zone F) - Grain Yields					MSV - Grain Yields					N Stress - Grain Yields						
		Wenger Zim		Across		Himptata Ang	CIMMYT Harare Zim		Across		CIMMYT Harare Zim	CIMMYT Harare Zim		Across		Harare Zim	Oxlden Valley Zim		Harare Zim		Across		
		ReloY	Rank	Avg	StDev	GrainYield	RankNo	GrainYield	RankNo	GrainYield	RankNo	GrainYield	RankNo	GrainYield	RankNo	GrainYield	RankNo	GrainYield	RankNo	GrainYield	RankNo	GrainYield	RankNo
Entries with antirhizis date between 60 - 90 days																							
27	CZH04012	95	24	10	10	4.8	11	6.1	27	4.1	27	7.3	12	1.1	10	2.1	33	1.5	13	0.9	8	0.7	18
Maturity group average																							
Maturity group average		95	24	10	10	4.8	11	4.1	27	4.1	27	7.3	12	1.1	10	2.1	33	1.5	13	0.9	8	0.7	18
Entries with antirhizis date between 93 - 66 days																							
16	CZH04001	118	12	7	7	4.9	10	4.3	21	4.3	21	8.9	1	1.3	11	2.9	6	1.5	16	0.8	17	1.0	5
6	SC403	107	15	8	8	4.2	14	3.7	32	3.7	32	6.0	23	1.5	5	3.4	1	2.0	3	1.2	4	0.9	7
20	CZH04004	110	15	10	10	4.5	13	5.4	3	5.4	3	3.6	33	1.4	12	2.6	16	2.1	1	0.6	28	0.7	22
23	CZH03005	108	15	10	10	5.3	8	5.0	6	5.0	6	6.9	15	0.8	24	3.2	2	1.3	19	1.2	3	0.5	29
25	CZH02002	108	17	9	9	4.2	16	4.2	25	4.2	25	6.8	16	0.8	24	2.9	4	1.4	17	0.8	18	0.3	31
8	SC525	104	17	9	9	8.4	1	4.5	18	4.5	18	7.4	10	0.9	22	2.3	28	1.2	21	0.6	27	0.8	23
31	CZH04016	102	17	9	9	2.5	30	4.9	10	4.9	10	4.8	28	0.8	21	2.8	11	0.8	30	0.9	11	0.8	11
7	SC411	96	19	8	8	2.1	33	4.7	15	4.7	15	6.2	21	1.2	18	2.8	8	0.7	19	0.6	24	0.6	24
3	DK8031	101	19	9	9	6.2	4	4.8	14	4.8	14	2.9	35	1.3	16	2.8	10	2.0	4	0.8	14	0.6	27
33	CZH01028	100	20	10	10	3.1	23	3.9	29	3.9	29	7.8	7	1.0	17	2.3	27	0.7	32	1.1	5	1.2	1
19	CZH04002	102	20	10	10	3.1	24	5.1	6	5.1	6	7.7	8	0.9	22	2.5	21	1.1	25	0.8	12	0.7	19
35	LocalCheck2	94	21	12	12	4.1	15	4.6	17	4.6	17	6.5	17	0.8	26	2.7	15	1.3	20	0.6	26	0.2	32
30	CZH04014	98	21	12	12	3.7	21	3.8	30	3.8	30	8.8	3	1.5	12	2.9	5	1.5	12	0.6	29	0.6	29
22	CZH03002	97	21	8	8	2.9	25	4.0	28	4.0	28	6.3	20	1.0	20	2.6	19	1.2	22	0.4	34	0.7	17
12	ZAM04333	95	21	8	8	3.8	19	3.2	34	3.2	34	2.2	30	1.0	21	2.9	7	1.5	11	0.9	9	0.5	30
15	013WH10	86	22	10	10	4.6	12	4.3	24	4.3	24	4.8	29	1.2	11	2.5	20	1.3	18	0.3	35	1.1	4
9	SC513	91	23	9	9	3.9	18	4.9	9	4.9	9	5.2	25	1.3	10	2.4	26	1.7	7	0.6	25	0.8	13
2	CAP341NG	87	23	9	9	5.5	6	4.3	23	4.3	23	5.2	24	0.9	25	2.4	24	1.1	24	1.3	2	0.6	26
34	LocalCheck1	74	25	12	12	1.7	35	2.7	35	2.7	35	6.4	18	0.7	30	2.1	32	0.8	31	0.6	30	0.5	28
29	CZH04013	89	25	6	6	1.7	35	4.2	29	4.2	29	7.9	6	0.7	30	2.1	32	0.8	31	0.6	30	0.5	28
Maturity group average																							
Maturity group average		99	19	6	6	4.3	17	4.3	20	4.3	20	6.3	18	1.0	18	2.7	15	1.4	17	0.8	16	0.6	20
Entries with antirhizis date > 87 days																							
14	ZAM04510	108	12	9	9	6.8	3	3.7	31	3.7	31	4.2	31	1.4	8	2.7	14	1.8	5	1.1	6	1.0	6
1	WH003	108	12	11	11	5.2	9	4.8	13	4.8	13	6.4	19	1.3	8	2.7	17	1.5	14	0.8	16	1.1	2
32	CZH04017	105	12	11	11	1.8	34	5.6	1	5.6	1	8.6	4	0.6	22	2.1	34	0.4	34	0.7	21	0.9	9
4	DKC80-33	106	14	6	6	4.1	16	5.1	5	5.1	5	3.4	34	1.4	9	2.8	12	2.0	2	0.5	33	0.8	15
21	CZF04005	106	14	8	8	3.5	22	5.1	7	5.1	7	8.4	5	0.9	18	2.8	9	1.0	26	0.5	31	0.8	10
26	CZH03010	102	14	9	9	2.9	26	4.3	22	4.3	22	7.4	11	0.5	30	2.5	23	0.9	27	0.5	32	0.0	33
17	013WH07	100	15	11	11	2.8	27	5.2	4	5.2	4	7.0	14	0.9	22	2.3	30	1.2	23	1.0	7	0.7	21
5	30G97	104	16	6	6	2.3	31	4.7	16	4.7	16	5.0	27	1.3	13	2.5	22	1.8	6	0.7	23	0.7	20
16	013WH31	99	16	12	12	2.7	29	5.4	2	5.4	2	8.9	2	0.7	19	2.2	31	0.4	35	1.4	1	1.1	3
10	ZAM02309	97	17	10	10	5.4	7	4.9	11	4.9	11	4.0	32	1.2	12	2.3	29	1.5	15	0.8	13	0.9	8
2 nd	CZH03007	107	17	10	10	2.7	28	4.4	20	4.4	20	7.5	9	1.2	12	3.2	3	1.7	9	0.7	22	0.8	14
11	ZAM03512	95	18	10	10	3.7	20	3.3	33	3.3	33	4.6	30	0.8	20	2.7	13	0.8	28	0.8	15	0.8	12
3 rd	CZH03006	98	18	11	11	2.3	32	4.6	12	4.6	12	7.2	13	0.7	29	2.4	25	0.7	33	0.7	20	0.8	25
13	25k10a334	90	21	10	10	5.9	5	4.5	19	4.5	19	5.1	20	0.8	23	1.8	35	0.6	29	0.8	10	0.7	16
Maturity group average																							
Maturity group average		102	15	10	10	3.7	21	4.7	14	4.7	14	6.3	18	1.0	17	2.5	21	1.2	20	0.8	16	0.8	16
15	D (0.05)	150	15	10	10	4.6	18	4.6	16	4.6	16	6.3	18	1.02	18	2.0	18	1.31	18	0.77	18	0.79	18
4		8	4	1	1	3.0	18	1.3	16	1.3	16	3.6	10	0.34	7	0.6	10	0.82	10	0.57	10	0.31	10
74		12	6	1.75	1	2.73	1	2.88	1	2.78	1	2.88	1	0.48	5	1.79	1	0.36	1	0.27	1	0.21	1
115		25	12	8.44	35	5.56	35	5.93	35	5.56	35	8.93	35	1.50	30	3.44	35	2.10	35	1.43	35	1.23	34
Nums/sign/cant/iles		19	19	19	19	0	0	1	1	1	0	0	0	2	2	0	0	1	1	0	0	1	1

EIH9B05: Results of evaluation of early to intermediate maturing hybrids from CIMMYT, Zimbabwe, Monsanto, Nelson Genetics, Panmar, Pioneer, Seed Co and Zamseed across 33 sites in eastern and southern Africa, 2004/05. Table 5G

Entry	Name	Pedigree	Origin	Comments	Across				Low pH - Grain Yields				Zone E				N Stress				Low pH										
					RelYf	Rank	Avg	SdDev	GrainYield	RankNo	GrainYield	RankNo	ASI	Plant	Leaf	Senes	ASI	Plant	Leaf	Senes	ASi	Plant	Leaf	Senes	ASi	Plant	Leaf	Senes	ASi	Plant	
Entries with anthesis date between 80 - 85 days																															
27	CZP00172	CZL0408/CZL04009/CZEWB01F2	CIMMYT	Non-OPM	95	8	10	3.4	21	3.4	21	1.7	0.83	0.3	8.3	0.54	7.8	4.8	1.13												
Maturity group average																															
16	CZH04001	CML395/CML444/CZL04001	CIMMYT	Non-OPM	116	12	7	3.8	10	3.8	10	3.6	0.84	0.3	10.3	0.63	6.8	2.6	0.89												
6	SC403	SeedCo	SeedCo	Non-OPM	107	15	8	3.8	16	3.6	16	3.8	0.45	0.4	7.0	0.67	6.3	5.2	1.15												
20	CZH04004	CML312/CML442/CZL04004	CIMMYT	Non-OPM	110	15	10	3.0	27	3.0	27	3.0	0.56	0.3	7.3	0.61	5.3	3.2	1.09												
23	CZH03005	CML395/CML444/CZL03004	CIMMYT	Non-OPM	109	15	10	4.8	3	4.6	3	2.0	0.59	0.2	4.7	0.55	5.9	3.0	1.00												
25	CZH02002	CML443/CML445/CZL02002	CIMMYT	Non-OPM	108	17	9	3.4	22	3.4	22	1.7	0.60	0.3	10.0	0.60	6.1	4.7	0.94												
8	SC525	SeedCo	SeedCo	Non-OPM	104	17	9	3.3	23	3.3	23	1.1	0.75	0.3	6.3	0.57	6.8	6.2	0.97												
31	CZH03016	CML312/CML442/CZL04010	CIMMYT	Non-OPM	102	17	9	4.2	6	4.2	6	2.5	0.72	0.4	9.3	0.58	7.1	4.0	1.08												
7	SC411	SeedCo	SeedCo	Non-OPM	98	19	8	3.7	12	3.7	12	6.7	0.35	0.3	6.0	0.59	5.9	4.2	1.08												
3	DK8031	DK8031	Monsanto	Non-OPM	101	19	9	3.0	26	3.0	26	2.5	0.63	0.2	10.0	0.62	6.9	7.8	0.96												
33	CZH01028	CML181/CML182/CZL01005	CIMMYT	OPM Hybrid	100	20	10	2.9	30	2.9	30	4.6	0.44	0.2	11.3	0.49	5.6	13.4	1.07												
19	CZH04002	CML312/CML442/CZL04002	CIMMYT	Non-OPM	102	20	10	2.8	29	2.8	29	4.1	0.39	0.3	9.7	0.47	6.6	5.5	1.03												
35	Local Check2		Various	Local Check2	94	21	12	4.5	4	4.5	4	4.9	0.59	0.4	8.7	0.44	7.0	6.8	0.94												
30	CZH04014	CZL0034/CZL00007/CZL9014	CIMMYT	Non-OPM	96	21	12	2.2	34	2.2	34	2.4	0.63	0.3	12.0	0.55	6.6	5.1	1.08												
22	CZH03002	CML312/CML442/CZL03002	CIMMYT	Non-OPM	97	21	8	2.6	33	2.6	33	10.6	0.49	0.3	10.0	0.55	6.7	5.8	0.87												
12	ZAM04333	ZAM04333	ZamSeed	Non-OPM	95	21	9	3.5	16	3.5	16	2.7	0.67	0.4	6.7	0.64	6.1	1.2	1.00												
15	013WH10	013WH10	Zimbabwe	Non-OPM	96	22	10	3.1	25	3.1	25	1.0	0.61	0.4	6.3	0.65	6.6	4.8	0.93												
9	SC513	SC513	SeedCo	Non-OPM	81	23	9	3.9	9	3.9	9	2.0	0.23	0.3	5.0	0.58	5.2	7.8	1.15												
2	CAP341NG	CAP341NG	Local Check1	Local Check1	87	23	9	3.5	19	3.5	19	10.9	0.18	0.3	11.7	0.60	5.6	5.1	1.00												
34	Local Check1		Local Check1	Local Check1	74	25	12	3.0	28	3.0	28	12.7	0.28	0.3	6.3	0.35	6.1	1.15													
29	CZH05013	CZL00034/CZL00007/CZL9014/CZL00008	CIMMYT	Non-OPM	89	25	6	1.7	35	1.7	35	3.5	0.46	0.4	11.7	0.50	7.5	8.3	1.03												
Maturity group average																															
Entries with anthesis date > 87 days																															
14	ZAM04510	ZAM04510	ZamSeed	Non-OPM	108	12	8	3.6	15	3.6	15	7.6	0.32	0.3	7.7	0.54	6.1	4.8	0.86												
1	WH403	WH403	Western Seed	Non-OPM	108	12	11	3.6	14	3.6	14	13.5	0.19	0.3	6.0	0.51	6.1	3.8	1.26												
32	CZH04017	CML395/CML444/CZL04011	CIMMYT	Non-OPM	105	12	11	5.0	2	5.0	2	12.8	0.16	0.4	9.7	0.38	6.1	1.14													
4	DK8033	DK8033	Monsanto	Non-OPM	108	14	8	3.8	17	3.5	17	5.8	0.56	0.4	5.0	0.54	6.5	11.9	1.07												
21	CZH04005	CML395/CML444/CZL03005/CZL03003	CIMMYT	Non-OPM	106	14	8	3.8	11	3.8	11	5.3	0.28	0.1	8.7	0.59	6.6	13.7	0.93												
26	CZH03010	CML441/CML442/CZL03007	CIMMYT	Non-OPM	102	14	9	4.3	5	4.3	5	3.8	0.50	0.3	10.0	0.42	6.1	6.1	0.88												
17	013WH07	013WH07	Zimbabwe	Non-OPM	100	15	11	4.0	8	4.0	8	12.9	0.09	0.4	14.0	0.60	6.1	10.4	1.04												
5	30G37	30G37	Penner	Non-OPM	104	16	8	2.8	31	2.8	31	3.4	0.38	0.3	5.0	0.60	5.9	0.88													
16	013WH31	013WH31	Zimbabwe	Non-OPM	99	16	12	4.0	7	4.0	7	10.9	0.18	0.3	11.3	0.30	6.5	0.99													
10	ZAM02309	ZAM02309	ZamSeed	Non-OPM	97	17	10	2.7	32	2.7	32	13.0	0.10	0.2	9.0	0.61	5.8	11.3	1.05												
24	CZH03007	CML395/CML444/CZL03006	CIMMYT	Non-OPM	107	17	10	5.2	1	5.2	1	12.7	0.26	0.4	6.3	0.59	6.3	11.2	1.07												
11	ZAM03512	ZAM03512	ZamSeed	Non-OPM	95	18	10	3.4	20	3.4	20	10.0	0.17	0.3	9.7	0.48	5.9	12.9	1.07												
28	CZH03006	CML395/CML444/CZL03005	CIMMYT	Non-OPM	96	18	11	3.3	24	3.3	24	8.0	0.38	0.4	12.7	0.36	5.6	0.68													
13	ZAM04334	ZAM04334	ZamSeed	Non-OPM	90	21	10	3.6	13	3.6	13	12.7	0.05	0.4	10.0	0.64	6.1	13.4	0.91												
Maturity group average																															
Means					100	18	10	3.6	18	3.6	18	5.3	0.42	0.3	8.7	0.54	6.1	7.0	1.02												
Stds					8	4	1	1.46	10	1.46	10	4.9	0.20	0.2	5.0	0.15	1.1	3.1	0.31												
RelYf					74	12	6	1.73	1	1.73	1	1.0	0.08	0.1	4.7	0.30	5.2	7.2	0.87												
Rank					116	25	12	5.17	35	5.17	35	13.5	0.83	0.4	14.0	0.87	7.8	20.7	1.26												
Number of plants																															
					19	19	19	1	1	1	1	2	1	0	1	2	1	1	1	0											

ILHYB05

ILHYB05: Results of evaluation of intermediate to late maturing hybrids from CIMMYT, South Africa, Monsanto, Nelson Genetics, Pannar, Pioneer, Seedco and Zamseed across 28 sites in eastern and southern Africa, 2004/05. Table 6C

Entry	Name	Pedigree	Origin	Comments	Mid Altitudes Eastern Africa - Grain Yields											
					Across			Across		Bako Est		Sungoma Km		Uga		
					RelGY	Rank	StdDev	GrainYield	RankNo	GrainYield	RankNo	GrainYield	RankNo	GrainYield	RankNo	GrainYield
%	Avg	StdDev	t/ha	#	t/ha	#	t/ha	#	t/ha	#	t/ha	#				
Entries with anthesis date between 68 - 71 days																
28	SAM17	SAM17	South Africa	Non-OPM	118	16	15	7.8	26	11.8	39	8.3	25	5.3	15	
29	CZHO025	CML440/CML444/CML445	CIMMYT	Non-OPM	100	24	15	7.4	31	11.1	44	5.5	39	5.6	9	
31	CZHO012	CML395/CML444/CZL03009	CIMMYT	Non-OPM	101	26	14	6.9	34	9.8	47	5.6	35	5.3	19	
46	CZHO4003	CML312/CML442/CZL04003	CIMMYT	Non-OPM	102	29	14	6.9	41	11.5	41	5.2	42	4.0	41	
3	CAP311	CAP311	Nelson Genetics / Capstone Seeds	Non-OPM	89	35	13	6.1	42	10.3	46	3.6	46	4.5	33	
Maturity group average					102	26	14	7.0	35	10.8	43	5.2	38	4.9	23	
Entries with anthesis date between 72 - 73 days																
30	CZHO019	CML444/CML197/CML488	CIMMYT	Non-OPM	114	15	11	8.9	12	13.0	26	7.8	2	5.8	8	
15	30G19	30G19	Pioneer	Non-OPM	105	19	13	9.8	8	16.4	2	7.7	3	5.2	20	
45	CZHO3025	CZL04013/CML444/CZL0002/WH488	CIMMYT	Non-OPM	106	20	10	8.2	23	13.3	22	6.2	27	5.2	21	
11	SC635	SC635	SeedCo	Non-OPM	107	20	9	8.6	23	15.2	6	5.8	33	4.6	30	
37	CZHO4007	CML489/CML444/CZL04006	CIMMYT	Non-OPM	107	21	13	8.2	21	12.7	29	6.5	20	5.4	14	
33	CZHO3022	CML312/CML444/CML488	CIMMYT	Non-OPM	105	22	13	8.4	19	12.5	33	7.3	5	5.3	18	
38	CZHO4008	CML444/CML395/CZL04007	CIMMYT	Non-OPM	107	22	13	8.5	18	13.4	19	5.8	32	6.3	3	
35	CZHO3030	CML444/CML395/CZL03014	CIMMYT	Non-OPM	104	22	15	8.8	14	13.3	21	6.4	21	6.6	1	
42	CZHO4018	CML202/CML444/CZL04006	CIMMYT	Non-OPM	106	22	11	8.4	19	12.9	28	8.8	15	5.4	13	
18	ZAM03505	ZAM03505	ZamSeed	Non-OPM	99	25	12	7.6	33	12.0	37	5.6	37	5.2	24	
32	CZHO3014	CML489/CML444/CML312/CML442	CIMMYT	Non-OPM	95	27	9	7.3	35	11.4	42	6.4	22	4.1	40	
39	CZHO4009	CML489/CML441/CZL03007	CIMMYT	Non-OPM	98	28	13	7.6	33	12.6	31	4.9	44	5.2	23	
47	CZHO1024	CZL01005/CML176/CML181	CIMMYT	OPM Hybrid	97	30	11	7.9	28	12.5	35	7.0	10	4.1	38	
44	CZHO4020	CZL02014/CML197/CML488	CIMMYT	Non-OPM	90	30	13	8.5	16	13.2	23	6.8	14	5.4	11	
9	SC627	SC627	SeedCo	Non-OPM	94	32	14	7.8	30	12.5	34	6.8	19	4.3	36	
5	CAP441NG	CAP441NG	Nelson Genetics / Capstone Seeds	Non-OPM	89	34	13	6.6	42	12.5	32	3.5	49	3.7	44	
24	ZAM04316	ZAM04316	ZamSeed	Non-OPM	85	35	13	8.0	26	13.9	13	5.9	31	4.3	35	
6	DK8051	DK8051	Monsanto	Non-OPM	83	37	15	6.7	43	11.6	40	5.0	43	3.3	47	
Maturity group average					99	26	12	8.1	25	13.1	28	6.2	24	5.0	24	
Entries with anthesis date greater than 73 days																
13	SC719	SC719	SeedCo	Non-OPM	124	9	12	8.7	16	14.3	18	7.2	8	4.6	31	
8	DKC80-73	DKC80-73	Monsanto	Non-OPM	115	14	13	9.6	5	15.2	5	7.2	7	6.3	2	
23	ZAM03530	ZAM03530	ZamSeed	Non-OPM	108	18	12	8.7	13	17.2	1	6.9	12	5.0	26	
22	ZAM03508	ZAM03508	ZamSeed	Non-OPM	105	19	11	8.9	16	15.0	7	5.6	36	5.9	6	
21	ZAM03518	ZAM03518	ZamSeed	Non-OPM	106	19	13	8.8	15	14.6	8	6.0	30	5.9	7	
2	WH502	WH502	Western Seed	Non-OPM	104	21	12	8.8	9	13.5	17	7.8	1	5.5	10	
43	CZHO4019	CML395/CML444/CZL04006	CIMMYT	Non-OPM	107	22	12	8.7	14	14.0	12	6.2	26	5.9	5	
36	CZHO4006	CZL04005/CML445/CML312	CIMMYT	Non-OPM	106	22	12	8.3	23	13.0	27	7.6	4	4.3	37	
1	WH505	WH505	Western Seed	Non-OPM	102	22	14	8.7	13	13.7	16	6.9	11	5.4	12	
26	013WH01	013WH01	Zimbabwe	Non-OPM	98	22	14	9.6	8	16.2	3	6.7	16	6.0	4	
19	ZAM04502	ZAM04502	ZamSeed	Non-OPM	103	23	13	7.7	31	13.1	24	5.6	37	4.5	32	
27	013WH03	013WH03	Zimbabwe	Non-OPM	97	24	15	7.0	38	10.9	45	4.8	46	5.3	16	
17	30V53	30V53	Pioneer	Non-OPM	96	24	14	9.0	11	14.4	9	7.2	6	5.3	17	
10	SC837	SC837	SeedCo	Non-OPM	102	25	15	8.4	20	13.9	14	6.9	13	4.5	34	
25	ZAM03538	ZAM03538	ZamSeed	Non-OPM	98	25	13	7.9	28	13.0	25	6.1	24	4.2	38	
20	ZAM04507	ZAM04507	ZamSeed	Non-OPM	99	26	12	8.0	26	12.7	30	6.4	23	5.0	25	
14	30N67	30N67	Pioneer	Non-OPM	94	26	14	7.6	32	13.4	20	4.7	47	4.7	29	
48	CZH99050	CML144/CML150/CML181	CIMMYT	OPM Hybrid	98	26	15	7.9	23	14.1	11	7.0	9	2.7	48	
34	CZHO3029	CML444/CML395/CZL03015	CIMMYT	Non-OPM	101	27	12	7.5	33	11.9	38	5.5	40	5.2	22	
16	30B35	30B35	Pioneer	Non-OPM	96	27	12	8.2	24	13.7	15	6.1	29	4.8	28	
12	SC715	SC715	SeedCo	Non-OPM	94	28	15	8.3	29	15.6	4	5.4	41	3.8	43	
49	Local Check	Local Check	Various	Local Check	90	29	15	7.6	31	13.4	18	6.2	28	3.3	46	
41	CZHO4011	CML444/CZL00003/CZL04005	CIMMYT	Non-OPM	96	30	15	8.2	38	9.3	49	6.7	17	2.5	49	
7	DK8071	DK8071	Monsanto	Non-OPM	98	31	13	7.4	35	11.4	43	5.8	34	4.9	27	
40	CZHO4010	CML489/CML444/CZL04005	CIMMYT	Non-OPM	99	34	16	6.8	36	9.8	48	6.0	18	3.9	42	
4	CAP614	CAP614	Nelson Genetics / Capstone Seeds	Non-OPM	74	41	7	6.9	42	12.1	36	4.9	45	3.7	45	
Maturity group average					100	29	13	8.2	23	13.4	21	6.3	23	4.7	26	
Mean					100	25	13	8.02	25	13.64	25	6.17	26	4.85	35	
LSD (I,05)					9	6	2	1.19	10	3.96	14	1.24	14	1.32	14	
Min					74	9	7	6.15	5	9.29	1	3.48	1	2.51	1	
Max					124	41	15	8.76	43	11.49	49	7.82	49	6.64	49	
NumSignificantSites					21	21	21	3	3	1	1	1	1	7		

ILHYB05: Results of evaluation of intermediates to late maturing hybrids from CIMMYT, South Africa, Monsanto, Nelson Genetics, Pannar, Pioneer. Seedco and Zamseed across 28 sites in eastern and southern Africa, 2004/05.

Table 6D

Entry	Name	Mid Altitude Humid Wern (Zone A) - Grain Yields																	
		Accras			Accras		Malanga Ang		Cacuro Ang		Cela Ang		ART Farm Harare Zim		Buzbwa Mat		Chitamba Mal		
		RelGY	Rank	StdDev	GrainYield	RankNo	GrainYield	RankNo	GrainYield	RankNo	GrainYield	RankNo	GrainYield	RankNo	GrainYield	RankNo	GrainYield	RankNo	
		%	Avg	StdDev	t/ha	#	t/ha	#	t/ha	#	t/ha	#	t/ha	#	t/ha	#	t/ha	#	
Entries with anthesis date between 68 - 71 days																			
28	SAM17	118	16	15	6.4	19	0.3	44	7.8	12	3.1	29	8.6	39	9.9	4	10.6	14	
29	CZH00025	100	24	15	6.2	19	0.5	27	8.1	5	4.5	4	9.0	31	9.1	10	10.0	21	
31	CZH03012	101	26	14	5.4	30	0.4	39	8.3	2	3.5	22	7.8	45	7.9	36	7.1	48	
46	CZH04003	102	29	14	5.8	25	0.8	6	7.8	15	4.0	12	8.9	35	8.3	23	9.0	35	
3	CAP311	88	35	13	5.1	35	0.6	15	8.3	4	2.5	40	7.6	46	8.2	28	7.4	46	
Maturity group average		102	26	14	5.8	26	0.5	26	8.1	8	3.5	21	8.4	39	8.7	20	8.8	33	
Entries with anthesis date between 72 - 73 days																			
30	CZH02019	114	15	11	6.5	15	0.6	14	7.1	31	4.8	3	10.3	6	10.3	2	9.5	27	
15	3UG19	105	19	13	6.2	20	0.4	33	7.2	27	3.4	23	9.3	26	8.9	16	11.1	4	
45	CZH03025	106	20	10	6.0	20	0.6	13	7.1	30	3.1	27	10.0	8	8.0	32	9.3	32	
11	SC635	107	20	9	6.2	18	0.8	5	6.9	36	3.0	32	9.9	13	8.7	19	10.7	10	
37	CZH04007	107	21	13	5.9	26	0.3	43	7.0	33	3.5	21	8.7	38	9.3	7	9.5	25	
33	CZH03022	105	22	13	6.1	24	0.5	26	6.6	43	3.9	13	9.1	30	9.2	9	11.0	5	
38	CZH04008	107	22	13	6.1	19	0.8	3	8.0	10	3.6	19	10.0	11	8.5	22	9.1	33	
35	CZH03030	104	22	15	5.8	25	0.4	35	7.7	17	4.3	8	9.4	23	7.9	37	8.0	43	
42	CZH04018	104	22	11	5.7	27	0.5	19	7.3	28	3.3	24	9.0	32	8.1	31	8.6	40	
18	ZAM03505	99	25	12	5.7	27	0.6	12	7.2	29	2.3	42	9.3	25	8.6	20	8.7	39	
32	CZH03014	98	27	9	6.1	22	0.5	24	7.0	34	3.8	18	9.3	24	8.2	25	10.7	13	
39	CZH04009	98	28	13	5.1	35	0.7	8	7.6	29	2.4	41	8.2	42	6.8	48	8.0	42	
47	CZH01024	97	30	11	5.4	34	0.4	32	6.6	42	3.8	16	8.8	36	7.6	39	9.1	34	
44	CZH04020	90	30	13	5.3	36	0.3	42	7.9	13	2.9	33	9.1	28	8.9	17	7.0	49	
9	SC637	94	32	14	5.6	27	0.8	4	8.4	1	2.6	39	10.0	9	7.2	41	8.7	38	
5	CAP441NG	89	34	13	5.0	36	0.7	9	6.5	45	2.0	46	9.1	29	6.1	49	7.3	47	
24	ZAM04316	85	35	13	5.2	34	0.5	28	8.1	6	2.2	44	8.8	37	6.9	46	7.7	44	
8	DK8051	83	37	15	5.9	28	0.3	47	7.4	24	4.4	6	7.4	47	10.0	3	10.5	17	
Maturity group average		98	26	12	5.8	26	0.5	22	7.3	28	3.3	25	9.2	28	8.3	26	9.2	38	
Entries with anthesis date greater than 73 days																			
13	SC710	124	9	12	7.3	10	0.1	48	6.9	37	4.4	7	10.4	5	10.4	1	12.8	1	
8	DK030-73	115	14	13	7.0	12	0.4	34	6.3	47	4.9	2	9.8	14	8.2	29	11.8	3	
23	ZAM03530	108	18	12	6.1	19	0.5	20	8.1	8	2.8	37	10.6	2	8.3	24	9.5	28	
22	ZAM03530	105	19	11	6.2	20	0.4	36	7.7	19	3.0	31	9.7	17	10.0	11	9.5	29	
21	ZAM03518	106	19	13	6.1	21	0.6	16	7.5	23	2.8	38	9.6	20	9.8	5	9.5	24	
2	WHS02	104	21	12	6.0	25	0.4	38	6.7	40	2.8	35	9.5	22	8.2	27	11.0	6	
43	CZH04019	107	22	12	6.1	19	0.7	10	8.3	3	3.5	29	8.9	34	9.0	12	9.6	23	
36	CZH04006	106	22	12	6.3	16	0.9	1	5.8	49	4.0	11	9.2	27	9.2	8	10.4	19	
1	WHS05	102	22	14	6.3	17	0.6	17	7.6	22	4.1	10	10.0	7	9.0	13	10.7	11	
26	013WH01	99	22	14	6.2	20	0.4	31	7.9	14	3.1	39	10.4	4	8.6	21	10.6	15	
19	ZAM04502	103	23	13	6.4	13	0.6	18	7.4	25	3.8	17	9.6	19	9.0	14	10.7	12	
27	013WH03	97	24	15	6.3	21	0.3	46	7.7	18	3.1	28	10.9	1	8.1	30	10.5	16	
17	30VS3	96	24	14	6.1	25	0.3	48	7.0	35	2.3	43	9.7	15	8.9	18	10.9	8	
10	SC637	100	25	15	6.0	27	0.3	45	6.7	41	2.0	45	9.5	21	7.9	35	12.0	2	
25	ZAM03530	99	25	13	6.0	23	0.5	23	6.4	46	2.9	34	10.0	10	9.4	6	10.1	20	
30	ZAM04507	99	26	12	5.6	30	0.4	40	8.0	11	3.1	26	8.9	33	7.8	38	9.9	22	
14	30WS7	94	26	14	6.0	21	0.6	11	6.8	39	1.8	47	10.4	3	8.2	26	10.7	9	
48	CZH03029	98	26	15	5.6	29	0.7	7	8.0	9	3.9	15	8.3	41	7.6	40	9.4	39	
34	CZH03028	101	27	12	5.7	28	0.3	41	8.1	7	3.2	25	9.7	16	8.9	15	8.1	41	
16	30R05	96	27	12	5.6	32	0.4	37	6.5	44	3.9	14	7.9	44	8.0	33	10.6	18	
12	SC715	94	28	15	6.0	24	0.5	30	7.6	21	2.8	36	9.6	18	7.9	34	10.0	7	
49	LineL Check	98	29	15	5.5	29	0.5	28	7.1	32	1.7	49	9.9	12	7.0	44	9.5	29	
41	CZH04011	96	30	15	5.5	38	0.9	2	6.0	48	4.5	5	8.1	43	7.1	43	9.3	31	
7	DK8071	94	31	13	5.2	35	0.5	22	7.7	16	4.2	9	8.4	40	6.9	45	8.6	37	
40	CZH04010	90	34	16	4.9	37	0.5	21	7.1	29	5.1	1	7.4	48	6.9	47	7.8	45	
4	CAP014	74	41	7	4.8	40	0.5	25	6.9	38	1.8	48	6.7	49	7.1	42	9.0	36	
Maturity group average		109	24	13	6.0	24	0.5	27	7.2	29	3.3	28	9.4	22	8.1	25	10.1	20	
Mean		106	26	13	5.99	25	0.54	25	7.34	25	3.20	29	9.28	25	8.14	25	9.64	25	
LSD (0.05)		9	6	2	#NUM!	7	0.34	14	23.6	14	0.97	18	1.40	14	1.30	14	2.00	14	
Min		74	9	7	4.82	16	0.12	1	5.80	1	1.68	1	6.70	1	6.12	1	7.03	1	
Max		124	41	16	7.28	49	0.97	49	8.41	49	5.78	49	10.94	49	10.39	49	12.80	49	
NumSignificant Sites		21	24	21	7	7	1	0	1	1	1	1	1	1	1	1	1	1	

ILHYBUS: Results of evaluation of intermediate to late maturing hybrids from CIMMYT, South Africa, Monsanto, Nelson Genetics, Pannar, Pioneer, Seedco and Zamseed across 28 sites in eastern and southern Africa, 2004/05. Table 6E

Entry	Name	Mid Altitude Humid Warm (Zone A) - Grain Yields				Mid Altitude Warm (Zone B) - Grain Yields				Mid Altitude Dry (Zone C) - Grain Yields								
		Across		Magobo Zam		Across		Kamun Tam		Across		Makaras Sow						
		RelGY	Rank	GrainYield	RankNo	GrainYield	RankNo	GrainYield	RankNo	GrainYield	RankNo	GrainYield	RankNo					
%	Avg	StdDev	t/ha	#	t/ha	#	t/ha	#	t/ha	#	t/ha	#	t/ha	#				
<i>Entries with anthesis date between 56-77 days</i>																		
28	SAH17	118	18	15	6.8	5	5.7	1	5.7	19	1.1	4	5.7	19	2.5	27	3.4	45
29	CZH00025	100	24	15	5.9	26	4.6	11	4.2	41	1.1	8	4.2	41	2.4	28	3.4	44
31	CZH03012	101	26	14	6.3	16	4.8	6	5.0	31	0.9	25	5.0	31	2.9	18	4.3	25
46	CZH04003	102	29	14	5.6	35	4.2	26	4.2	43	0.8	43	4.2	43	2.8	22	3.6	40
3	CAF311	89	35	13	5.2	43	4.2	25	4.2	44	0.9	31	4.2	44	2.3	28	3.1	47
Maturity group average		102	26	14	6.0	25	4.7	14	4.6	36	1.0	22	4.6	36	2.6	24	3.6	40
<i>Entries with anthesis date between 77-78 days</i>																		
30	CZH02019	114	15	11	5.3	41	4.6	12	6.4	7	0.8	43	6.4	7	2.8	21	4.5	18
15	30G19	105	19	13	6.6	7	4.0	31	5.7	20	0.9	29	5.7	20	2.7	24	4.0	30
45	CZH03025	106	20	10	6.8	4	4.2	22	5.8	15	0.9	34	5.8	15	2.4	29	3.8	35
11	30G35	107	20	9	6.2	19	4.0	29	5.9	14	1.1	9	5.9	14	2.5	28	4.0	31
37	CZH04007	107	21	13	6.1	20	3.5	38	5.5	27	1.2	2	5.5	27	2.7	22	3.7	37
33	CZH03022	105	22	13	5.6	37	3.4	45	5.2	28	1.1	7	5.2	28	3.1	17	5.3	4
38	CZH04008	107	22	13	5.7	32	4.7	10	4.9	33	1.0	10	4.9	33	3.1	10	4.5	15
35	CZH03038	104	22	15	6.5	11	4.4	16	5.7	21	1.2	1	5.7	21	2.7	24	4.4	71
42	CZH04018	104	22	11	6.1	22	4.3	18	5.9	13	1.0	11	5.9	13	2.8	20	4.2	26
18	ZAM03505	98	25	12	6.4	13	3.8	35	5.6	25	0.8	40	5.6	25	2.5	30	4.1	27
31	CZH03014	98	27	9	5.8	30	4.2	21	5.7	17	0.8	38	5.7	17	2.9	19	4.4	22
38	CZH04009	98	28	13	6.1	21	3.2	46	6.0	11	0.7	45	6.0	11	2.4	32	4.0	32
47	CZH01024	97	30	11	4.5	47	3.7	36	4.6	38	0.8	41	4.6	38	3.0	14	4.6	12
44	CZH04020	90	30	13	5.2	42	3.5	41	5.7	18	1.0	16	5.7	18	2.0	40	3.5	41
9	SC027	94	32	14	5.9	25	4.0	30	4.8	36	1.0	11	4.8	36	1.7	43	2.8	49
5	CAP41NG	89	34	13	5.8	31	3.9	33	4.5	39	0.8	38	4.5	39	2.4	34	4.3	24
24	ZAM04016	85	35	13	5.9	23	4.7	9	3.7	47	0.7	46	3.7	47	1.8	47	3.1	46
6	DK8051	83	37	15	5.5	38	3.0	48	2.6	49	0.9	23	2.6	49	2.2	34	3.1	48
Maturity group average		98	36	12	5.9	26	3.9	29	5.2	25	0.9	25	5.2	25	2.5	27	4.0	29
<i>Entries with anthesis date greater than 73 days</i>																		
13	SC719	124	9	12	7.2	2	5.7	2	7.4	1	0.8	35	7.4	1	3.5	7	5.5	3
8	DKC80-73	115	14	13	8.1	1	5.4	3	5.6	24	0.9	32	5.6	24	3.5	8	5.7	2
73	ZAM03530	108	18	12	6.9	3	4.2	20	6.6	5	0.9	33	6.6	5	2.7	22	4.7	10
22	ZAM03508	105	19	11	6.4	14	5.2	4	5.0	32	0.9	21	5.0	32	2.6	25	4.6	13
21	ZAM03518	105	19	13	5.7	33	4.8	8	6.8	6	0.9	22	6.8	6	2.6	27	4.5	19
2	WMS02	104	21	12	5.6	35	4.5	13	5.2	29	0.9	23	5.2	29	2.5	29	4.1	28
43	CZH04019	107	22	12	6.5	9	4.2	24	5.6	23	1.0	16	5.6	23	3.1	17	3.9	33
36	CZH04006	106	22	12	5.7	34	4.4	15	5.1	30	0.9	26	5.1	30	2.7	25	4.1	29
1	WMS01	102	22	14	6.2	18	3.4	43	5.5	26	1.0	14	5.5	26	3.0	11	4.5	17
26	P13MH01	99	22	14	6.4	15	4.2	23	6.3	8	0.9	20	6.3	8	2.8	25	5.2	5
19	ZAM03502	103	23	13	6.6	6	4.8	7	5.8	16	1.2	3	5.8	16	2.5	31	4.3	23
27	P13MH01	97	24	15	6.6	8	4.4	17	7.1	2	1.1	5	7.1	2	2.6	25	4.7	8
17	30Z53	96	24	14	6.3	17	4.1	27	5.6	22	0.9	27	5.6	22	2.3	34	4.4	20
10	30G37	101	25	15	5.8	29	4.5	14	4.2	42	0.8	38	4.2	42	2.3	32	3.4	43
25	ZAM03538	98	25	13	5.3	40	4.1	28	4.8	37	1.1	3	4.8	37	2.4	31	4.5	16
30	ZAM04507	98	26	12	4.2	49	4.8	5	6.1	9	1.0	19	6.1	9	3.5	10	5.7	1
14	30N17	94	26	14	6.5	10	3.4	44	6.0	10	1.0	15	6.0	10	2.6	25	4.7	9
48	CZH04010	98	28	15	5.8	28	3.5	40	4.3	40	0.6	49	4.3	40	3.1	9	4.6	11
34	CZH03029	101	27	12	5.8	27	3.7	37	4.8	35	0.9	31	4.8	35	2.9	19	3.8	36
16	30B35	96	27	12	5.4	39	3.5	42	6.5	6	0.9	26	6.5	6	2.6	25	4.8	7
12	30Z15	94	28	15	6.4	12	3.9	32	7.0	3	0.8	42	7.0	3	2.0	51	3.5	42
49	Local Check	90	28	15	5.9	24	4.3	19	3.9	45	1.0	13	3.9	45	2.3	32	3.7	38
41	CZH04011	96	30	15	4.9	45	3.7	36	4.8	34	0.7	47	4.8	34	2.1	21	4.6	14
7	13K071	94	31	13	4.7	46	3.1	47	5.9	12	0.7	48	5.9	12	2.2	37	3.7	39
40	CZH04010	90	34	16	4.5	48	2.4	49	3.7	46	1.0	18	3.7	46	3.0	14	4.8	6
4	CAP31A	74	41	7	5.0	44	3.8	34	3.6	48	0.8	37	3.6	48	2.0	42	3.8	34
Maturity group average		100	24	13	5.9	25	4.2	24	5.5	23	0.9	26	5.5	23	2.7	24	4.5	19
Mean		100	26	13	5.93	25	4.13	25	5.51	23	0.82	26	5.21	25	2.82	25	4.20	25
LSD (D.F.)		5	6	2	1.35	14	1.43	14	1.30	14	0.32	14	1.30	14	0.82	18	1.43	14
Min		74	41	7	4.24	1	2.43	1	2.83	1	0.83	1	2.83	1	1.98	7	2.78	1
Max		124	9	12	8.12	49	6.75	49	7.33	49	1.23	49	7.33	49	3.54	47	5.73	49

Norm significance

ILHYB05: Results of evaluation of intermediate to late maturing hybrids from CIMMYT, South Africa, Monsanto, Nelson Genetics, Pannar, Pioneer, Seedco and Zamseed across 28 sites in eastern and southern Africa, 2004/05.

Table 6F

Entry	Name	Mid Altitude Dry (Zone C) - Grain Yields						Lowland Tropical Humid (Zone D) - Grain Yields				Lowland Tropical Dry (Zone E) - Grain Yields						
		Across			Kadoma Zim		Makusho Zim		Across		Benge Tac		Across		Chiredzi Zim		Nanga Zim	
		RelGY	Rank	StDev	GrainYield	RankNo	GrainYield	RankNo	GrainYield	RankNo	GrainYield	RankNo	GrainYield	RankNo	GrainYield	RankNo	GrainYield	RankNo
		%	Avg	StDev	t/ha	#	t/ha	#	t/ha	#	t/ha	#	t/ha	#	t/ha	#	t/ha	#
Entries with anthesis date between 80 - 71 days																		
28	SAM7	116	16	15	1.5	8	0.9	37	5.0	9	5.0	9	3.0	1	3.0	1	2.4	4
29	CZH00025	100	24	15	1.4	12	1.3	6	1.3	48	1.3	48	2.8	3	2.8	3	2.0	8
31	CZH03012	101	20	14	1.5	10	1.1	25	4.3	19	4.3	19	2.6	8	2.6	8	1.6	17
46	CZH04003	102	29	14	1.9	3	0.9	34	3.5	38	3.5	38	1.9	23	1.9	23	0.5	46
3	CAP311	89	36	13	1.5	9	0.7	47	3.5	39	3.5	39	2.3	17	2.3	17	1.8	12
Maturity group average		102	26	14	1.6	8	1.0	30	3.5	31	3.5	31	2.5	10	2.5	10	1.7	17
Entries with anthesis date between 72 - 73 days																		
30	CZH02019	114	15	11	1.1	24	1.1	20	5.5	3	5.5	3	2.5	14	2.5	14	1.3	26
15	30G19	105	19	13	1.3	17	1.0	27	4.5	15	4.5	15	1.5	39	1.5	39	1.6	16
45	CZH03025	106	20	10	1.1	23	1.0	31	4.6	14	4.6	14	2.5	12	2.5	12	1.7	14
11	SC635	107	20	9	1.0	25	1.1	21	5.8	2	5.8	2	2.0	22	2.0	22	1.7	15
37	CZH04007	107	21	13	1.6	6	1.4	3	5.1	4	5.1	4	2.9	2	2.9	2	1.8	10
33	CZH03022	105	22	13	0.9	30	1.3	4	3.5	41	3.5	41	2.5	13	2.5	13	1.0	33
38	CZH04008	107	22	13	1.6	4	0.9	35	4.1	27	4.1	27	2.8	6	2.8	6	0.8	28
35	CZH03030	104	22	15	0.9	27	1.0	32	2.5	46	2.5	46	1.8	25	1.8	25	1.5	21
42	CZH04018	104	22	11	1.4	14	1.4	2	3.8	31	3.8	31	2.6	9	2.6	9	1.4	24
18	ZAM03505	99	25	12	0.8	32	1.2	17	5.0	7	5.0	7	1.8	27	1.8	27	0.9	36
32	CZH03014	98	27	9	1.4	15	1.0	28	4.3	21	4.3	21	1.8	26	1.8	26	2.3	5
39	CZH04009	98	28	13	0.9	31	1.5	1	4.4	17	4.4	17	2.3	18	2.3	18	1.8	13
47	CZH01024	97	30	11	1.3	16	1.1	23	3.6	36	3.6	36	1.8	28	1.8	28	0.6	44
44	CZH04020	90	33	13	0.6	39	1.2	13	4.6	13	4.6	13	1.2	46	1.2	46	2.6	1
9	SC627	99	30	14	0.6	37	0.7	46	4.2	26	4.2	26	1.2	47	1.2	47	1.8	11
5	CAP441NG	89	34	13	0.5	43	0.8	42	3.8	32	3.8	32	2.0	20	2.0	20	1.5	22
24	ZAM04016	85	35	13	0.4	47	1.0	29	4.2	25	4.2	25	2.6	10	2.6	10	1.0	34
6	DK005I	83	37	15	1.3	19	0.9	41	2.4	47	2.4	47	1.4	44	1.4	44	0.8	40
Maturity group average		100	26	12	1.0	25	1.1	23	4.2	23	4.2	23	2.1	23	2.1	23	1.4	22
Entries with anthesis date greater than 73 days																		
13	SC718	124	9	12	1.4	11	1.2	14	6.4	1	6.4	1	2.7	7	2.7	7	1.5	23
8	DKC89-73	115	14	13	1.4	13	1.2	15	4.8	11	4.8	11	1.2	45	1.2	45	0.5	45
23	ZAM03538	108	18	12	1.6	33	1.3	11	4.1	29	4.1	29	2.5	15	2.5	15	1.0	31
22	ZAM02509	105	19	11	0.7	36	0.9	40	5.1	6	5.1	6	2.4	16	2.4	16	1.5	26
21	ZAM03518	106	19	13	0.7	35	1.3	5	4.5	16	4.5	16	1.5	35	1.5	35	1.1	28
2	WH502	104	21	12	0.9	29	1.1	19	3.7	35	3.7	35	2.8	5	2.8	5	2.5	2
43	CZH00019	107	22	12	2.3	1	1.2	12	4.9	10	4.9	10	1.9	24	1.9	24	2.5	3
36	CZH04006	106	22	12	1.2	21	0.9	39	3.1	43	3.1	43	2.1	19	2.1	19	1.0	32
1	WH505	105	22	14	1.6	5	1.3	8	5.1	5	5.1	5	1.5	42	1.5	42	2.3	6
26	013WH01	99	22	14	0.5	44	1.1	22	4.7	12	4.7	12	1.5	37	1.5	37	0.7	42
19	ZAM0502	103	23	13	0.6	38	0.7	49	4.4	18	4.4	18	1.7	32	1.7	32	1.0	30
27	013WH03	97	24	15	0.5	41	1.3	10	4.3	22	4.3	22	2.0	21	2.0	21	2.1	7
17	30VS3	96	24	14	0.2	48	0.8	45	3.4	42	3.4	42	1.5	40	1.5	40	1.3	27
10	SC637	100	25	15	1.2	20	1.3	9	5.0	8	5.0	8	2.6	11	2.6	11	0.6	43
25	ZAM03538	98	25	13	0.4	46	1.3	7	3.6	37	3.6	37	1.5	38	1.5	38	1.9	9
20	ZAM04507	98	26	12	1.3	18	1.0	33	4.1	30	4.1	30	1.6	33	1.6	33	1.5	18
14	WH07	94	26	14	0.5	40	0.8	44	4.2	24	4.2	24	1.8	29	1.8	29	1.4	25
48	CZH03050	98	26	15	1.5	7	0.9	38	3.5	40	3.5	40	1.7	31	1.7	31	0.2	49
34	CZH03029	101	27	12	2.1	2	1.1	18	3.8	33	3.8	33	1.7	30	1.7	30	0.9	38
16	30B35	96	27	12	0.5	42	0.7	48	4.3	20	4.3	20	1.6	34	1.6	34	0.2	48
12	SC715	94	28	15	0.5	45	1.1	24	4.2	23	4.2	23	1.2	48	1.2	48	1.5	19
49	Unsel-Check	90	32	15	1.0	26	1.0	30	0.3	49	0.3	49	2.8	4	2.8	4	1.2	28
41	CZH00011	96	30	15	0.9	28	1.0	36	2.6	45	2.6	45	1.5	41	1.5	41	0.8	41
7	DK8071	94	31	13	0.7	34	0.9	39	4.1	28	4.1	28	1.5	36	1.5	36	0.9	37
40	CZH00010	90	34	16	1.2	22	1.2	16	2.7	44	2.7	44	1.5	43	1.5	43	1.0	35
4	CAP514	74	41	7	0.2	49	0.8	43	3.8	34	3.8	34	1.1	49	1.1	49	0.3	47
Maturity group average		100	29	13	1.0	20	1.0	25	4.0	26	4.0	26	1.8	29	1.8	29	1.2	28
Mean		100	25	12	1.05	23	1.00	26	4.00	25	4.00	25	1.90	25	1.90	25	1.34	25
LSD (0.05)		9	6	2	0.02	14	0.46	14	7.28	14	7.28	14	0.78	14	0.78	14	1.00	14
Min		74	41	7	0.18	5	0.89	1	0.34	1	0.34	1	1.05	1	1.05	1	0.24	1
Max		124	9	10	2.31	49	1.49	49	9.41	49	9.41	49	3.00	49	3.00	49	2.56	49
NumSignificant Sites		21	21	21	1	0	0	0	1	1	1	1	1	1	1	1	0	0

ILHYB05: Results of evaluation of intermediate to late maturing hybrids from CIMMYT, South Africa, Monsanto, Nelson Genetics, Pannar, Pioneer, Seedco and Zamseed across 28 sites in eastern and southern Africa, 2004/05.

Table 6G

Entry	Name	Highlands (Zone F) - Grain Yields								MSV - Grain Yields				N Stress - Grain Yields				
		Across		Across		Humpata Ang		Across		Harare Zim		Across		CIMMYT Harare Zim		Harare Zim		
		RelFY	Rank	GrainYield	RankNo	GrainYield	RankNo	GrainYield	RankNo	GrainYield	RankNo	GrainYield	RankNo	GrainYield	RankNo	GrainYield	RankNo	GrainYield
	%	Avg	StdDev	t/ha	#	t/ha	#	t/ha	#	t/ha	#	t/ha	#	t/ha	#	t/ha	#	
Entries with anthesis date between 68 - 71 days																		
28	SAH17	116	16	15	6.2	1	6.2	1	11.1	4	11.1	4	1.8	2	2.6	2	1.9	17
29	CZH00025	100	24	15	5.3	7	5.3	7	8.6	21	8.6	21	1.2	21	2.0	19	1.3	41
31	CZH03012	101	26	14	4.8	19	4.8	19	9.3	14	9.3	14	1.4	13	2.1	12	2.4	3
46	CZH04003	102	29	14	4.8	18	4.8	18	4.6	46	4.6	46	1.6	7	2.3	7	2.7	1
3	CAP311	89	35	13	4.6	26	4.6	26	5.3	45	5.3	45	1.2	28	2.2	11	1.9	13
Maturity group average		102	26	14	5.1	14	5.1	14	7.8	26	7.8	26	1.4	14	2.2	10	2.0	15
Entries with anthesis date between 72 - 73 days																		
30	CZH02019	114	15	11	4.6	24	4.6	24	10.3	5	10.3	5	1.1	22	1.7	30	1.7	21
15	30G19	105	19	13	5.0	15	5.0	15	7.3	33	7.3	33	1.1	34	1.9	21	1.5	33
45	CZH03025	106	20	10	4.6	23	4.6	23	8.5	24	8.5	24	1.4	15	2.4	5	2.0	10
11	SC635	107	20	9	4.2	31	4.2	31	8.9	20	8.9	20	1.2	20	1.9	22	2.5	2
37	CZH04007	107	21	13	4.6	22	4.6	22	7.6	29	7.6	29	1.4	13	2.4	6	1.5	34
33	CZH03022	105	22	13	4.4	29	4.4	29	9.6	11	9.6	11	1.0	31	1.7	29	1.9	16
38	CZH04008	107	22	13	4.0	33	4.0	38	7.0	38	7.0	38	1.2	29	2.1	14	1.4	40
35	CZH03030	104	22	15	5.6	4	5.6	4	9.7	10	9.7	10	1.7	5	2.6	3	2.1	6
47	CZH04018	104	22	11	5.6	2	5.6	2	9.6	12	9.6	12	1.2	28	2.0	17	1.5	32
18	ZAM03505	99	25	12	4.7	20	4.7	20	7.7	28	7.7	28	0.8	35	1.2	44	1.3	43
32	CZH03014	100	27	9	4.0	39	4.0	39	7.5	30	7.5	30	1.1	31	1.8	24	1.9	18
36	CZH04009	98	28	13	4.5	25	4.5	25	8.5	23	8.5	23	1.4	17	2.4	4	1.7	25
47	CZH01024	97	30	11	4.1	37	4.1	37	7.2	35	7.2	35	1.3	16	2.0	16	2.1	7
44	CZH04020	90	30	13	4.1	36	4.1	36	8.6	22	8.6	22	1.1	34	2.0	15	1.7	26
9	SC627	94	32	14	3.0	49	3.0	49	8.3	25	8.3	25	1.2	18	1.6	32	1.9	14
5	CAPA41ING	88	36	13	4.2	32	4.2	32	7.8	27	7.8	27	0.9	27	0.9	48	1.6	30
24	ZAM04316	85	35	13	3.4	48	3.4	48	7.1	37	7.1	37	0.7	43	1.1	45	1.3	42
6	DK0051	83	37	15	3.9	41	3.9	41	3.2	49	3.2	49	0.8	42	1.4	38	1.2	46
Maturity group average		99	25	12	4.4	29	4.4	29	8.0	25	8.0	25	1.2	25	1.8	23	1.7	25
Entries with anthesis date greater than 73 days																		
13	SC719	124	9	12	5.6	3	5.6	3	10.3	6	10.3	6	1.3	17	1.8	25	1.9	12
8	DKC80-73	115	14	13	5.1	10	5.1	10	6.7	39	6.7	39	1.6	11	2.6	1	2.1	8
23	ZAM03530	108	18	12	5.0	16	5.0	16	12.2	2	12.2	2	1.1	32	1.8	27	1.4	37
22	ZAM03508	105	19	11	5.2	8	5.2	8	10.3	7	10.3	7	1.1	29	1.7	28	1.2	44
21	ZAM03518	106	19	13	5.0	11	5.0	11	12.2	1	12.2	1	0.8	36	1.1	47	1.4	39
2	WH502	104	21	12	5.3	6	5.3	6	9.0	19	9.0	19	1.0	27	1.5	36	1.4	38
43	CZH04019	107	22	12	4.1	35	4.1	35	9.2	16	9.2	16	0.9	40	1.5	35	1.2	45
36	CZH04006	106	22	12	5.0	12	5.0	12	7.1	36	7.1	36	1.3	25	2.2	9	2.0	9
1	WH505	102	22	14	5.0	14	5.0	14	6.5	42	6.5	42	0.8	38	1.3	40	1.8	20
28	013WH01	98	22	14	3.5	46	3.5	46	9.2	17	9.2	17	0.8	40	1.1	46	1.1	47
19	ZAM04502	103	23	13	3.4	47	3.4	47	8.1	26	8.1	26	1.3	18	1.5	34	1.6	27
27	013WH03	97	24	15	5.0	13	5.0	13	10.2	8	10.2	8	0.6	40	0.9	49	1.6	31
17	30V53	96	24	14	4.2	34	4.2	34	9.3	15	9.3	15	1.0	26	1.2	43	1.5	25
10	SC637	102	25	15	4.4	28	4.4	28	6.4	43	6.4	43	1.0	23	1.2	42	1.6	28
25	ZAM03538	98	25	13	4.5	27	4.5	27	6.6	41	6.6	41	1.3	14	2.0	18	1.9	15
20	ZAM04507	99	26	12	3.9	42	3.9	42	9.4	13	9.4	13	1.1	28	1.8	23	2.0	11
14	30M97	94	26	14	3.9	40	3.9	40	7.5	31	7.5	31	0.9	31	1.3	39	1.8	19
48	CZH99050	98	26	15	4.9	17	4.9	17	1.8	49	1.8	49	1.2	20	2.0	20	1.7	23
34	CZH03029	101	27	12	5.2	9	5.2	9	7.4	32	7.4	32	1.0	27	1.5	37	1.7	22
16	30B25	96	27	12	4.2	33	4.2	33	7.2	34	7.2	34	1.0	30	1.5	33	1.1	48
12	SC715	94	28	15	4.3	30	4.3	30	11.8	3	11.8	3	1.0	37	1.6	31	1.7	24
49	Local Check	90	29	15	3.8	43	3.8	43	10.1	9	10.1	9	1.1	31	2.1	13	1.1	49
41	CZH04011	96	30	15	4.7	21	4.7	21	9.2	18	9.2	18	1.2	19	1.8	26	2.2	5
7	DK0071	94	31	13	5.4	5	5.4	5	6.1	44	6.1	44	1.4	18	2.3	8	2.3	4
40	CZH04010	90	34	16	3.5	45	3.5	45	6.7	40	6.7	40	1.4	11	2.2	10	1.6	29
4	CAP614	74	41	7	3.6	44	3.6	44	3.8	47	3.8	47	0.8	40	1.3	41	1.4	36
Maturity group average		100	24	13	4.5	25	4.5	25	8.2	25	8.2	25	1.1	27	1.6	29	1.6	27
Mean		100	25	13	4.53	25	4.53	25	8.11	25	8.11	25	1.14	25	1.77	25	1.88	25
LSD (P<05)		9	6	2	1.44	14	1.44	14	3.36	14	3.36	14	0.45	10	0.78	14	0.87	14
Min		74	9	7	2.99	1	2.99	1	1.79	1	1.79	1	0.85	2	0.88	1	1.08	1
Max		124	41	16	6.24	49	6.24	49	12.18	49	12.18	49	1.75	43	2.60	49	2.69	49
NumSignificantSites		21	21	21	1	1	1	1	1	1	1	1	2	2	1	0		

ILHYB05: Results of evaluation of intermediate to late maturing hybrids from CIMMYT, South Africa, Monsanto, Nelson Genetics, Pannar, Pioneer, Seedco and Zamseed across 28 sites in eastern and southern Africa, 2004/05.

Table 6H

Entry	Name	N Stress - Grain Yields				Low pH - Grain Yields				Zone E			N Stress			Low pH						
		Across		Golden Valley Zam		Chitidas Mal		Across		Kasama Zam		Bismarka Mal	ASI	Earls	Leaf	ASI	Earls	Leaf	Across			
		RstGY	Rank	GrainYield	RankNo	GrainYield	RankNo	GrainYield	RankNo	GrainYield	RankNo	GrainYield	RankNo	ASI	Plant	Senes	Plant	Senes	Plant	Senes	ASI	EPPNo
Entries with anthesis date between 65 - 71 days																						
28	SAM17	118	15	15	0.9	2	1.5	6	4.6	11	5.3	15	3.9	7	-0.6	0.95	5.3	5.2	0.69	3.6	1.8	1.08
29	CZH0025	100	24	15	0.5	22	0.6	44	3.3	38	4.7	31	2.0	44	-2.1	0.90	5.2	6.8	0.68	3.5	1.7	1.45
31	CZH0012	101	26	14	0.7	13	1.8	1	2.9	40	4.7	30	1.2	49	-0.7	0.91	5.0	2.9	0.74	3.4	2.0	0.95
46	CZH0403	102	29	14	0.8	7	1.6	5	3.3	40	4.3	39	2.2	41	0.4	0.84	5.3	4.3	0.76	3.0	2.6	0.95
3	CAP311	89	35	13	0.3	44	0.6	45	3.2	39	4.0	42	2.5	36	-0.3	0.88	5.6	5.9	0.61	3.2	2.3	0.94
Maturity group average		102	26	14	0.6	18	1.2	20	3.5	33	4.8	31	2.4	35	-0.7	0.90	5.3	5.2	0.69	3.4	2.1	1.08
Entries with anthesis date between 72 - 73 days																						
30	CZH0219	114	15	11	0.6	14	1.1	23	4.3	18	5.3	16	3.3	20	0.0	0.88	4.5	3.3	0.74	3.4	2.0	1.03
15	30G19	105	19	13	0.2	47	0.7	39	5.3	3	5.9	4	4.7	2	-1.7	0.78	4.5	8.3	0.49	3.6	3.0	1.08
45	CZH0025	106	20	10	0.5	24	1.2	15	4.4	20	6.4	1	2.4	39	-0.7	0.86	4.8	5.4	0.70	3.0	2.5	0.95
11	SC635	107	20	9	0.5	17	1.0	33	4.1	24	4.8	28	3.4	19	3.3	0.70	4.8	4.8	0.58	3.6	2.3	0.98
37	CZH0007	107	21	13	0.5	20	0.7	42	4.4	16	4.8	26	3.9	6	0.2	0.95	5.1	6.0	0.72	3.5	2.1	1.03
33	CZH0022	105	22	13	0.4	33	1.7	3	5.0	7	5.4	11	4.5	3	-1.1	0.89	5.1	6.0	0.71	3.5	2.0	1.04
38	CZH0408	107	22	13	0.3	43	1.4	10	3.7	31	5.0	24	2.5	38	-0.1	0.95	5.4	6.5	0.59	3.5	1.5	0.94
35	CZH0330	104	22	15	0.8	6	0.6	46	2.7	46	3.5	46	1.9	45	1.0	0.80	4.8	4.1	0.77	3.2	1.9	0.98
42	CZH0418	104	22	11	0.4	39	1.1	24	3.6	34	4.8	27	2.3	40	0.4	0.93	4.9	4.7	0.68	3.6	2.7	1.13
18	ZAM0305	99	25	12	0.5	26	1.0	29	5.0	5	5.9	5	4.0	5	0.4	0.79	5.1	9.1	0.53	3.2	1.9	1.05
32	CZH0014	98	27	9	0.4	37	1.6	4	3.6	35	4.6	32	2.5	37	0.4	0.73	5.2	5.3	0.66	4.1	2.3	0.97
38	CZH0008	98	28	13	0.4	29	1.2	20	3.9	26	4.1	40	3.7	12	-1.0	0.80	5.7	5.1	0.63	3.8	2.3	1.08
47	CZH0104	97	30	11	0.6	15	1.1	26	3.6	14	4.6	33	2.5	35	-0.5	0.71	4.8	4.2	0.74	3.9	2.5	1.16
44	CZH0020	90	38	13	0.2	48	1.3	11	3.9	29	4.5	36	3.3	21	1.0	0.81	4.9	5.7	0.57	3.5	2.3	1.08
9	SC627	94	32	14	0.9	3	0.7	40	3.2	42	4.5	37	1.9	46	2.1	0.54	5.5	5.4	0.70	3.6	1.5	0.99
5	CAP44ING	89	34	13	0.8	5	0.5	49	3.5	33	5.0	23	2.0	43	0.9	0.74	4.6	5.3	0.66	3.2	2.8	0.95
24	ZAM04316	85	35	13	0.3	41	0.9	37	3.3	40	4.4	38	2.2	42	2.5	0.80	4.3	8.3	0.61	3.6	2.4	0.99
6	DK8051	83	37	15	0.3	46	0.6	47	3.8	30	3.9	44	3.7	15	1.7	0.69	5.4	5.4	0.49	3.2	2.0	1.07
Maturity group average		99	26	12	0.5	27	1.0	28	4.0	26	4.9	26	3.0	26	0.7	0.80	5.0	5.7	0.64	3.5	2.2	1.03
Entries with anthesis date greater than 73 days																						
13	SC718	124	9	12	0.8	8	1.5	7	5.7	7	5.4	12	6.0	1	0.3	0.81	4.3	6.1	0.61	3.6	1.7	0.98
8	DK80-73	115	14	13	0.5	21	1.0	32	4.7	9	5.5	10	3.8	8	0.3	0.67	4.5	5.8	0.66	3.8	2.7	1.06
23	ZAM0350	108	18	12	0.4	36	1.4	8	4.5	15	6.0	2	3.1	27	1.2	0.77	4.3	6.9	0.58	3.7	3.4	0.92
22	ZAM0350	105	19	11	0.4	30	0.9	35	4.4	18	5.3	17	3.5	18	0.6	0.83	4.9	5.7	0.61	3.5	2.3	1.14
21	ZAM03518	106	19	13	0.5	25	1.0	31	4.9	9	5.3	13	4.4	4	2.3	0.59	5.1	7.0	0.58	3.8	2.6	1.01
2	WH502	104	21	12	0.5	16	0.8	38	4.6	14	6.0	3	3.2	24	0.6	0.70	4.8	5.7	0.69	3.2	2.2	1.12
43	CZH0019	107	22	12	0.3	45	1.4	9	3.8	28	4.8	25	2.8	31	1.0	0.77	4.8	3.7	0.60	3.8	2.0	1.01
35	CZH0006	106	22	12	0.3	40	1.2	18	4.3	19	5.0	22	3.5	16	-0.6	0.77	4.6	3.7	0.65	3.8	2.2	1.02
1	WH505	102	27	14	0.5	35	1.2	22	3.0	41	3.4	47	2.6	34	0.1	0.56	5.0	4.3	0.52	3.6	2.8	1.00
29	O19W401	99	22	14	0.4	34	1.2	16	3.9	29	4.6	34	3.3	23	1.2	0.49	5.0	6.4	0.47	3.3	2.7	0.99
19	ZAM14502	103	23	13	1.1	1	1.2	18	3.6	28	5.6	8	1.6	47	1.0	0.57	4.5	5.1	0.68	4.0	2.6	1.01
27	O19W403	97	24	15	0.4	31	1.3	13	3.9	26	5.1	20	2.8	32	0.7	0.72	5.1	6.9	0.56	3.8	2.8	0.97
17	30V53	96	24	14	0.7	9	1.1	27	4.5	16	5.3	18	3.7	14	4.8	0.71	4.1	10.0	0.57	3.1	2.0	1.07
10	SC637	102	25	15	0.9	4	1.3	14	4.5	13	5.5	9	3.5	17	2.1	0.74	4.7	4.7	0.55	3.5	2.4	0.94
25	ZAM03538	98	25	13	0.7	10	1.0	30	4.7	9	5.7	6	3.7	11	2.6	0.59	4.8	5.7	0.65	3.4	2.1	0.92
20	ZAM0507	99	26	12	0.4	37	0.7	41	4.0	25	5.0	21	3.0	28	0.7	0.58	4.3	5.7	0.63	3.4	1.8	0.95
14	30N67	94	26	14	0.5	23	0.5	48	3.8	31	4.5	35	3.1	26	-0.1	0.67	4.7	3.7	0.57	3.8	1.9	1.00
48	CZH0050	98	26	15	0.5	19	1.2	21	3.9	26	3.8	43	3.8	9	-0.7	0.79	5.5	4.2	0.72	3.5	2.2	1.16
34	CZH0029	101	27	12	0.5	16	1.7	2	4.5	14	5.3	14	3.7	13	1.0	0.69	4.3	5.6	0.63	3.2	2.3	1.01
16	30B35	96	27	12	0.4	27	1.1	24	4.5	15	5.2	19	3.8	10	1.3	0.74	5.0	8.1	0.64	3.4	2.7	1.01
12	SC715	94	28	15	0.3	42	1.0	28	3.7	32	4.0	41	3.3	22	19.2	0.90	4.8	8.2	0.65	4.0	2.3	0.99
40	Local Check	90	29	15	0.2	49	0.9	34	4.3	18	5.6	7	3.0	29	-0.8	0.88	4.9	6.2	0.57	2.9	2.1	1.04
41	CZH0011	96	30	15	0.7	11	1.3	12	3.2	30	4.8	29	1.6	48	0.4	0.75	4.8	1.9	0.75	3.7	0.9	0.92
7	DH0071	94	31	13	0.4	28	1.2	17	3.4	35	3.7	45	3.1	25	2.0	0.62	4.7	5.7	0.68	3.5	2.0	1.04
40	CZH04010	90	34	16	0.7	12	0.9	36	2.7	41	2.6	49	2.8	33	-0.7	0.68	4.4	2.6	0.70	4.1	1.9	0.94
4	CAP614	74	41	7	0.4	38	0.6	43	2.9	39	3.0	48	2.8	30	0.9	0.51	4.5	5.6	0.66	3.8	2.3	1.13
Maturity group average		100	24	13	0.5	25	1.1	24	4.1	23	4.9	23	3.3	22	1.4	0.67	4.7	5.6	0.62	3.6	2.2	1.01
Mean		100	25	13	0.51	25	1.08	25	3.87	25	4.85	25	3.11	25	0.9	0.74	4.9	5.9	0.64	3.6	2.2	1.02
SD (0.03)		8	6	2	0.17	14	1.09	14	1.21	12	1.57	14	1.87	14	4.9	0.19	0.8	2.7	0.12	0.7	0.8	0.99
Min		74	9	7	0.17	1	0.46	1	2.08	3	2.81	1	1.31	1	-2.1	0.51	4.1	1.8	0.47	2.9	0.9	0.91
Max		124	41	16	1.34	49	1.80	49	5.68	46	6.37	49	5.99	49	13.2	0.90	5.7	10.0	0.77	4.1	3.4	1.45
NumSignificantSites		21	21	21	1	0		2	2	1	1	1	1	1	1	0	3	3	0	1	1	

QHYB05: Results of evaluation of Quality Protein Maize Hybrids from CIMMYT and Seed Co and one OPV from CIMMYT across 25 sites in eastern and southern Africa, 2004/05.

Entry	Name	Pedigree	Origin	Comments	Across		Across		Across		Mid Altitudes Eastern Africa - Grain Yields		Mid Altitudes Humid Warm (Zone A) - Grain Yields		Shimva Zim				
					ReIS	Rank	GrainYield	RankNo	GrainYield	RankNo	GrainYield	RankNo	GrainYield	RankNo	GrainYield	RankNo	GrainYield	RankNo	
					%	Avg	StdDev	t	#	t	#	t	#	t	#	t	#		
Entries with anthesis date between 62 - 63 days																			
21	SC403	SC403	SeedCo	Non-OPM	112	9	6	3.1	23	3.1	23	5.9	8	2.5	8	2.8	24	3.1	6
1	SynG15QSR	SynG15QSR	CIMMYT	OPM OPV	68	23	3	2.5	25	2.5	25	3.2	24	2.3	13	4.3	10	2.3	21
Maturity group average																			
					90	16	5	2.8	24	2.8	24	4.5	16	2.4	11	3.5	17	2.7	14
Entries with anthesis date between 65 - 66 days																			
7	CZ-H04034	CML181den/WW01408/CZL04021	CIMMYT	QPM Hybrid	112	8	4	5.8	9	5.8	9	5.8	6	2.1	18	3.3	21	3.2	5
10	CZ-H04025	CML144/CML159/CZL04016	CIMMYT	QPM Hybrid	114	9	6	7.0	4	7.0	4	5.6	11	2.4	10	3.1	22	2.8	12
22	SC635	SC635	SeedCo	Non-OPM	112	9	7	6.2	7	6.2	7	5.9	9	3.2	3	3.3	20	3.3	4
19	03C3490	03C3490	SeedCo	QPM Hybrid	105	10	8	5.6	12	5.6	12	5.8	10	3.4	2	4.0	12	2.1	24
17	CZ-H04032	CML181den/WW01408/CZL03018	CIMMYT	QPM Hybrid	107	11	7	7.8	3	7.8	3	5.8	7	2.6	6	4.8	6	3.6	2
23	SC633	SC633	SeedCo	Non-OPM	100	11	9	3.2	22	3.2	22	6.1	9	2.2	14	4.6	7	3.6	1
11	CZ-H04026	G0L5/CML176/CZL04017	CIMMYT	QPM Hybrid	105	12	7	4.7	17	4.7	17	5.2	14	2.5	7	5.6	4	3.5	3
8	CZ-H04023	CML144/CML159/CZL04014	CIMMYT	QPM Hybrid	104	12	6	4.6	18	4.6	18	5.4	12	3.5	1	3.3	19	2.6	14
12	CZ-H04035	CML181den/CML182/CZL04021	CIMMYT	QPM Hybrid	105	12	7	6.3	6	6.3	6	5.1	16	1.6	25	4.3	9	3.0	10
16	CZ-H04031	CML181den/CML182/CZL03018	CIMMYT	QPM Hybrid	101	13	6	6.6	1	6.6	1	5.3	14	2.2	15	4.3	8	3.0	8
5	CZ-H03035	CML144/CZL03016/CZL03018	CIMMYT	QPM Hybrid	101	14	6	6.3	5	6.3	5	5.2	14	3.1	4	6.0	3	2.5	16
2	CZ-H01031	CZL01005/CML181/CML176	CIMMYT	QPM Hybrid	98	14	7	5.7	11	5.7	11	5.2	16	2.0	20	2.0	25	2.8	11
3	CZ-H01025	CZL01006/CML176/CML182	CIMMYT	QPM Hybrid	102	14	8	5.1	14	5.1	14	5.0	16	2.1	19	4.1	11	2.3	23
13	CZ-H04028	G0L5/CML176/CZL04019	CIMMYT	QPM Hybrid	96	16	6	4.9	15	4.9	15	5.1	18	2.4	9	6.5	1	2.3	22
18	CZ-H04033	CML182/WW01408/CZL04021	CIMMYT	QPM Hybrid	94	16	6	5.2	13	5.2	13	4.9	18	2.3	11	3.0	23	2.4	19
14	CZ-H04029	CML144/CML159/CZL04020	CIMMYT	QPM Hybrid	91	17	7	4.5	19	4.5	19	4.6	22	2.2	17	3.4	18	2.3	20
Maturity group average																			
					103	12	7	5.7	11	5.7	11	5.4	13	2.5	11	4.1	13	2.8	12
Entries with anthesis date > 68 days																			
20	03C2893	03C2893	SeedCo	QPM Hybrid	107	10	7	8.4	2	8.4	2	6.1	6	2.2	16	3.7	16	2.4	18
6	CZ-H04021	CML144/CML159/CZL04012	CIMMYT	QPM Hybrid	98	12	7	5.8	10	5.8	10	5.5	11	1.7	23	5.0	5	2.5	17
24	SC715	SC715	SeedCo	Non-OPM	97	13	8	2.8	24	2.8	24	6.0	10	2.6	5	3.4	17	2.6	13
25	Local Check	Local Check	Various	Local Check	90	14	8	3.3	21	3.3	21	5.8	12	2.0	21	3.6	14	1.8	25
4	CZ-H03033	CML144/CML159/CZL03018	CIMMYT	QPM Hybrid	100	14	8	6.1	8	6.1	8	5.3	13	1.7	24	3.9	13	3.1	7
9	CZ-H04024	CML144/CML159/CZL04015	CIMMYT	QPM Hybrid	96	14	5	4.7	16	4.7	16	5.5	12	1.7	22	6.0	2	3.0	9
15	CZ-H04030	CML144/CML159/CZL04021	CIMMYT	QPM Hybrid	87	18	3	3.7	20	3.7	20	5.1	16	2.3	12	3.8	15	2.6	15
Maturity group average																			
					97	14	6	5.0	14	5.0	14	5.6	11	2.0	18	4.2	12	2.6	15
Mean					100	13	7	5.7	13	5.7	13	5.8	13	2.3	13	4.0	13	2.7	13
LRD (0.05)					10	3	1	1.79	7	1.79	7	0.48	5	1.34	7	3.65	7	0.76	7
Min					68	8	3	2.51	1	2.51	1	3.18	8	1.83	1	2.04	1	1.33	1
Max					114	23	9	8.63	25	8.63	25	6.09	24	3.51	25	6.54	25	3.33	25
NumSignificantSites					14	14	14	1	1	1	6	6	0	0	0	0	0	1	1

QHYB05: Results of evaluation of Quality Protein Maize Hybrids from CIMMYT and Seed Co and one OPV from CIMMYT across 25 sites in eastern and southern Africa, 2004/05.

Table 7D

Entry	Name	Across		Mid Altitude Humid Warm (Zone A) - Grain Yields				Mid Altitude Humid Warm (Zone B) - Grain Yields													
		ReSY	Rank	GrainYield	RankNo	Chibatale Mal	Kasama Zam	Mount Makulu Zam	Chibatale Mal	Dedza Mal	Bvumbwe Mal	Zamseed Farm Zam	Across	Chitala Mal							
%	Avg	StDev	#	t/ha	#	t/ha	#	t/ha	#	t/ha	#	t/ha	#	t/ha	#						
Entries with anthesis date between 62 - 65 days																					
21	SC403		6	10.2	5	4.2	13	2.9	2	8.6	6	1.3	6	5.0	12	5.2	16	3.5	9	5.2	9
1 SynGI50SR																					
			3	4.8	25	3.8	17	1.3	24	3.6	25	1.4	2	3.6	25	3.5	25	2.4	24	3.8	25
Maturity group average																					
			5	7.5	15	4.0	15	2.1	13	6.2	16	1.3	4	4.3	19	4.3	21	2.9	15	4.5	17
Entries with anthesis date between 65 - 69 days																					
7	CZH04034		4	9.5	11	4.5	7	2.3	9	8.4	8	1.0	16	5.3	6	5.8	6	4.0	4	5.9	2
10 CZH04025																					
			6	9.3	15	4.5	8	1.6	19	8.0	10	1.0	13	5.2	8	6.3	1	3.6	7	5.0	13
22 SC635																					
			7	10.1	6	5.0	3	2.8	4	8.9	5	0.9	21	4.6	22	5.4	12	3.9	6	5.9	3
19 OSG490																					
			8	9.4	13	5.1	2	2.6	5	9.7	1	1.4	4	5.3	5	5.4	11	3.7	10	6.3	1
17 CZH04032																					
			7	10.0	9	4.6	5	2.6	7	7.9	11	1.5	1	5.6	2	5.4	10	3.5	10	5.7	4
23 SC633																					
			9	11.9	2	2.6	24	1.9	16	8.7	7	0.9	22	4.6	23	5.9	5	3.3	13	5.2	8
11 CZH04028																					
			7	8.5	23	4.3	11	1.9	14	6.5	22	1.0	12	5.5	4	5.1	18	3.3	12	4.9	14
8 CZH04023																					
			6	9.3	14	5.3	1	2.0	11	7.9	12	1.3	8	4.8	19	5.9	3	3.4	10	4.9	15
12 CZH04035																					
			7	9.2	16	4.6	6	2.1	10	6.8	21	0.9	20	4.8	17	4.8	22	3.7	7	5.2	10
16 CZH04031																					
			6	8.9	20	3.5	19	2.0	13	7.7	14	1.0	14	4.8	15	5.4	13	2.9	18	5.2	11
5 CZH03035																					
			6	8.8	22	2.3	25	1.9	15	7.6	16	1.1	11	5.0	10	5.7	7	3.5	9	4.9	16
2 CZH04031																					
			7	9.7	10	4.4	9	1.4	23	7.6	15	1.2	9	4.6	24	5.2	15	3.3	14	4.8	17
3 CZH01025																					
			8	9.2	17	3.2	21	3.1	1	5.9	24	0.7	25	5.1	9	4.5	23	3.0	16	4.0	24
13 CZH04028																					
			6	9.1	18	3.1	23	1.6	22	7.8	13	1.3	7	4.9	14	5.1	17	3.2	13	4.3	21
18 CZH04033																					
			6	8.4	24	3.1	22	1.6	20	7.0	20	1.0	15	5.2	7	4.9	19	2.6	22	4.1	23
14 CZH04039																					
			7	8.9	21	4.1	14	0.9	25	6.1	23	0.9	23	4.8	16	4.4	24	2.9	17	4.1	22
Maturity group average																					
			12	9.4	15	4.0	13	2.0	13	7.7	14	1.1	14	5.0	13	5.3	13	3.4	12	5.0	13
Entries with anthesis date > 69 days																					
20 OSG2893																					
			10	10.9	4	4.2	12	2.6	6	9.1	3	1.1	10	5.6	3	5.9	4	3.5	11	5.5	6
6 CZH04021																					
			7	10.0	8	3.4	20	2.0	12	7.4	17	1.3	5	5.6	1	5.6	8	3.0	18	5.2	12
24 SC715																					
			6	11.4	3	3.9	16	2.9	3	9.3	2	0.9	19	4.7	20	4.9	20	3.0	15	5.4	7
25 Local Check																					
			8	11.9	1	4.4	10	2.4	8	8.9	4	0.9	18	5.0	11	4.8	21	3.3	13	5.5	5
4 CZH03033																					
			6	8.9	19	4.9	4	1.8	17	7.1	19	1.4	3	4.9	13	6.1	2	3.2	16	4.8	19
9 CZH04024																					
			5	10.1	7	3.7	18	1.6	21	8.1	9	1.0	17	4.8	18	5.5	9	2.8	19	4.3	20
15 CZH04030																					
			3	9.4	12	4.0	15	1.7	18	7.2	18	0.8	24	4.7	21	5.3	14	3.1	16	4.8	18
Maturity group average																					
			14	10.4	8	4.1	14	2.1	12	8.2	10	1.1	14	5.0	12	5.5	11	3.1	15	5.1	12
Mean																					
			13	9.51	13	4.03	13	2.08	13	7.63	13	1.09	13	4.95	13	5.30	13	3.28	13	5.00	13
LSD (0.05)																					
			3	1.75	7	1.86	7	1.08	7	1.46	7	0.52	7	0.81	7	0.89	7	0.62	5	0.80	7
Min																					
			8	4.78	1	2.30	1	0.87	1	3.59	1	0.87	1	3.59	1	3.49	1	2.37	4	3.78	1
Max																					
			114	23	9	11.92	25	5.25	25	9.71	25	1.49	25	5.64	25	6.32	25	3.66	24	6.28	25
NumSignificantSites																					
			14	14	14	1	0	1	1	1	1	0	1	1	1	1	1	2	2	2	1

QHYB05: Results of evaluation of Quality Protein Maize Hybrids from CIMMYT and Seed Co and one OPV from CIMMYT across 25 sites in eastern and southern Africa, 2004/05.

Table 7E

Entry	Name	Mid Altitude Humid Warm (Zone B) - Grain Yields				Mid Altitude Dry (Zone C) - Grain Yields				Lowland Tropical Humid (Zone D) - Grain Yields				Lowland Tropical Dry (Zone E) - Grain Yields											
		RelGY	Across Rank	StDev	#	u/ha	#	u/ha	#	u/ha	RankNo	GrainYield	RankNo	GrainYield	RankNo	GrainYield	RankNo	GrainYield	RankNo	GrainYield	RankNo	GrainYield	RankNo	GrainYield	RankNo
21	SC403	112	9	6	1.8	8	3.50	3	2.9	16	15	1.2	3	4.2	16	4.2	16	4.2	16	2.9	3	2.9	3	2.9	3
1	SynGI50SR	66	23	3	1.0	22	2.72	14	2.4	24	24	0.4	25	2.8	24	2.8	24	2.8	24	2.3	12	2.3	12	2.3	12
Maturity group average		50	16	5	1.4	15	3.11	9	2.6	20	20	0.8	14	3.5	20	3.5	20	3.5	20	2.6	8	2.6	8	2.6	8
Entries with anthesis date between 65 - 69 days		112	8	4	2.0	6	3.07	9	3.0	12	12	1.2	2	4.9	7	4.9	7	4.9	7	2.6	5	2.6	5	2.6	5
7	CZHI034	114	9	6	2.3	1	3.52	2	3.8	1	1.0	13	4.4	13	4.4	13	4.4	13	3.3	1	3.3	1	3.3	1	
10	CZHI025	112	9	7	1.8	9	2.59	16	2.8	17	11	5	5.3	2	5.3	2	5.3	2	2.2	18	2.2	18	2.2	18	
22	SC635	105	10	8	1.2	19	1.97	24	3.1	9	3.1	9	1.0	12	5.2	4	5.2	4	2.2	16	2.2	16	2.2	16	
19	03C3490	107	11	7	1.3	16	2.37	19	2.7	19	10	7	3.8	19	3.8	19	3.8	19	1.9	22	1.9	22	1.9	22	
23	SC633	100	11	9	1.3	17	2.25	22	3.1	5	3.1	5	0.9	18	5.4	1	5.4	1	1.5	24	1.5	24	1.5	24	
11	CZHI026	105	12	7	1.8	10	4.13	1	3.1	6	3.1	6	1.0	8	5.3	3	5.3	3	2.5	8	2.5	8	2.5	8	
8	CZHI023	104	12	6	2.0	5	2.28	21	2.3	25	23	0.7	23	4.6	9	4.6	9	2.7	4	2.7	4	2.7	4	2.7	4
12	CZHI035	105	12	7	2.1	3	3.17	8	3.3	3	3	3	0.9	15	3.5	22	3.5	22	2.1	19	2.1	19	2.1	19	
16	CZHI031	101	13	6	0.6	25	2.59	17	2.9	14	1.0	10	3.3	23	3.3	23	3.3	23	2.3	10	2.3	10	2.3	10	
5	CZHI0305	101	14	6	2.1	2	1.70	25	2.4	23	24	0.8	21	4.5	11	4.5	11	4.5	11	2.1	21	2.1	21	2.1	
2	CZHI031	96	14	7	1.7	11	3.28	7	3.6	2	3.6	2	1.2	1	4.2	17	4.2	17	2.2	15	2.2	15	2.2	15	
3	CZHI025	102	14	8	1.9	7	2.57	18	3.0	13	3.0	13	0.7	22	4.5	12	4.5	12	2.9	2	2.9	2	2.9	2	
13	CZHI028	96	16	6	2.1	4	2.62	15	2.6	21	2.6	21	0.9	16	4.0	18	4.0	18	2.3	11	2.3	11	2.3	11	
18	CZHI033	94	16	6	1.1	20	3.35	5	3.1	11	3.1	11	0.8	20	4.9	6	4.9	6	2.2	14	2.2	14	2.2	14	
14	CZHI029	91	17	7	1.7	12	2.98	10	3.1	7	3.1	7	0.9	17	4.2	15	4.2	15	2.5	6	2.5	6	2.5	6	
Maturity group average		103	12	7	1.7	10	2.78	14	3.0	12	12	0.9	13	4.5	11	4.5	11	4.5	11	2.3	12	2.3	12	2.3	12
Entries with anthesis date > 69 days		107	10	7	1.4	15	2.74	13	2.9	15	15	0.6	24	3.7	21	3.7	21	3.7	21	1.8	23	1.8	23	1.8	23
20	03C2893	98	12	7	0.9	23	2.31	20	3.3	4	3.3	4	1.0	14	4.8	6	4.8	6	2.3	9	2.3	9	2.3	9	
6	CZHI021	97	13	6	0.7	24	2.75	11	3.1	10	10	1.0	9	4.6	10	4.6	10	1.2	25	1.2	25	1.2	25	1.2	
24	SC715	90	14	8	1.1	21	2.74	12	3.1	8	3.1	8	1.1	6	0.2	25	0.2	25	2.2	13	2.2	13	2.2	13	
25	Local Check	100	14	6	1.5	13	2.11	23	2.6	22	2.6	22	0.8	19	4.3	14	4.3	14	2.5	7	2.5	7	2.5	7	
9	CZHI024	96	14	5	1.3	18	3.44	4	2.7	18	1.2	4	5.2	5	5.2	5	5.2	5	2.2	17	2.2	17	2.2	17	
15	CZHI030	87	18	3	1.4	14	3.31	6	2.6	20	2.6	20	1.0	11	3.8	20	3.8	20	2.1	20	2.1	20	2.1	20	
Maturity group average		97	14	6	1.2	16	2.77	13	2.9	14	14	1.0	12	3.8	15	3.8	15	3.8	15	2.1	16	2.1	16	2.1	16
Mean		100	13	7	1.53	13	2.80	13	2.94	13	13	0.94	13	4.22	13	4.22	13	4.22	13	2.28	13	2.28	13	2.28	13
LSD (0.05)		10	3	1	0.84	7	1.24	7	0.89	7	0.89	7	0.44	7	1.32	7	1.32	7	0.56	7	0.56	7	0.56	7	0.56
Min		80	8	3	0.83	1	1.70	1	2.25	1	2.25	1	0.42	1	0.20	1	0.20	1	1.19	1	1.19	1	1.19	1	1.19
Max		114	23	9	2.23	25	4.13	25	3.83	25	3.83	25	1.20	25	5.45	25	5.45	25	3.26	25	3.26	25	3.26	25	3.26
NumSignificant		14	14	14	1	1	0	0	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1

QHYB05: Results of evaluation of Quality Protein Maize Hybrids from CIMMYT and Seed Co and one OPV from CIMMYT across 25 sites in eastern and southern Africa, 2004/05.

Table 7F

Entry	Name	Across	Lowland/Tropical Dry (Zone E) - Grain Yields			Highlands (Zone F) - Grain Yields			MSV - Grain Yields			N Sheels - Grain Yields			Zone E			N Sheels				
			RankNo	GrainYield	#	RankNo	GrainYield	#	RankNo	GrainYield	#	RankNo	GrainYield	#	RankNo	GrainYield	#	RankNo	GrainYield	#	RankNo	GrainYield
21	GC403	6	0.9	18	4.7	1	8.8	7	2.1	1	2.3	3	3	1.2	1	-0.7	0.87	6.0	4.6	0.83	6.4	
68	1 SynG15QSR	3	0.8	23	2.8	25	5.3	23	0.9	22	1.3	24	4	0.4	24	-0.3	0.93	5.7	5.1	0.59	7.1	
90	Majority group average	5	0.8	21	3.8	13	7.0	16	1.5	12	1.8	14	14	0.8	13	-0.5	0.90	5.9	4.9	0.76	6.7	
112	7 CZRH034	4	2.6	1	4.0	8	6.4	20	1.7	4	1.7	12	11	3	3	-1.0	0.91	4.8	3.7	0.68	5.6	
114	10 CZRH025	6	1.2	12	3.3	18	8.0	15	1.5	7	2.1	4	4	0.4	23	0.0	0.93	5.4	6.7	0.82	6.1	
112	22 SC635	7	0.9	20	3.6	16	10.1	1	1.2	13	1.6	15	12	2	2	2.7	0.74	5.1	7.3	0.53	6.3	
105	19 03C490	8	0.7	24	3.6	15	9.7	3	1.0	21	1.6	18	0.7	13	0.0	0.78	5.7	4.2	0.60	6.5		
107	17 CZRH032	11	1.7	5	4.3	4	6.5	19	1.5	6	1.7	14	0.8	11	-1.0	0.85	4.2	2.6	0.80	5.0		
100	23 SC633	11	1.2	15	3.8	12	9.6	4	0.7	24	2.1	7	1.1	4	3.3	0.62	3.9	8.6	0.38	6.4		
105	11 CZRH026	12	2.0	3	4.2	6	8.4	11	1.4	10	1.4	10	2.5	1	0.8	-1.0	0.80	5.2	2.1	0.75	6.5	
104	8 CZRH023	5	1.2	14	3.9	10	9.5	5	1.3	12	2.0	8	0.6	19	-0.3	0.88	5.2	1.9	0.71	5.6		
101	16 CZRH035	5	1.5	6	3.0	23	10.0	2	1.4	8	2.1	5	1.1	6	-0.7	0.80	4.9	2.9	0.71	5.6		
101	5 CZRH030	6	0.9	21	3.8	11	8.1	14	1.1	18	1.8	11	0.8	10	-0.7	0.75	4.3	2.9	0.76	5.1		
98	2 CPH1031	7	1.6	7	4.2	5	2.4	25	1.7	2	2.5	2	1.1	5	-1.0	0.84	3.6	1.7	0.77	5.4		
102	3 CZRH1025	8	2.1	2	4.0	7	8.0	16	1.1	17	1.3	23	0.5	22	-0.3	0.96	4.1	3.8	0.89	6.5		
96	13 CZRH028	6	1.4	9	3.4	17	5.0	24	1.7	3	1.6	16	0.6	16	-0.3	0.91	4.3	4.9	0.71	5.5		
94	18 CZRH023	6	1.7	4	3.3	19	8.8	9	1.1	19	2.1	6	0.7	14	-1.0	0.82	4.3	4.1	0.56	6.3		
91	14 CZRH024	7	1.1	16	3.8	13	9.0	6	1.0	20	1.2	25	0.6	17	-1.0	0.94	5.0	5.6	0.51	6.5		
103	Majority group average	12	1.5	11	3.8	12	8.0	12	1.3	12	1.8	12	1.8	12	0.8	-0.1	0.84	4.7	4.2	0.87	6.0	
107	20 03C283	10	1.5	8	4.5	2	8.7	10	1.1	16	1.6	19	0.5	21	1.3	0.76	4.3	11.1	0.61	5.8		
98	6 CZRH021	7	1.0	17	3.1	21	8.0	17	0.8	23	0.8	23	1.5	20	0.9	8	3.3	0.86	4.7	8.0	0.50	6.1
97	24 SC715	8	0.7	25	3.7	14	8.6	8	1.3	11	1.3	11	1.7	13	0.9	7	6.7	0.45	4.9	15.6	0.60	5.3
50	25 Local Check	14	1.3	11	2.9	24	8.4	12	1.1	14	1.9	10	0.6	16	1.7	0.89	4.7	6.5	0.66	6.1		
100	4 CZRH033	6	0.9	19	3.9	9	5.4	22	1.4	9	1.9	9	0.4	25	-1.0	0.90	3.8	3.6	0.70	5.1		
96	9 CZRH032A	5	0.8	22	3.0	22	6.5	18	1.1	15	1.4	21	0.5	20	0.7	0.80	4.6	11.3	0.68	5.7		
87	15 CZRH020	3	1.2	13	3.2	20	6.1	21	0.6	25	1.4	22	0.7	15	-1.0	0.87	5.5	5.7	0.65	6.5		
97	Majority group average	14	1.1	16	3.5	16	7.4	15	1.1	16	1.6	16	0.6	16	1.7	0.79	4.6	8.8	0.63	5.8		
100	Mean	7	1.30	13	3.89	13	7.75	13	1.26	13	1.77	13	0.76	13	0.4	0.83	4.7	5.6	0.67	6.0		
10	1SD (0.05)	3	1.26	7	1.28	7	7.33	7	0.61	7	0.95	7	0.61	7	1.5	0.12	0.7	5.1	0.17	6.6		
68	3	0.68	1	3.15	1	3.37	1	0.65	1	0.95	1	1.17	1	6.47	1	-1.0	0.45	3.6	1.7	0.18	5.0	
114	25	8	2.57	25	4.65	25	10.08	25	2.10	25	2.19	25	2.53	25	1.17	25	6.7	0.88	5.0	15.8	0.33	7.1
14	NumSignificant sites	14	0	0	0	1	1	1	1	1	1	1	0	0	1	1	1	1	1	1	1	1

Entries with anthesis date between 82 - 85 days

Entries with anthesis date between 85 - 88 days

Entries with anthesis date > 91 days

CIMMYT

The International Maize and Wheat Improvement Center (CIMMYT) is an internationally funded, non-profit scientific research and training organization. Headquartered in Mexico, the Center works with agricultural research institutions worldwide to improve the productivity and sustainability of maize and wheat systems for resource-poor farmers in developing countries. It is one of 16 similar centers supported by the Consultative Group on International Agricultural Research (CGIAR). The CGIAR comprises over 50 partner countries, international and regional organizations, and private foundations. It is co-sponsored by the Food and Agriculture Organization (FAO) of the United Nations, the International Bank for Reconstruction and Development (World Bank), the United Nations Development Programme (UNDP), and the United Nations Environment Programme (UNEP).

Contact Information

CIMMYT-Zimbabwe, P.O. Box MP163, Harare, Zimbabwe. Phone +263-4-301807 or 369120; FAX +263-4-301327; email: CIMMYT-ZIMBABWE@CGIAR.ORG

Acknowledgement

These trials were supported by the collaborators listed in Section 5, the Swiss Agency for Development and Cooperation (SDC), the Nippon Foundation, and the Rockefeller Foundation.

The help rendered by S. Chisoro in the preparation of this publication is acknowledged.

Correct Citation: Magorokosho C., Vivek B., Bänziger M., and J. MacRobert. 2006. Characterization of maize germplasm grown in eastern and southern Africa: Results of the 2005 regional trials coordinated by CIMMYT. Harare, Zimbabwe. CIMMYT.

Accuracy of information: The information in this publication is based on results available at the time of publication. This does not exclude that the germplasm may perform differently if grown at other sites, or under different conditions.

Plant breeders' rights: Germplasm developed by CIMMYT is made freely available for any agricultural research or breeding purposes. Prior to the release, commercialization, or application for any form of IPR on CIMMYT germplasm or related information, written permission from CIMMYT must be obtained. Germplasm developed by institutions other than CIMMYT (private seed companies, National Agricultural Research Programs) are subject to restrictions imposed by those institutions on their germplasm. Evaluation of germplasm by CIMMYT does not imply endorsement or recommendation.

CIMMYT-Zimbabwe, P.O. Box MP163, Harare, Zimbabwe.

Phone +263-4-301807 or 369120; FAX +263-4-301327;

email: CIMMYT-ZIMBABWE@CGIAR.ORG