

# Nasionale Kultivarproewe/National Cultivar Trials

Mielies/Maize



Westelike en Watertafel streke/  
Western and Watertable regions



2016/2017

Eenjarig/Annual

Meerjarig/Multiseasonal

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*Landbounavorsingsraad/Agricultural Research Council*

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## **BELANGRIK**

Resultate van 'n kultivarproef by 'n enkele lokaliteit in enige jaar, of selfs 'n beperkte aantal lokaliteite in 'n enkele jaar, kan as gevolg van die kenmerkende seisoenale variasie in die Republiek van Suid Afrika (RSA) hoogs misleidend wees en kan sodoende onregverdiglik teen die beste genotipes vir daardie omgewing diskrimineer. **'N ERNSTIGE BEROEP WORD OP ALLE BETROKKENES GEDOEN OM NIE HUL GENOTIPEADVIES OP SO 'N HOOGS ONBETROUBARE METODE TE BASEER NIE.** Produsente word veral versoek om nougeset daarteen te waak dat hulle nie ook foutiewe genotipe uitsprake op dieselfde wyse doen nie, of op hierdie wyse mislei word nie.

Resultate van hierdie nasionale kultivarproewe, wat deur die LNR- Instituut vir Graangewasse uitgevoer is en gepubliseer word, geskied in belang van produsente, adviesdienste en die teeltbedryf. Die resultate mag derhalwe vryelik gebruik word, mits dit wetenskaplik korrek gedoen word deur die totale spektrum van lokaliteite en waarnemings in berekening te bring. Vrye gebruik van die resultate word ook met 'n verdere voorwaarde toegelaat, naamlik dat die nodige erkenning aan die bron van die inligting verleen word.

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Die sukses van hierdie navorsingsprojek is toe te skryf aan die goeie samewerking en medewerking tussen die private en openbare sektore asook boere by wie genotipeproewe geplant is. Die verantwoordelike navorsers betuig hiermee hul grootste waardering vir die besondere samewerking en ondersteuning wat hulle van al die betrokkenes ontvang het.

### Medewerkende Instansies

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Agricol Saad (Edms) Bpk

Departement Landbou

Link Saad (Edms) Bpk

Klein Karoo

Monsanto SA (Edms) Bpk

Pannar Saad (Edms) Bpk

DuPont Pioneer RSA (Edms) Bpk

Seed-Co

DMS

### LNR - Navorsingsinstituut vir Graangewasse

Hierdie verslag se samestelling, voorbereiding en vermeerdering het bydraes deur verskeie kollegas en beamptes geverg. Spesiale vermelding moet egter gemaak word aan Mnr. D De V Bruwer vir sy beplanning en bestuur van die proewe. Me T. Mathobisa-Manyokole vir data voorbereiding.

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### **IMPORTANT**

Due to typical seasonal variations in the Republic of South Africa (RSA), results of a Cultivar trial at a single locality in any year, or even at a limited amount of localities in a single year can be highly misleading and can discriminate unfairly against genotypes which may in reality be the best for certain areas. **ALL THOSE INVOLVED, ARE STRONGLY URGED NOT TO BASE THEIR GENOTYPE RECOMMENDATIONS ON A HIGHLY UNRELIABLE METHOD SUCH AS THIS.** Producers, especially, are requested to avoid being misled in this way and against making incorrect genotype judgements.

The Agricultural Research Council (ARC) - Grain Crops Institute (GCI) in the interest of producers, advisory services and the breeding industry publishes results of these national Cultivar trials. These results may thus be freely used, as long as they are used in a scientifically correct manner, incorporating the whole spectrum of localities and observations. The source of the information should also be awarded the necessary recognition when using these results.

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### ARC - Grain Crops Institute

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## KULTIVAREVALUERING

Inligting rondom kultivars wat deur die produsent aangeplant word, is van kardinale belang. Dit beïnvloed 'n groot deel van die produsent se beplanning vir die seisoen. Betroubare en indien moontlik, onafhanklike inligting rakende kultivars moet aan elke produsent beskikbaar wees. Die LNR - Instituut vir Graangewasse (LNR-IGG), in samewerking met landboubesighede en die saadbedryf, poog om in hierdie belangrike behoefte van die produsent te voldoen. Die onus rus op die produsent om nuwe of onbekende kultivars eers op sy plaas te toets, voordat daar op groot skaal van beproefde kultivars afgesien word.

## KULTIVARINLIGTING

Die boer moet aan die einde van elke seisoen 'n baie belangrike besluit neem naamlik: Watter kultivars gaan die volgende jaar geplant word? 'n Korrek beplande kultivarkeuse kan beslis 'n belangrike bydrae lewer om risiko te verminder en moet 'n belangrike onderdeel uitmaak van 'n produsent se produksiebeplanning.

Kultivars verskil van mekaar in een of meer van 'n verskeidenheid eienskappe en elkeen het dus 'n eiesoortige aanpasbaarheid en opbrengspotensiaal. Hierdie kultivar-verskeidenheid stel alternatiewes beskikbaar wat goed benut kan word en die volgende is belangrike riglyne vir kultivarbeplanning wat oorweeg moet word:

- Moet nooit 'n staatmaker-kultivar binne een seisoen met 'n nuwe of onbekende kultivar vervang nie.
- Kultivarverskeidenheid versprei risiko. Plant 'n reeks kultivars wat verskil in groeiseisoenlengte en eienskappe.
- Kultivars moet aanpas by 'n spesifieke opbrengs-potensiaal, maar moet in staat wees om hoër potensiaaltoestande te benut en 'n aanvaarbare opbrengs by laer potensiaaltoestande te lewer. Kultivars met 'n wye aanpassingsvermoë kan hier 'n rol speel.
- Hersien Kultivarkeuse jaarliks.

## DIAGNOSTIESE PARAMETERS

**KV** Die Koëffisient van Variasie verwys na die fout van enkel persele en gee 'n aanduiding van die grootte van die variasie tussen perseelwaardes wat vanaf verskeie bronne afkomstig is. Die KV gee dus 'n aanduiding van die akkuraatheid van die perseelwaardes (grootte van die waarde). Bronne van variasie is byvoorbeeld grondvariasie (vrugbaarheid, diepte, grondvog, kleipersentasie, ongelykheid, ens) en plantvariasie (bevolkingsgrootte, oneweredige groei ens). Stremmingstoestande (vog, temperatuur, siektes, ens) het so dikwels tot gevolg dat normaalweg aanvaarbare grond- en plantvariasie baie sterker in die proefdata tot uiting kan kom en die KV vergroot. 'n Relatief hoë KV, wat aan hand van bekende bronne van variasie verklaar kan word, kan nie as die enigste parameter gebruik word om onbetroubare proefdata te identifiseer nie.

**GKV** Die Genetiese Koëffisient van Variasie verwys na die verskille in genotipe-opbrengs. Die GKV is dus 'n aanduiding van die variasiegrootte wat aan verskille in genetiese samestelling tussen genotipeinskrywings toegeskryf kan word. Hoë waardes kan die gevolg wees van siektevatbaarheid, groot verskille in rypwordingstadium, temperatuurgevoeligheid en soortgelyke afwykings. Dit word ook gebruik om uitskieterproewe te identifiseer.

**tn** Genotipeherhaalbaarheid verwys na die herhaalbaarheid van genotipe gemiddeldes en kan gedefinieer word as die verwantskap tussen die genotipe variasie en die totale variasie. Hierdie parameter is eintlik van waarde vir proewe waarvan die aantal herhalings nie dieselfde is nie.

**t** Die Intraklas Korrelasie verwys na die herhaalbaarheid van perseelwaardes oor herhalings. Hoe groter die ooreenstemming tussen perseelwaardes oor herhalings vir elke genotipeinskrywing is, hoe nader sal "t" na 1.0 neig.

**SF(t)** Die Standaard Fout van die Intraklas Korrelasie (t) gee 'n aanduiding van hoe akkuraat die skatting van "t" is.

**t/SF(t)** Hierdie verhouding word as 'n belangrike parameter beskou daar die Intraklas Korrelasie

(t) moet verkieslik minstens drie keer groter as sy foutterm moet wees. 'n Verhouding van kleiner as 3.0 dui aan dat die betrokke stel proefdata as minder betroubaar beskou kan word.

Die kleinste betekenisvolle verskil (KBV) by ( $P \leq 0.05$ ) wat gelys word onder aan die tabel vir elke kolom word gebruik om te bepaal of daar betekenisvolle verskille is. As die verskil tussen twee kultivars gelyk of groter is as die KBV beteken dit dat die gemiddeldes is betekenisvol verskillend.

Opbrengs waarskynlikheid is baie belangrik in keuse van 'n geskikte kultivar. Die opbrengs waarskynlikheid is die moontlikheid van 'n kultivar om 'n bo-gemiddelde opbrengs te behaal by 'n spesifieke omgewingspotensiaal. As die waarskynlikheid 80% is, is die kans om 'n opbrengs hoër as die gemiddeld van alle kultivars te kry agt uit tien met 'n kans van twee uit tien om onder die gemiddeld te presteer.

## **KULTIVARS VOLGENS MIELIE PRODUKSIESTREKE**

Vir die doel van hierdie publikasie is die kultivarproewe ingedeel in streke volgens hitte eenhede, reënval en produksie en verder verwerk tot opbrengswaarskynlikheid. Waar voldoende inligting oor 'n betrokke kultivar beskikbaar is, is die inligting van twee en drie seisoene saamgevoeg. Andersins is die inligting van die nuwer kultivars bekom uit die eenjarige en tweejarige data van die onderskeie groter westelike streke. Om voldoende betroubare inligting te verskaf, is van die produksiegebiede saamgevoeg. Proewe wat in die Wes-produksiegebied (Streek 2) gedoen is, is saamgesmelt met die Watertabel-streek (Streek 1) vir multiseason data.

Hierdie inligtingstuk poog nie om die enigste bron van inligting te wees nie. Kultivarinligting is ook by koöperasies en die saadmaatskappye beskikbaar.

## **VRYWARING**

Die opsteller van die dokument en enige ander bron/instansie/persoon verantwoordelik vir enige inligting genoem in hierdie dokument is na die beste wete van die opstellers korrek met druktyd. Die inligting is ontwikkel deur wetenskaplike prosesse en word in goeder trou aangebied. Enige persoon/instansie wat hierdie inligting gebruik doen dit op eie risiko en die opstellers of enige ander party sal onder geen omstandighede verantwoordelik gehou kan word vir enige verliese gelei deur enige persoon/instansie wat die inligting in hierdie dokument gebruik nie.

## **CULTIVAR EVALUATION**

Information on cultivars planted by producers is of utmost importance. It affects seasonal planning by producers to a large extent. Reliable and if possible independent information regarding cultivars should be available to every producer. The ARC-Grain Crops Institute (ARC-GCI) in co-operation with agricultural businesses and the seed industry attempt to satisfy the producers` requirements. The responsibility is with the producer to test new or unknown cultivars first before dispensing with the known cultivars on a large scale.

## CULTIVAR INFORMATION

At the end of each season the farmer has to decide which cultivars are to be planted during the following season. A correctly planned cultivar choice can contribute greatly to reduce risk and constitutes an important part of the producer's production planning.

Cultivars differ in one or more of a number of characteristics. Each cultivar has a particular adaptability and yield potential. Variability of cultivars provides alternatives, which can be utilized effectively. The following are important guidelines in cultivar planning which can be considered:

- Never replace a reliable cultivar with a new or unknown cultivar in a single season.
  
- Cultivar variability divides the risk factor. Use a series of cultivars, which differ in length of growing season and other characteristics.
  
- Cultivars must be adapted to a specific yield potential but should be able to utilize increased potential conditions and still deliver an acceptable yield at reduced yield potential. Cultivars with a wide adaptability can play a role under these conditions.
  
- Cultivar choice should be revised annually.

## DIAGNOSTIC PARAMETERS

CV The coefficient of variation - relates to the error of a single plot, and as such relays the variability induced by soil variation or plant population i.e. the larger the variation the larger the CV. Stress conditions (moisture, temperature, diseases, etc.) result in acceptable soil variation to be more pronounced in trials and a higher CV is recorded. The CV on its own cannot be used as a parameter to discard trials.

GCV The genetic coefficient of variation - relates to the yield differential between the highest and lowest entry yield, relative to the trial mean i.e. the greater the difference between the extreme values, the larger the GCV. High values are indicative of disease sensitivity, differences in maturity stage, temperature sensitivity and like problems.

tn Repeatability of genotype mean yield - relates to the repeatability of entry means, and can be defined as the relationship of genetic variance of observed means. In genotype trials this parameter is useful only when the number of replications between trials varies, otherwise the t-value is sufficient.

T The repeatability of plot yield or intra class correlation coefficient - relates to the repeatability of plot means over replications, and is interpreted as is the normal correlation coefficient, i.e. the greater the concurrence of plot values per entry over replications the closer "t" will strive towards unity. The standard error calculated for a particular t-value indicates the accuracy of the estimate of "t"

SE (t) Standard Error of the Intra-class Correlation (t) denotes how accurate the estimation of "t" is.

t/ SE (t) This relationship is considered an important parameter as the Inter Class Correlation

(t) Should be at least three times greater than its error term. A relationship of less than 3.0 denotes low reliability.

The least significance difference (LSD) at ( $P \leq 0.05$ ) statistical probability listed at the bottom of the tables for each column, is used to determine if there is significance differences between the means for that particular column. If the difference between two hybrids were equal to or greater than the LSD, it implies that the means were statistically significantly different.

Yield probability values are important in selecting cultivars. The yield probability of a cultivar is the chance to get an above average yield at a particular yield potential. If the yield probability of a cultivar is 80%, the chance to get a yield above the mean of all cultivars is eight out of ten with a two out of ten chance of obtaining a yield below the mean

## **CULTIVAR GROUPING ACCORDING TO MAIZE PRODUCTION REGIONS**

For the purpose of this publication the cultivar trials were divided into regions according to heat unit, precipitation and production for which yield reliability values were calculated. Information pertaining to three seasons was combined where sufficient information on a particular cultivar was available. Information on the newer cultivars was obtained from data of the annual and bi-annual reports of the greater eastern and western regions. Data for certain production regions have been combined in order to obtain more reliable information. Trials conducted in the Western (Region 2) and Watertable (Region 2) were combined for multi-season data.

Note that this brochure is not the only source of information. Cultivar information is also available at co-operatives and seed companies.

## **INDEMNITY**

The composer of this document and any other source/institution/individual person responsible for any information contained in this document is to the best knowledge of the composers correct at printing. The information was developed using sound scientific procedures and is presented in good faith. Institutions or people use this information at own risk and the composers or any other party will under no circumstances be under any legal obligation regarding any losses occurring by using the information contained in this document.

**Tabel 1:** Gemiddelde graanopbrengs (t ha<sup>-1</sup>) vir mieliegenotipes by verskillende Watertafel omgewings gedurende die 2016/2017 seisoen

**Table 1:** Mean yield (t ha<sup>-1</sup>) for maize genotypes under different Watertable environments during the 2016/2017 season

Genotipe Genotype	Lokaliiteit/Locality											Gemiddelde Mean (t ha <sup>-1</sup> )
	Bothaville <sup>(2)</sup>	Bothaville <sup>(6)</sup>	Bothaville <sup>(3)</sup>	Leeudoringstad <sup>(1)</sup>	Losdoorns <sup>(4)</sup>	Nampo <sup>(1)</sup>	Vierfontein <sup>(4)</sup>	Viljoenskroon <sup>(5)</sup>	Viljoenskroon <sup>(3)</sup>	Wesselsbron <sup>(1)</sup>	Wesselsbron <sup>(4)</sup>	
BG 5285	4,85	10,46	7,83	6,48	5,49	6,45	3,85	8,66	8,29	9,00	7,13	7,14
BG5 785 BR	4,72	8,04	8,68	6,55	4,57	5,86	4,57	5,71	9,36	7,24	7,14	6,59
DKC 68-58 BR	3,42	7,46	6,96	5,91	4,11	5,50	4,20	5,85	6,67	6,22	4,38	5,52
DKC 71-44 B	4,79	7,24	8,17	6,86	4,59	6,31	5,48	6,16	6,49	6,42	5,68	6,20
DKC 74-74B R	4,33	8,18	8,23	7,43	4,89	5,79	5,34	6,42	7,48	7,35	5,89	6,48
DKC 75-65 BR	6,25	10,39	9,17	8,94	5,74	7,20	2,99	7,06	8,55	8,96	8,28	7,59
DKC 77-77 BR	5,24	9,81	9,57	7,97	6,03	7,56	3,63	6,30	7,61	7,15	6,60	7,04
DKC 78-45 BRGEN	5,53	7,10	11,97	8,29	5,13	6,08	5,52	6,97	6,67	7,68	6,29	7,02
DKC 78-79 BR	5,10	9,06	7,80	8,68	5,18	6,50	5,06	6,99	8,92	8,23	7,40	7,17
DKC 80-40 BRGEN	4,51	6,95	10,63	7,39	4,78	5,24	5,84	7,45	7,66	8,30	6,99	6,89
IMP 51-22 B	3,65	8,57	5,44	7,43	4,77	6,95	4,64	5,29	6,42	6,90	5,53	5,96
IMP 52-11 R	4,69	8,97	8,32	7,76	5,20	6,71	5,02	6,44	5,64	5,62	6,64	6,46
IMP 53-49 B	3,71	9,66	7,64	8,42	5,13	6,83	3,99	6,80	8,36	7,01	6,55	6,74
LG 3607 Y	5,47	7,94	9,48	7,95	5,76	6,39	3,96	6,17	7,27	6,77	6,59	6,70
LS 8518	5,61	11,40	9,08	7,75	4,80	6,30	3,54	6,34	7,40	8,33	6,02	6,96
LS 8526	4,11	7,99	7,88	5,14	3,85	5,87	5,17	4,71	6,86	6,76	6,14	5,86
LS 8533 R	5,16	7,81	8,19	5,75	4,94	5,61	4,81	6,65	7,64	7,32	7,39	6,48
LS 8536 B	4,10	8,99	10,63	6,03	3,19	6,60	3,65	5,32	8,15	7,13	5,69	6,32
LS 8539 B	4,80	6,17	8,60	7,04	4,04	6,49	6,05	6,53	6,39	7,58	7,18	6,44
LS 8541 BR	3,73	7,43	9,72	8,07	5,02	5,95	3,44	5,04	7,37	6,92	5,86	6,23
LS 8542	3,91	6,64	8,31	6,92	4,36	5,49	3,69	5,77	6,76	7,00	5,84	5,88
P 2319 B	3,94	5,89	9,64	5,83	3,79	5,69	4,54	4,00	7,21	6,86	5,85	5,75
P 2707 WYR	6,49	9,58	7,05	8,33	5,02	6,68	4,26	6,54	6,52	8,40	7,43	6,94
P 2864 WYR	5,68	8,70	10,20	7,71	5,86	6,56	4,55	7,15	6,60	7,87	8,50	7,22
P 2880 WYR	5,18	9,02	9,19	6,58	5,56	5,75	5,13	7,06	7,25	8,05	5,44	6,75
PAN 5A-182	4,08	8,72	8,13	5,97	4,73	5,58	4,65	7,10	8,59	7,17	6,66	6,49
PAN 5R-591 R	5,65	10,25	9,43	7,07	5,98	6,85	4,33	7,04	8,60	7,80	7,25	7,30
PAN 5R-785 BR	4,54	7,75	8,30	7,83	6,39	5,81	5,38	6,47	8,30	7,34	6,92	6,82
PAN 5R-791 BR	6,34	9,39	9,50	8,92	5,79	5,92	5,00	6,67	6,54	9,62	8,10	7,44
PAN 6B-410 B	4,48	7,64	8,32	7,52	4,47	5,71	2,91	5,33	6,39	6,93	5,66	5,94
PAN 6Q-865 BR	5,75	5,73	9,71	7,79	4,82	6,31	3,99	6,23	7,41	7,37	6,97	6,55
PAN 6R-710 BR	4,84	7,55	8,29	7,45	4,60	6,03	4,06	5,86	7,93	7,86	6,09	6,41
SC 506	4,65	8,36	9,92	5,93	4,68	5,28	4,81	6,53	7,68	6,39	6,38	6,42
VP 8405 B	5,77	9,35	10,41	7,77	6,14	7,04	5,63	7,03	8,81	8,61	6,91	7,59
Gemiddelde /Mean	4,86	8,36	8,84	7,28	4,98	6,20	4,52	6,34	7,46	7,48	6,57	6,63
KBV / LSD	1,39	2,05	2,75	1,64	1,64	1,09	1,74	1,11	1,77	1,29	1,45	
KV/ CV %	17,50	14,10	18,00	13,80	14,30	10,80	19,80	10,70	14,50	10,60	13,50	

(1)= ARC; (2)= Pannar; (3)= Monsanto , (4)= Pioneer; (5)=Agricol; (6)=Linkseed

**Tabel 2:** Diagnostiese parameters vir die statistiese aanvaarbaarheid van proewe vir betroubare opbrengsanalises 2016/2017 seisoen (Watertafel streek)

**Table 2:** Diagnostic parameters for the statistical acceptability of trials for reliable yield analysis for the 2016/2017 season (Watertable region)

Lokaliteit Locality	Gemiddelde Mean(t ha <sup>-1</sup> )	SF SE	KV(%) CV(%)	GKV GCV	t t	SF(t) SE(t)	tn
Bothaville <sup>(2)</sup>	4,86	0,49	17,50	13,40	0,37	0,11	0,64
Bothaville <sup>(6)</sup>	8,36	0,68	14,10	14,00	0,49	0,10	0,74
Bothaville <sup>(3)</sup>	8,84	0,92	18,00	9,70	0,22	0,11	0,46
Leeudoringstad <sup>(1)</sup>	7,28	0,58	13,80	10,90	0,38	0,11	0,65
Losdoorns <sup>(4)</sup>	4,98	0,41	14,30	12,20	0,42	0,11	0,68
Nampo <sup>(1)</sup>	6,20	0,39	10,80	6,90	0,29	0,11	0,55
Vierfontein <sup>(4)</sup>	4,52	0,52	19,80	13,70	0,32	0,11	0,59
Viljoenskroon <sup>(5)</sup>	6,34	0,39	10,70	12,40	0,57	0,09	0,80
Viljoenskroon <sup>(3)</sup>	7,46	0,63	14,50	8,70	0,26	0,11	0,51
Wesselsbron <sup>(1)</sup>	7,48	0,46	10,60	9,80	0,46	0,10	0,72
Wesselsbron <sup>(4)</sup>	6,57	0,51	13,50	10,90	0,39	0,11	0,66

(1)= ARC; (2)= Pannar; (3)= Monsanto , (4)= Pioneer; (5)=Agricol; (6)=Linkseed

**Tabel 3:** Opbrengswaarskynlikheid (%) bo y=x lyn vir 2016/2017 seisoen (Watertafel streek)

**Table 3:** Probability (%) above y = x line for 2016/2017 season (Water table region)

Genotipe Genotype	Obrengspotensiaal/Yield potential (t ha <sup>-1</sup> )				
	3	5	7	9	11
BG 5285	51	59	67	72	74
BG 5785 BR	41	45	50	56	59
DKC 68-58 BR	23	9	3	1	1
DKC 71-44 B	91	61	13	1	0
DKC 74-74 BR	67	53	36	23	18
DKC 75-65 BR	45	68	87	95	96
DKC 77-77 BR	43	58	75	84	88
DKC 78-45 BRGEN	54	58	62	64	64
DKC 78-79 BR	75	77	76	71	65
DKC 80-40 BRGEN	54	56	59	60	60
IMP 51-22 B	62	45	25	14	10
IMP 52-11 R	69	57	39	26	19
IMP 53-49 B	35	44	58	69	74
LG 3607 Y	62	60	55	49	46
LS 8518	20	40	70	88	94
LS 8526	39	25	14	10	10
LS 8533 R	79	63	38	19	11
LS 8536 B	1	8	43	84	96
LS 8539 B	82	65	36	16	9
LS 8541 BR	8	15	34	60	76
LS 8542	9	5	3	4	6
P 2319 B	24	21	20	23	28
P 2707 WYR	77	71	59	45	36
P 2864 WYR	72	76	77	74	70
P 2880 WYR	63	60	55	49	45
PAN 5A-182	41	41	42	45	47
PAN 5R-591 R	62	77	89	93	93
PAN 5R-785 BR	91	82	59	32	18
PAN 5R-791 BR	73	78	80	79	75
PAN 6B-410 B	5	6	9	20	33
PAN 6Q-865 BR	62	55	46	37	33
PAN 6R-710 BR	34	31	30	32	35
SC 506	32	35	41	49	54
VP 8405 B	94	98	99	99	99

**Tabel 4:** Gemiddelde graanopbrengs (t ha<sup>-1</sup>) vir mieliegenotipes by verskillende Westelike omgewings gedurende die 2016/2017 seisoen

**Table 4:** Mean yield (t ha<sup>-1</sup>) for maize genotypes under different Western environments during the 2016/2017 season

Genotipe Genotype	Lokaleiteit/Locality														Gemiddelde Mean (t ha <sup>-1</sup> )
	Coligny 2.3m <sup>(1)</sup>	Coligny <sup>(4)</sup>	Coligny 0,91m <sup>(1)</sup>	Lichtenburg <sup>(3)</sup>	Ottosdal <sup>(1)</sup>	Potchefstroom <sup>(5)</sup>	Potchefstroom <sup>(1)</sup>	Potchefstroom <sup>(6)</sup>	Putfontein <sup>(4)</sup>	Rushof <sup>(1)</sup>	Sannieshof <sup>(1)</sup>	Tweebuffels <sup>(1)</sup>	Ventersdorp <sup>(1)</sup>	Ottosdal <sup>(7)</sup>	
BG 5285	5,68	8,07	7,78	11,41	8,82	9,00	9,45	5,05	8,65	9,81	3,52	7,16	6,82	7,13	7,74
BG 5785 BR	5,69	8,29	7,85	9,08	8,47	8,70	8,91	4,52	8,01	10,21	2,80	6,35	6,05	7,11	7,29
DKC 68-58 BR	4,90	6,69	7,22	9,06	7,91	6,22	6,41	3,82	6,58	6,66	2,78	5,76	5,47	7,47	6,21
DKC 71-44 B	5,67	7,81	8,28	6,86	7,46	7,44	6,88	4,00	8,10	8,46	3,12	6,23	6,69	7,91	6,78
DKC 74-74 BR	5,64	7,11	6,36	9,87	7,07	8,03	7,94	4,38	7,20	7,13	3,50	6,39	4,91	7,96	6,68
DKC 75-65 BR	6,13	9,79	8,18	9,64	10,53	8,69	8,12	4,63	9,98	9,07	2,61	5,40	7,72	8,61	7,79
DKC 77-77 BR	6,00	9,00	7,92	11,25	8,98	9,41	8,60	4,85	8,65	9,89	2,81	6,50	7,36	6,97	7,73
DKC 78-45 BRGEN	5,51	8,37	7,60	13,34	8,84	7,87	7,19	4,31	7,97	8,08	2,00	6,26	6,08	7,18	7,19
DKC 78-79 BR	5,74	8,57	7,32	9,81	8,55	8,83	8,94	4,17	8,72	9,25	3,28	6,36	5,82	9,31	7,48
DKC 80-40 BRGEN	5,24	8,85	8,61	8,84	7,94	9,03	7,98	5,49	7,46	7,90	2,01	6,81	6,81	8,00	7,21
IMP 51-22 B	5,69	4,74	6,95	9,29	6,52	7,82	6,17	4,43	4,35	8,87	2,90	4,56	3,88	6,33	5,89
IMP 52-11 R	5,23	7,94	5,28	9,61	8,32	8,41	8,18	4,46	8,28	9,09	3,21	5,93	5,84	6,75	6,90
IMP 53-49 B	6,47	8,47	6,19	9,39	9,61	9,33	7,89	4,36	8,36	9,66	3,02	6,04	7,55	7,70	7,43
KKS 4581 BR	5,40	6,74	8,40	9,27	7,78	5,56	7,35	0,77	4,92	7,47	2,38	6,08	4,99	7,13	6,02
KKS 8403 R	5,07	6,27	5,61	8,42	6,87	7,55	6,85	3,77	5,84	7,06	2,34	4,36	5,45	6,26	5,84
KKS 8410 BR	4,58	6,82	6,87	9,51	7,78	6,31	6,24	3,56	6,02	7,13	3,00	5,28	5,65	7,78	6,18
LG 3607 Y	4,40	5,05	8,77	9,27	7,32	9,07	6,81	3,80	5,28	7,71	2,81	4,91	4,41	7,05	6,19
LS 8518	5,24	8,28	6,43	6,80	8,24	6,98	8,32	3,85	8,52	7,19	3,65	6,60	6,31	7,45	6,70
LS 8526	4,95	6,31	6,52	9,95	6,87	7,03	7,40	3,40	6,82	8,05	2,62	5,50	5,57	7,02	6,29
LS 8533 R	5,37	7,39	7,56	10,05	8,20	6,74	7,75	3,84	7,74	7,67	2,23	7,00	5,75	5,57	6,63
LS 8536 B	3,66	6,42	5,71	9,21	6,86	7,35	7,03	4,45	5,84	8,66	3,08	5,31	5,57	7,12	6,16
LS 8539 B	4,36	7,59	5,08	9,26	7,90	7,52	8,68	3,09	8,07	8,68	3,99	6,06	6,36	7,72	6,74
LS 8541 BR	6,09	6,89	5,27	9,51	7,58	7,58	6,33	3,96	7,34	7,30	2,71	6,24	6,69	7,21	6,48
LS 8542	4,35	3,93	4,96	9,16	7,20	6,65	5,78	4,92	5,55	8,03	2,93	5,04	4,49	5,84	5,63
P 2319 B	4,88	6,70	5,78	8,47	6,68	8,27	8,74	4,05	6,26	7,70	2,57	5,49	5,44	7,55	6,33
P 2432 R	4,75	7,26	6,06	8,60	7,77	5,94	6,84	5,49	7,33	8,62	2,79	5,61	5,35	6,77	6,37
P 2707 WYR	5,66	9,03	7,67	7,40	8,47	6,49	7,98	4,32	7,06	9,20	3,52	6,57	5,42	6,92	6,84
P 2842 W	5,15	7,54	9,39	8,83	7,91	7,74	8,69	5,66	7,31	9,30	2,05	5,49	6,39	8,25	7,12
P 2864 WYR	5,80	6,61	6,74	10,39	6,58	6,83	10,06	4,68	7,49	11,8	3,13	6,41	7,40	7,20	7,22
P 2880 WYR	6,37	8,79	7,08	7,29	8,87	9,70	9,67	4,46	7,77	9,72	3,56	6,25	6,73	8,64	7,49
P 2961 WYR	6,99	8,83	9,92	10,97	8,58	10,13	9,05	4,87	8,65	9,12	3,66	7,40	5,05	7,91	7,94
PAN 5A-182	5,49	6,93	8,92	9,78	6,18	9,46	7,36	4,85	6,93	9,12	2,88	5,31	6,39	7,87	6,96
PAN 5R-591 R	5,69	9,23	6,92	10,28	9,01	9,41	8,70	4,64	8,95	8,65	3,50	6,55	6,41	8,21	7,58
PAN 5R-785 BR	5,05	8,03	8,27	9,25	8,97	5,74	8,16	3,78	6,54	9,05	2,88	7,68	6,15	6,8	6,88
PAN 5R-791 BR	6,39	7,54	9,14	9,76	8,42	8,85	8,11	4,63	6,28	8,72	3,07	8,00	7,05	7,86	7,42
PAN 6B-410 B	4,59	6,74	6,92	8,79	5,94	5,57	7,54	2,09	6,40	7,81	2,10	5,46	5,31	6,88	5,87
PAN 6B-465 B	6,46	7,99	4,93	9,20	7,19	8,37	9,73	4,28	7,50	7,89	3,04	6,16	6,58	7,57	6,92
PAN 6Q-865 BR	5,74	8,9	8,48	10,39	7,41	7,42	9,09	4,49	6,88	9,08	3,31	6,33	6,07	7,59	7,23
PAN 6R-710 BR	5,75	8,63	6,85	8,26	7,45	7,14	8,18	3,58	6,69	9,40	2,59	5,11	4,19	7,92	6,55
SC 506	4,06	5,97	6,84	9,30	7,53	5,69	6,97	4,21	5,92	6,83	1,90	5,21	4,62	6,48	5,82
VP 8405 B	6,34	9,85	7,88	10,33	9,28	9,68	9,14	4,52	8,05	9,73	2,74	6,69	6,34	8,83	7,81
Gemiddelde/Mean	5,42	7,56	7,18	9,39	7,9	7,79	7,93	4,21	7,23	8,56	2,89	6,05	5,93	7,41	6,82
KBV / LSD	1,74	2,03	2,21	3,13	1,83	2,34	1,15	1,16	1,90	1,19	0,87	1,67	1,12	1,96	
KV/ CV%	19,80	16,50	18,90	15,70	14,2	18,50	8,90	16,9	16,20	8,70	18,60	17,00	11,6	16,3	

(1)= ARC; (2)= Pannar; (3)= Monsanto , (4)= Pioneer; (5)=Agricol; (6)=Linkseed; (7) Klein karoo

**Tabel 5:** Diagnostiese parameters vir die statistiese aanvaarbaarheid van proewe vir betroubare opbrengsanalises 2016/2017 seisoen (Westelike streek)

**Table 5:** Diagnostic parameters for the statistical acceptability of trials for reliable yield analysis for the 2016/2017 season (Western region)

Lokaliteit Locality	Gemiddelde Mean (t ha <sup>-1</sup> )	SF SE	KV(%) CV(%)	GKV GCV	t t	SF(t) SE(t)	tn
Colignv 2.3m <sup>(1)</sup>	5,42	0,62	19,80	6,80	0,11	0,10	0,27
Colignv <sup>(4)</sup>	7,56	0,72	16,50	14,60	0,44	0,10	0,70
Colignv 0.91m <sup>(1)</sup>	7,18	0,78	18,90	14,10	0,36	0,10	0,63
Lichtenburg <sup>(3)</sup>	9,39	0,85	15,70	9,00	0,25	0,10	0,50
Ottosdal <sup>(1)</sup>	7,90	0,65	14,20	9,20	0,30	0,10	0,56
Potchefstroom <sup>(5)</sup>	7,79	0,83	18,50	12,60	0,32	0,10	0,59
Potchefstroom <sup>(1)</sup>	7,93	0,41	8,90	12,50	0,66	0,07	0,85
Potchefstroom <sup>(6)</sup>	4,21	0,41	16,90	17,90	0,53	0,09	0,77
Putfontein <sup>(4)</sup>	7,23	0,68	16,20	13,90	0,42	0,10	0,68
Rushof <sup>(1)</sup>	8,56	0,43	8,70	11,50	0,64	0,08	0,84
Sannieshof <sup>(1)</sup>	2,89	0,31	18,60	14,00	0,36	0,10	0,63
Tweebuffels 1,5m <sup>(1)</sup>	6,05	0,59	17,00	8,90	0,21	0,10	0,44
Ventersdorp <sup>(1)</sup>	5,93	0,40	11,60	14,10	0,60	0,08	0,82
Ottosdal <sup>(7)</sup>	7,41	0,70	16,30	4,60	0,07	0,10	0,18

1)= ARC; (2)= Pannar; (3)= Monsanto ; (4)= Pioneer; (5)=Agricol; (6)=Linkseed; (7) Klein karoo

**Tabel 6:** Opbrengswaarskynlikheid (%) bo y=x lyn vir 2016/2017 seisoen (Westelike streek)

**Table 6:** Probability (%) above y = x line for 2016/2017 season (Western region)

Genotipe Genotype	Obrengspotensiaal/Yield potential (t ha <sup>-1</sup> )				
	3	5	7	9	11
BG 5285	73	88	96	98	99
BG5 785 BR	53	68	81	89	92
DKC 68-58 BR	45	28	15	8	5
DKC 71-44 B	79	67	48	30	19
DKC 74-74 BR	66	54	40	28	21
DKC 75-65 BR	59	71	82	88	91
DKC 77-77 BR	55	80	94	99	99
DKC 78-45 BRGEN	24	42	66	84	92
DKC 78-79 BR	57	75	88	95	97
DKC 80-40 BRGEN	67	68	67	66	63
IMP 51-22 B	38	29	22	17	15
IMP 52-11 R	49	51	53	55	56
IMP 53-49 B	65	72	77	80	81
KKS 4581 BR	18	21	28	36	45
KKS 8403 R	18	6	2	1	0
KKS 8410 BR	35	25	18	14	12
LG 3607 Y	32	31	30	32	34
LS 8518	80	65	44	25	14
LS 8526	11	11	12	17	23
LS 8533 R	37	39	43	47	50
LS 8536 B	33	24	18	14	13
LS 8539 B	48	48	47	48	48
LS 8541 BR	59	46	32	21	15
LS 8542	41	26	13	7	5
P 2319 B	35	28	23	20	19
P 2432 R	62	44	25	13	8
P 2707 WYR	74	64	50	36	26
P 2842 W	55	60	64	67	69
P 2864 WYR	53	58	63	67	69
P 2880 WYR	77	77	75	71	66
P 2961 WYR	73	82	89	92	93
PAN 5A-182	56	57	57	56	56
PAN 5R-591 R	71	82	89	93	94
PAN 5R-785 BR	52	53	54	55	55
PAN 5R-791 BR	80	79	77	72	66
PAN 6B-410 B	8	8	9	13	19
PAN 6B-465 B	63	58	52	46	41
PAN 6Q-865 BR	60	67	73	77	78
PAN 6R-710 BR	28	33	39	47	54
SC 506	14	9	7	6	7
VP 8405 B	53	86	98	100	100

**Tabel 7:** Gemiddelde graanopbrengs (t ha<sup>-1</sup>) vir mieliegenotipes by Westelike en westomgewings gedurende die 2015/2016 & 2016/2017 seisoene

**Table 7:** Mean grain yield (t ha<sup>-1</sup>) for different maize genotypes under Western and Watertable environments during the 2015/2016 & 2016/2017 seasons

Lokaliteit Locality	Genotipe/Genotype				Gemiddelde Mean (t ha <sup>-1</sup> )	KBV LSD	KV CV%
	DKC68-58BR	DKC71-44B	LS8541BR	P2842W			
<b>2015/2016 season</b>							
Wesselsbron <sup>(4)</sup>	6,22	6,17	5,77	7,43	6,40	0,83	6,50
Coligny 2.3 <sup>(1)</sup>	3,65	3,06	2,34	2,59	2,91	0,77	13,30
Hoogekraal <sup>(2)</sup>	8,92	9,47	7,67	9,95	9,00	0,94	5,20
Migdol <sup>(3)</sup>	2,46	1,83	2,23	1,81	2,08	0,82	19,70
Putfontein <sup>(4)</sup>	4,67	7,62	4,90	8,69	6,47	1,57	12,10
Tweebuffels 0.75 <sup>(1)</sup>	3,50	3,06	2,35	3,51	3,11	1,00	16,20
Viljoenskroon <sup>(5)</sup>	3,23	3,19	2,83	2,94	3,05	1,55	11,90
<b>2016/2017 season</b>							
Coligny 2,3m <sup>(1)</sup>	4,90	5,67	6,09	5,15	5,45	0,77	16,80
Coligny <sup>(4)</sup>	6,69	7,81	6,89	7,54	7,23	2,72	18,80
Coligny 0,91m <sup>(1)</sup>	7,22	8,28	5,27	9,39	7,54	2,78	18,50
Lichtenburg <sup>(3)</sup>	9,06	6,66	9,51	8,83	8,51	1,47	8,70
Ottosdal <sup>(1)</sup>	7,91	7,46	7,58	7,91	7,72	3,09	20,00
Ottosdal <sup>(7)</sup>	7,47	7,91	7,21	8,25	7,71	1,91	12,40
Potchefstroom <sup>(1)</sup>	6,41	6,88	6,33	8,69	7,08	1,26	8,90
Potchefstroom <sup>(5)</sup>	6,22	7,44	7,58	7,74	7,24	1,56	10,80
Putfontein <sup>(4)</sup>	6,58	9,04	7,34	7,31	7,57	0,44	2,90
Rushof <sup>(1)</sup>	6,66	8,46	7,30	9,30	7,93	1,33	8,40
Sannieshof <sup>(1)</sup>	2,78	2,59	2,71	2,05	2,53	0,57	11,20
Ventersdorp <sup>(1)</sup>	5,47	6,69	6,69	6,39	6,31	0,71	5,60

(1)= ARC; (2)= Pannar; (3)= Monsanto , (4)= Pioneer; (5)=Agricol; (6)=Linkseed; (7) Klein karoo

**Tabel 8:** Diagnostiese parameters vir die statistiese aanvaarbaarheid van proewe vir betroubare opbrengsanalises 2015/2016 & 2016/2017 seisoen (watertafel enwestile streke)

**Table 8:** Diagnostic parameters for the statistical acceptability of trials for reliable yield analysis for the 2015/2016 & 2016/2017 season (watertafel enwestile streke)

Lokaliteit Locality	Gemiddelde Mean(t ha <sup>-1</sup> )	SF SE	KV(%) CV(%)	GKV GCV	t t	SF(t) SE(t)	tn
<b>2015/2016</b>							
Wesselsbron <sup>(4)</sup>	6,40	0,24	6,50	10,60	0,73	0,22	0,89
Coligny 2.3 <sup>(1)</sup>	2,91	0,22	13,30	18,20	0,65	0,27	0,85
Hoogekraal <sup>(2)</sup>	9,00	0,27	5,20	10,50	0,80	0,17	0,92
Migdol <sup>(3)</sup>	2,08	0,24	19,70	10,20	0,21	0,37	0,44
Putfontein <sup>(4)</sup>	6,47	0,45	12,10	30,00	0,86	0,13	0,95
Tweebuffels 0.75 <sup>(1)</sup>	3,11	0,29	16,20	14,90	0,46	0,35	0,72
Viljoenskroon <sup>(5)</sup>	3,05	0,21	11,90	.	-0,06	0,31	-0,20
<b>2016/2017</b>							
Coligny <sup>(4)</sup>	7,23	0,78	18,80	.	-0,22	0,23	-1,18
Coligny 2,3m <sup>(1)</sup>	5,45	0,53	16,80	1,30	0,01	0,34	0,03
Coligny 0,91m <sup>(1)</sup>	7,54	0,80	18,50	20,60	0,56	0,31	0,79
Lichtenburg <sup>(3)</sup>	8,51	0,43	8,70	14,00	0,72	0,23	0,89
Ottosdal <sup>(1)</sup>	7,72	0,89	20,10	.	-0,45	0,05	-13,50
Ottosdal <sup>(7)</sup>	7,71	0,55	12,40	.	-0,11	0,29	-0,42
Potchefstroom <sup>(1)</sup>	7,08	0,36	8,90	14,70	0,73	0,22	0,89
Potchefstroom <sup>(5)</sup>	7,24	0,45	10,80	7,20	0,31	0,37	0,57
Putfontein <sup>(4)</sup>	7,57	0,13	2,90	13,70	0,96	0,04	0,99
Rushof <sup>(1)</sup>	7,93	0,38	8,40	14,00	0,74	0,22	0,90
Sannieshof <sup>(1)</sup>	2,53	0,16	11,20	11,40	0,51	0,33	0,76
Ventersdorp <sup>(1)</sup>	6,31	0,21	5,60	8,60	0,70	0,24	0,88

(1)= ARC; (2)= Pannar; (3)= Monsanto , (4)= Pioneer; (5)=Agricol; (6)=Linkseed; (7) Klein karoo

**Tabel 9:** Opbrengswaarskynlikheid (%) bo y=x lyn vir 2015/2016 & 2016/2017 seisoene (westelike en watertafel streke)

**Table 9:** Probability (%) above y = x line for 2015/2016 & 2016/2017 seasons (Western and watertable regions)

Genotipe Genotype	Yield potential (t/ha)				
	3	5	7	9	11
DKC80-40BRGEN	59	42	26	15	9
PAN6B-410B	55	58	60	62	63
KKS8410BR	42	36	30	26	24
LS8518	46	65	81	91	95



**Tabel 11:** Diagnostiese parameters vir die statistiese aanvaarbaarheid van proewe vir betroubare opbrengsanalises vir die 2014/2015, 2015/2016 & 2016/2017 seisoene (Westelike en Watertafel streke)

**Table 11:** Diagnostic parameters for the statistical acceptability of trials for reliable yield analysis for the 2014/2015, 2015/2016 & 2016/2017 seasons (Western and Watertable regions)

Lokaleiteit Locality	Gemiddelde Mean(t ha <sup>-1</sup> )	SF SE	KV(%) CV(%)	GKV GCV	t t	SF(t) SE(t)	tn
<b>2014/2015</b>							
Bothaville <sup>(2)</sup>	5,14	0,59	19,90	23,90	0,59	0,12	0,81
Coligny 2.3 <sup>(1)</sup>	4,54	0,38	14,30	13,60	0,47	0,14	0,73
Migdol <sup>(3)</sup>	4,02	0,41	17,70	.	-0,13	0,11	-0,53
Nampo <sup>(1)</sup>	4,96	0,50	17,40	10,60	0,27	0,15	0,53
Ottosdal <sup>(1)</sup>	3,92	0,34	15,00	16,40	0,55	0,13	0,79
Potchefstroom <sup>(5)</sup>	4,57	0,37	14,10	7,10	0,20	0,15	0,43
Potchefstroom <sup>(1)</sup>	4,03	0,36	15,70	10,90	0,32	0,15	0,59
Tweebuffels 0.75 <sup>(1)</sup>	3,66	0,40	19,00	9,20	0,19	0,15	0,41
Tweebuffels 1.5 <sup>(1)</sup>	3,60	0,38	18,30	12,60	0,32	0,15	0,59
Ventersdorp <sup>(1)</sup>	4,34	0,39	15,70	6,60	0,15	0,15	0,35
Viljoenskroon <sup>(3)</sup>	3,21	0,29	15,50	10,50	0,32	0,15	0,59
Viljoenskroon <sup>(6)</sup>	2,47	0,28	19,60	10,70	0,23	0,15	0,47
<b>2015/2016</b>							
Coligny 0.91 <sup>(1)</sup>	2,27	0,42	32,10	.	-0,03	0,13	-0,10
Hoogekraal <sup>(2)</sup>	9,56	0,49	8,90	13,80	0,70	0,10	0,88
Putfontein <sup>(4)</sup>	6,84	0,54	13,60	16,70	0,60	0,12	0,82
Viljoenskroon <sup>(5)</sup>	3,10	0,24	13,60	4,70	0,11	0,14	0,27
Wesselsbron <sup>(4)</sup>	6,23	0,63	17,40	13,30	0,37	0,15	0,64
<b>2016/2017</b>							
Coligny 2,3m <sup>(1)</sup>	5,27	0,60	19,60	7,60	0,13	0,15	0,31
Coligny <sup>(4)</sup>	7,48	0,68	15,70	11,40	0,34	0,15	0,61
Coligny 0,91m <sup>(1)</sup>	7,15	0,71	17,30	12,90	0,36	0,15	0,63
Lichtenburg <sup>(3)</sup>	9,51	0,99	18,00	1,20	0,00	0,13	0,00
Ottosdal <sup>(1)</sup>	7,98	0,67	14,50	6,90	0,18	0,15	0,40
Ottosdal <sup>(7)</sup>	7,26	0,76	18,10	1,90	0,01	0,13	0,03
Potchefstroom <sup>(1)</sup>	7,77	0,40	8,90	10,40	0,58	0,12	0,81
Potchefstroom <sup>(5)</sup>	7,79	0,85	19,00	12,50	0,30	0,15	0,56
Potchefstroom <sup>(6)</sup>	4,24	0,31	12,80	22,50	0,76	0,08	0,90
Putfontein <sup>(4)</sup>	7,34	0,57	13,50	15,50	0,57	0,12	0,80
Rushof <sup>(1)</sup>	8,54	0,37	7,40	10,70	0,67	0,10	0,86
Sannieshof <sup>(1)</sup>	2,86	0,30	17,90	16,50	0,46	0,14	0,72
Tweebuffels 1,5m <sup>(1)</sup>	6,03	0,53	15,20	10,50	0,32	0,15	0,59
Ventersdorp <sup>(1)</sup>	5,99	0,44	12,70	13,20	0,52	0,13	0,76

(1)= ARC; (2)= Pannar; (3)= Monsanto , (4)= Pioneer; (5)=Agricol; (6)=Linkseed; (7) Klein karoo

**Tabel 12:** Opbrenghwaarskynlikheid (%) bo  $y=x$  lyn vir 2014/2015, 2015/2016 & 2016/2017 seisoene (Westelike en Watertafel streke)

**Table 12:** Probability (%) above  $y = x$  line for 2014/2015, 2015/2016 & 2016/2017 season (Western and Watertable regions)

Genotipe Genotype	Obrenghpotensiaal/Yield potential (t ha <sup>-1</sup> )				
	3	5	7	9	11
BG5285	76	91	97	99	100
BG5785BR	53	72	87	94	97
DKC77-77BR	56	80	93	98	99
DKC78-45BRGEN	42	57	71	82	88
DKC78-79BR	71	78	84	88	91
DKC80-40BRGEN	50	53	55	56	58
IMP51-22B	39	27	17	11	7
IMP52-11R	35	42	49	57	63
IMP53-49B	49	60	69	77	83
KKS4581BR	48	38	28	21	16
KKS8410BR	59	33	13	4	1
LS8518	47	40	33	28	24
LS8526	30	29	30	30	31
LS8533R	48	43	38	34	30
LS8536B	44	31	20	13	8
LS8539B	56	55	54	53	51
P2432R	57	46	35	26	19
PAN5A-182	50	52	55	58	60
PAN5R-791BR	63	65	65	66	66
SC506	30	17	9	5	2

**Tabel 13:** Gemiddelde persentasie spruitvorming vir die 2016/2017 seisoen (Westelike streek)

**Table 13:** Mean percentage tillering for the 2016/2017 season (Western region)

Genotipes Genotypes	Lokaliteit/Locality				Gemiddelde Mean
	Coligny 2,3m <sup>(1)</sup>	Coligny 0,91m <sup>(1)</sup>	Tweebuffels 1,5m <sup>(1)</sup>	Tweebuffels 0,75m <sup>(1)</sup>	
BG5285	26,32	17,09	57,65	14,95	29,00
BG5785BR	19,66	20,34	28,28	12,96	20,31
DKC68-58BR	20,37	17,09	30,00	17,27	21,18
DKC71-44B	20,95	31,09	22,00	11,11	21,29
DKC74-74BR	28,95	38,46	51,04	41,58	40,01
DKC75-65BR	23,28	28,33	42,53	45,10	34,81
DKC77-77BR	24,14	31,93	63,44	34,82	38,58
DKC78-45BRGEN	31,43	33,33	55,21	35,64	38,90
DKC78-79BR	27,52	30,77	38,54	33,33	32,54
DKC80-40BRGEN	23,89	22,03	46,88	32,38	31,30
IMP51-22B	44,34	45,76	53,76	42,20	46,52
IMP52-11R	51,38	36,13	50,48	26,47	41,12
IMP53-49B	43,48	49,57	64,44	47,22	51,18
KKS4581BR	19,66	21,24	25,53	13,33	19,94
KKS8403R	25,71	13,16	39,58	16,36	23,70
KKS8410BR	10,53	18,64	35,48	9,48	18,53
LG3607Y	48,94	46,49	44,66	36,36	44,11
LS8518	32,35	23,01	47,92	42,34	36,41
LS8526	21,65	16,24	22,58	25,23	21,43
LS8533R	39,29	31,09	41,51	23,36	33,81
LS8536B	15,31	13,04	35,05	7,83	17,81
LS8539B	16,04	13,91	38,38	13,21	20,39
LS8541BR	28,44	15,38	56,84	27,10	31,94
LS8542	39,81	37,93	55,79	36,52	42,51
P2319B	14,55	4,24	20,41	3,96	10,79
P2432R	23,64	18,42	54,55	16,38	28,25
P2707WYR	49,02	42,37	50,96	21,37	40,93
P2842W	26,5	23,33	35,11	16,96	25,48
P2864WYR	20,00	24,79	36,89	16,83	24,63
P2880WYR	24,35	24,14	29,13	30,36	27,00
P2961WYR	38,46	48,74	59,09	41,96	47,06
PAN5A-182	15,18	19,17	38,30	35,19	26,96
PAN5R-591R	25,89	23,93	42,86	22,22	28,73
PAN5R-785BR	34,69	40,52	52,63	37,50	41,34
PAN5R-791BR	33,02	23,53	41,90	30,17	32,16
PAN6B-410B	21,9	23,93	18,75	39,81	26,10
PAN6B-465B	51,92	45,22	53,41	49,52	50,02
PAN6Q-865BR	43,24	37,50	48,04	24,56	38,34
PAN6R-710BR	32,20	10,08	36,84	14,91	23,51
SC506	12,07	7,56	31,76	12,84	16,06
VP8405B	39,83	51,26	54,37	37,07	45,63
<b>Gemiddelde Mean</b>	29,02	27,34	42,75	26,77	31,47

(1) = ARC

Tabel 14: Gemiddelde aantal koppe per plant vir die 2016/2017 seisoen (Westelike streek)

Table 14: Mean number of ears per plant for the 2016/2017 season (Western region)

Genotypes Genotypes	Lokaleiteit/Locality								Gemiddelde Mean
	Coligny 0.91 m <sup>(1)</sup>	Coligny 2.3 m <sup>(1)</sup>	Ottosdal <sup>(1)</sup>	Ventersdorp <sup>(1)</sup>	Tweebuffels 0.75 <sup>(1)</sup>	Tweebuffels 1.5 <sup>(1)</sup>	Rushof <sup>(1)</sup>	Potchefstroom <sup>(1)</sup>	
BG5285	2,19	2,45	1,78	2,21	2,11	2,74	2,40	2,36	2,19
BG5785BR	2,44	2,22	1,95	2,08	2,17	2,18	2,50	2,27	2,44
DKC68-58BR	2,15	2,14	1,86	1,85	1,89	2,13	2,00	1,88	2,15
DKC71-44B	2,66	2,23	1,71	2,14	1,94	1,97	2,12	2,16	2,66
DKC74-74BR	2,25	2,34	1,65	1,77	2,39	2,61	2,14	2,12	2,25
DKC75-65BR	2,33	2,36	1,80	2,18	2,44	2,26	2,26	2,02	2,33
DKC77-77BR	2,34	2,52	1,60	2,18	2,06	2,34	2,54	2,49	2,34
DKC78-45BRGEN	2,38	2,49	1,88	2,14	2,02	2,28	2,50	2,02	2,38
DKC78-79BR	2,27	2,56	1,66	2,06	2,15	2,49	2,46	2,29	2,27
DKC80-40BRGEN	2,32	2,44	1,99	2,21	2,14	2,57	2,21	2,21	2,32
IMP51-22B	2,06	2,84	1,88	1,72	1,96	2,11	2,79	2,01	2,06
IMP52-11R	1,66	2,03	2,00	1,75	1,85	1,79	1,89	1,76	1,66
IMP53-49B	2,22	2,72	1,90	2,50	1,90	2,40	2,08	1,87	2,22
KKS4581BR	2,23	2,10	1,56	1,90	1,41	2,39	1,71	1,88	2,23
KKS8403R	1,91	2,21	1,59	2,08	1,74	1,83	1,77	1,83	1,91
KKS8410BR	1,89	2,00	1,67	1,79	1,69	1,75	1,46	1,65	1,89
LG3607Y	2,76	2,43	1,81	1,84	1,78	1,83	2,03	1,88	2,76
LS8518	2,01	2,25	1,56	2,00	2,08	2,07	1,46	1,94	2,01
LS8526	2,20	2,36	1,78	2,22	2,36	2,17	2,21	2,23	2,20
LS8533R	2,34	2,48	1,77	2,04	1,94	2,29	2,39	2,07	2,34
LS8536B	1,98	1,87	1,89	2,04	1,99	1,89	2,12	1,87	1,98
LS8539B	1,86	1,98	1,67	1,97	1,84	2,17	1,92	2,07	1,86
LS8541BR	2,21	2,68	1,94	2,17	2,00	2,57	2,33	1,97	2,21
LS8542	1,76	1,80	1,57	1,86	1,84	1,86	1,54	1,45	1,76
P2319B	2,03	2,38	1,75	2,17	2,03	2,11	2,55	2,63	2,03
P2432R	1,87	1,94	1,40	1,82	1,83	2,06	1,86	1,74	1,87
P2707WYR	2,69	2,56	1,68	2,35	2,09	2,39	2,78	2,33	2,69
P2842W	2,60	2,16	1,73	2,19	1,94	2,29	2,32	2,30	2,60
P2864WYR	2,28	2,43	1,52	2,63	1,90	2,18	2,91	2,32	2,28
P2880WYR	2,26	2,65	1,69	2,49	2,12	2,17	2,53	2,52	2,26
P2961WYR	2,51	2,56	1,81	1,91	1,88	2,64	2,27	2,24	2,51
PAN5A-182	2,53	2,49	1,80	2,44	2,17	2,38	2,57	2,23	2,53
PAN5R-591R	2,34	2,49	2,07	2,49	2,38	2,68	2,31	2,41	2,34
PAN5R-785BR	2,41	2,43	1,78	2,08	2,25	2,76	2,38	2,19	2,41
PAN5R-791BR	2,75	2,92	1,96	2,43	2,40	2,67	2,45	2,32	2,75
PAN6B-410B	2,42	2,38	1,70	2,13	2,31	2,29	2,42	2,23	2,42
PAN6B-465B	2,41	3,23	1,82	2,28	2,22	2,81	2,22	3,15	2,41
PAN6Q-865BR	2,74	2,95	1,83	2,23	2,13	2,56	2,67	2,80	2,74
PAN6R-710BR	1,99	2,66	1,84	2,00	2,04	2,23	2,77	2,13	1,99
SC506	1,92	2,03	1,53	1,74	1,83	1,89	1,80	1,59	1,92
VP8405B	2,76	2,80	2,13	2,27	2,08	2,44	2,66	2,93	2,76
<b>Gemiddelde Mean</b>	2,27	2,40	1,77	2,11	2,03	2,27	2,25	2,16	2,27

(1) = ARC

**Tabel 15:** Meerjarige gemiddeldes ten opsigte van persentasie graanvog vir die 2016/2017 seisoen (Westelike streek)

**Table 15:** Multi seasonal means of percentage grain moisture for the 2016/2017 season (Western region)

Genotipes Genotypes	Lokaleiteit/Locality											Gemiddelde Mean
	Coligny <sup>(4)</sup>	Coligny 2.3 m <sup>(1)</sup>	Coligny 0,91 m <sup>(1)</sup>	Lichtenburg <sup>(4)</sup>	Ottosdal <sup>(1)</sup>	Potchefstroom <sup>(6)</sup>	Pufffontein <sup>(4)</sup>	Tweebuffels 1,5 <sup>(1)</sup>	Potchefstroom <sup>(1)</sup>	Rushhof <sup>(1)</sup>	Potchefstroom <sup>(5)</sup>	
BG5285	20,57	11,00	11,20	12,23	11,90	13,10	18,13	11,60	11,50	11,40	12,43	13,19
BG5785BR	19,63	11,30	11,70	12,43	11,40	12,90	17,30	11,00	12,20	11,70	13,35	13,17
DKC68-58BR	16,90	11,10	11,10	13,10	11,20	12,80	16,67	11,20	11,30	12,10	11,93	12,67
DKC71-44B	14,20	11,20	11,70	12,07	11,20	12,10	15,90	11,90	11,90	11,00	10,53	12,15
DKC74-74BR	18,67	11,60	11,30	14,80	13,80	14,00	18,60	12,50	13,00	14,60	12,60	14,13
DKC75-65BR	22,03	11,20	11,40	11,70	13,20	12,10	18,50	11,80	14,10	12,20	12,13	13,67
DKC77-77BR	21,80	11,40	11,50	13,33	12,70	12,50	17,43	11,30	13,10	11,40	11,81	13,48
DKC78-45BRGEN	21,50	11,90	12,30	17,13	14,70	12,10	19,87	12,30	14,20	12,80	13,01	14,71
DKC78-79BR	20,87	12,30	12,10	13,17	12,20	13,30	18,20	12,00	12,50	12,50	11,54	13,70
DKC80-40BRGEN	18,57	10,80	10,90	15,90	11,80	13,20	16,47	11,10	13,90	11,70	11,94	13,30
IMP51-22B	13,60	10,80	10,80	12,37	10,80	12,80	11,70	11,10	14,90	10,80	13,51	12,11
IMP52-11R	18,43	11,30	11,30	11,20	11,40	12,50	17,33	11,30	11,20	11,20	11,82	12,63
IMP53-49B	22,03	12,30	13,50	14,07	11,60	12,80	17,27	12,70	13,90	17,40	12,51	14,55
KKS4581BR	21,37	12,00	11,60	11,50	14,30	12,40	17,47	11,90	15,30	14,30	13,02	14,11
KKS8403R	18,87	11,50	10,80	13,23	12,10	12,40	18,20	11,40	14,80	12,30	13,12	13,52
KKS8410BR	16,80	11,70	11,30	15,37	11,00	13,10	17,90	11,30	11,90	11,80	12,18	13,12
LG3607Y	10,80	10,90	10,60	10,40	10,30	11,70	11,20	10,90	11,70	10,80	12,27	11,05
LS8518	21,13	11,60	11,20	17,33	12,90	13,10	19,90	12,30	11,40	13,70	11,85	14,22
LS8526	15,03	10,90	11,30	10,40	10,80	12,20	12,10	10,60	14,40	10,90	13,49	12,01
LS8533R	19,40	11,30	11,60	14,93	11,10	12,00	13,63	11,00	11,10	11,60	11,68	12,67
LS8536B	14,87	11,50	10,80	10,67	10,20	13,20	16,97	10,90	11,80	11,90	11,58	12,22
LS8539B	20,37	11,80	11,30	13,87	13,10	13,10	19,10	11,30	10,80	14,50	12,72	13,81
LS8541BR	20,20	12,00	12,20	16,60	13,50	13,50	18,20	11,90	13,80	11,80	12,04	14,16
LS8542	14,60	10,70	11,20	10,87	10,90	13,40	14,50	10,90	14,20	11,50	12,56	12,30
P2319B	19,30	11,00	11,90	12,83	13,00	13,50	15,63	11,20	10,90	11,90	12,16	13,03
P2432R	18,00	11,10	11,30	11,20	12,20	13,40	16,77	11,10	12,90	13,30	12,08	13,03
P2707WYR	22,43	11,60	11,30	13,03	13,80	12,40	19,87	11,90	12,10	14,30	11,31	14,00
P2842W	20,23	11,90	11,80	12,57	14,50	13,80	20,77	11,40	13,90	11,10	13,29	14,11
P2864WYR	19,03	11,20	11,10	14,70	13,30	12,00	16,37	11,70	15,30	11,40	12,56	13,51
P2880WYR	20,17	11,70	11,30	13,50	11,90	13,10	19,17	12,20	11,30	11,80	12,01	13,47
P2961WYR	20,47	11,40	11,40	17,13	13,00	14,70	19,53	12,20	12,60	14,20	11,52	14,38
PAN5A-182	17,67	11,30	11,90	11,50	12,80	13,10	14,50	11,70	14,70	11,90	12,85	13,08
PAN5R-591R	21,13	11,30	11,90	16,80	11,50	12,40	19,97	11,90	13,30	11,50	12,63	14,03
PAN5R-785BR	21,27	11,70	11,20	15,47	11,80	12,40	19,73	11,80	14,60	12,30	12,29	14,05
PAN5R-791BR	20,40	11,10	11,40	12,07	12,10	12,60	19,83	12,10	14,90	12,20	12,93	13,78
PAN6B-410B	19,63	11,80	11,90	12,23	13,00	13,20	18,90	12,00	13,90	12,40	11,88	13,71
PAN6B-465B	20,63	11,30	12,20	16,73	10,40	15,00	20,47	11,60	14,60	12,70	12,95	14,42
PAN6Q-865BR	21,33	11,50	12,10	18,47	13,80	13,00	18,63	11,70	13,20	13,40	12,34	14,50
PAN6R-710BR	20,23	11,30	11,20	14,70	13,60	13,10	17,50	11,80	14,40	12,10	12,98	13,90
SC506	18,87	11,60	11,30	12,73	12,10		17,13	11,60	14,00	12,70	11,93	12,18
VP8405B	22,93	11,70	11,80	16,20	13,30	12,90	16,33	12,10	12,90	12,80	12,70	14,15
<b>Gemiddelde Mean</b>	19,17	11,43	11,50	13,67	12,30	12,50	17,41	11,61	13,13	12,39	12,34	13,41

(1)= ARC; (2)= Pannar; (3)= Monsanto ; (4)= Pioneer; (5)=Agricol; (6)=Linkseed

**Tabel 16:** Opsomming van gemiddelde waardes vir alle agronomiese parameters vir die 2016/2017 seisoen (Westelike streek)

**Table 16:** Summary of mean values for all agronomic parameters for the 2016/2017 season (Western region)

Genotipe Genotype	Spruite (%) Tillering (%)	Koppe per plant Ears per plant	Graan vog (%) Grain moisture (%)	Graan opbrengs Grain yield (t ha <sup>-1</sup> )
BG 5285	29,00	2,25	13,19	7,74
BG 5785 BR	20,31	2,17	13,17	7,29
DKC 68-58 BR	21,18	2,00	12,67	6,21
DKC 71-44 B	21,29	2,11	12,15	6,78
DKC 74-74 BR	40,01	2,17	14,13	6,68
DKC 75-65 BR	34,81	2,23	13,67	7,79
DKC 77-77 BR	38,58	2,17	13,48	7,73
DKC 78-45 BRGEN	38,90	2,20	14,71	7,19
DKC 78-79 BR	32,54	2,20	13,70	7,48
DKC 80-40 BRGEN	31,30	2,28	13,30	7,21
IMP 51-22 B	46,52	2,10	12,11	5,89
IMP 52-11 R	41,12	1,85	12,63	6,90
IMP 53-49 B	51,18	2,27	14,55	7,43
KKS 4581 BR	19,94	1,93	14,11	6,02
KKS 8403 R	23,70	1,89	13,52	5,84
KKS 8410 BR	18,53	1,80	13,12	6,18
LG 3607 Y	44,11	2,08	11,05	6,19
LS 8518	36,41	2,00	14,22	6,70
LS 8526	21,43	2,18	12,01	6,29
LS 8533 R	33,81	2,14	12,67	6,63
LS 8536 B	17,81	1,94	12,22	6,16
LS 8539 B	20,39	1,92	13,81	6,74
LS 8541 BR	31,94	2,26	14,16	6,48
LS 8542	42,51	1,78	12,30	5,63
P 2319 B	10,79	2,08	13,03	6,33
P 2432 R	28,25	1,82	13,03	6,37
P 2707 WYR	40,93	2,29	14,00	6,84
P 2842 W	25,48	2,15	14,11	7,12
P 2864 WYR	24,63	2,16	13,51	7,22
P 2880 WYR	27,00	2,23	13,47	7,49
P 2961 WYR	47,06	2,22	14,38	7,94
PAN 5A-182	26,96	2,30	13,08	6,96
PAN 5R-591 R	28,73	2,41	14,03	7,58
PAN 5R-785 BR	41,34	2,29	14,05	6,88
PAN 5R-791 BR	32,16	2,52	13,78	7,42
PAN 6B-410 B	26,10	2,21	13,71	5,87
PAN 6B-465 B	50,02	2,46	14,42	6,92
PAN 6Q-865 BR	38,34	2,41	14,50	7,23
PAN 6R-710 BR	23,51	2,13	13,90	6,55
SC 506	16,06	1,82	12,18	5,82
VP 8405 B	45,63	2,41	14,15	7,81
<b>Gemiddelde Mean</b>	31,47	2,14	13,41	6,82

**Tabel 17:** Meerjarige gemiddeldes ten opsigte van persentasie plante omval vir die, 2014/2015, 2015/2016 & 2016/2017 seisoene (Westelike streek)

**Table 17:** Multi seasonal means of total percentage for lodged plants for the 2014/2015, 2015/2016 & 2016/2017 seasons (Western region)

Genotipes Genotypes	Omval/ Lodged plants (%)			Gemiddelde/ Average (%)
	2014/2015	2015/2016	2016/2017	
BG 5285	14,10	2,42	*	8,26
BG 5685R	5,20	0,98	*	3,09
BG 5785BR	17,90	3,00	*	10,45
DKC 77 - 77BR	14,90	0,74	*	7,82
DKC 77 - 85BGEN	13,10	1,09	*	7,10
DKC 78 - 17B	10,30	1,09	*	5,70
DKC 78 - 45BR GEN	10,30	0,17	*	5,24
DKC 78 - 79BR	3,70	1,40	*	2,55
DKC 78 - 87B	21,50	0,00	*	10,75
DKC 80 - 40BR GEN	5,40	0,67	*	3,04
IMP 51 - 22B	7,10	1,26	*	4,18
IMP 52 - 11R	11,00	1,17	*	6,09
IMP 53 - 49B	12,30	1,68	*	6,99
KKS 4581BR	2,50	0,00	*	1,25
KKS 8410BR	20,00	0,26	*	10,13
LS 8518	4,50	5,00	*	4,75
LS 8526	5,10	4,38	*	4,74
LS 8533R	14,80	1,70	*	8,25
LS 8536B	8,80	4,93	*	6,87
LS 8539B	6,60	2,53	*	4,57
P 2432R	8,50	0,45	*	4,48
PAN 6P - 110	6,50	1,21	*	3,86
PAN 6Q - 245	2,40	0,15	*	1,28
PAN 6Q - 345CB	14,70	0,27	*	7,49
PAN 6Q - 408CB	16,30	1,09	*	8,70
PAN 6R - 680R	2,60	1,55	*	2,08
Phb 33H54BR	17,30	1,83	*	9,57
SC 506	2,60	3,33	*	2,97
Gemiddelde/ Average (%)	10,00	1,60	*	5,80

**Tabel 18:** Meerjarige gemiddeldes ten opsigte van persentasie spruitvorming vir die 2014/2015, 2015/2016 & 2016/2017 seisoene (Westelike streek)

**Table 18:** Multi seasonal means of total tillering percentage for the 2014/2015, 2015/2016 & 2016/2017 seasons (Western region)

Genotipes Genotypes	Spruite/Tillers (%)			Gemiddelde/ Mean (%)
	2014/2015	2015/2016	2016/2017	
BG 5285	25,30	13,51	29,00	19,41
BG 5785BR	20,30	10,31	20,31	15,31
DKC 77 - 77BR	31,70	24,58	38,58	28,14
DKC 78 - 45BR GEN	26,70	23,28	38,90	24,99
DKC 78 - 79BR	27,70	21,80	32,54	24,75
DKC 80 - 40BR GEN	19,00	13,94	31,30	16,47
IMP 51 - 22B	28,80	31,41	46,52	30,11
IMP 52 - 11R	33,80	30,98	41,12	32,39
IMP 53 - 49B	46,20	41,62	51,18	43,91
KKS 4581BR	22,50	16,81	19,94	19,66
KKS 8410BR	19,00	8,55	18,53	13,78
LS 8518	27,40	9,59	36,41	18,50
LS 8526	19,40	27,44	21,43	23,42
LS 8533R	32,80	21,92	33,81	27,36
LS 8536B	19,60	8,77	17,81	14,19
LS 8539B	26,80	14,90	20,39	20,85
P 2432R	24,40	19,51	28,25	21,96
SC 506	14,70	12,60	16,06	13,65
Gemiddelde/ Average (%)	26,29	19,31	30,11	22,80

**Tabel 19:** Meerjarige gemiddeldes ten opsigte van aantal koppe per plant vir die 2014/2015, 2015/2016 & 2016/2017 seisoene

**Table 19:** Multi seasonal means of ears per plant for the 2014/2015, 2015/2016 & 2016/2017 seasons (Western region)

Genotipes Genotypes	Koppe/ Ears per plant			Gemiddelde/ Mean
	2014/2015	2015/2016	2016/2017	
BG 5285	1,59	1,35	2,19	1,47
BG 5785BR	1,52	1,24	2,44	1,38
DKC 77 - 77BR	1,70	1,34	2,34	1,52
DKC 78 - 45BR GEN	1,74	1,31	2,38	1,53
DKC 78 - 79BR	1,69	1,39	2,27	1,54
DKC 80 - 40BR GEN	1,53	1,38	2,32	1,46
IMP 51 - 22B	1,41	1,06	2,06	1,24
IMP 52 - 11R	1,14	0,93	1,66	1,04
IMP 53 - 49B	1,27	1,21	2,22	1,24
KKS 4581BR	1,29	1,14	2,23	1,22
KKS 8410BR	1,22	1,07	1,89	1,15
LS 8518	1,19	1,13	2,01	1,16
LS 8526	1,44	1,23	2,20	1,34
LS 8533R	1,57	1,28	2,34	1,43
LS 8536B	1,30	1,14	1,98	1,22
LS 8539B	1,43	1,36	1,86	1,40
P 2432R	1,24	1,14	1,87	1,19
SC 506	1,22	1,10	1,92	1,16
Gemiddelde/ Mean	1,46	1,26	2,12	1,36

**Tabel 20:** Meerjarige gemiddeldes ten opsigte van persentasie graanvog vir die 2014/2015, 2015/2016 & 2016/2017 seisoene (Westlike streek)

**Table 20:** Multi seasonal means of percentage grain moisture for the 2014/2015, 2015/2016 & 2016/2017 seasons (Western region)

Genotipes Genotypes	Graan vog /Grain moisture (%)			Gemiddelde/ Mean
	2014/2015	2015/2016	2016/2017	
BG 5285	16,50	18,40	13,19	16,03
BG 5785BR	14,50	16,30	13,17	14,66
DKC 77 - 77BR	15,50	16,90	13,48	15,29
DKC 78 - 45BR GEN	16,70	17,40	14,71	16,27
DKC 78 - 79BR	15,90	18,50	13,70	16,03
DKC 80 - 40BR GEN	14,60	15,60	13,30	14,50
IMP 51 - 22B	15,00	14,00	12,11	13,70
IMP 52 - 11R	15,10	14,90	12,63	14,21
IMP 53 - 49B	16,90	19,40	14,55	16,95
KKS 4581BR	14,70	17,40	14,11	15,40
KKS 8410BR	16,30	16,00	13,12	15,14
LS 8518	16,20	14,40	14,22	14,94
LS 8526	14,40	17,90	12,01	14,77
LS 8533R	16,80	16,90	12,67	15,46
LS 8536B	15,20	14,20	12,22	13,87
LS 8539B	17,20	18,20	13,81	16,40
P 2432R	16,10	16,70	13,03	15,28
SC 506	15,00	16,30	12,18	14,49
Gemiddelde/ Average (%)	15,95	16,74	13,23	15,19

**Tabel 21:** Opsomming van gemiddelde waardes vir alle agronomiese parameters vir die 2014/2015, 2015/2016 & 2016/2017 seisoene (Westlike streek)

**Table 21:** Summary of mean values for all agronomic parameters for the 2014/2015, 2015/2016 & 2016/2017 seasons (Western region)

Genotipes Genotypes	Agronomiese parameters/Agronomic parameters				Graan opbrengs Grain yield (t ha <sup>-1</sup> )
	Omval (%) Lodged (%)	Spruite (%) Tillering (%)	Koppe per plant Ears per plant	Graan vog (%) Grain moisture (%)	
BG 5285	8,26	19,41	1,47	16,03	6,27
BG 5785BR	10,45	15,31	1,38	14,66	5,95
DKC 77 - 77BR	7,82	28,14	1,52	15,29	6,16
DKC 78 - 45BR GEN	5,24	24,99	1,53	16,27	5,76
DKC 78 - 79BR	2,55	24,75	1,54	16,03	6,24
DKC 80 - 40BR GEN	3,04	16,47	1,46	14,50	5,60
IMP 51 - 22B	4,18	30,11	1,24	13,70	4,90
IMP 52 - 11R	6,09	32,39	1,04	14,21	5,45
IMP 53 - 49B	6,99	43,91	1,24	16,95	5,81
KKS 4581BR	1,25	19,66	1,22	15,40	5,10
KKS 8410BR	10,13	13,78	1,15	15,14	5,20
LS 8518	4,75	18,50	1,16	14,94	5,28
LS 8526	4,74	23,42	1,34	14,77	5,20
LS 8533R	8,25	27,36	1,43	15,46	5,40
LS 8536B	6,87	14,19	1,22	13,87	5,11
LS 8539B	4,57	20,85	1,40	16,40	5,58
P 2432R	4,48	21,96	1,19	15,28	5,38
SC 506	2,97	13,65	1,16	14,49	4,89