SENSAKO

2020 | Cultivar Trial Results
Kultivar-proefresultate

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What others say about Sensako seed | **Wat sê andere oor** Sensako**-saad**

“SST835 is ‘n betroubare en stabiele kultivar wat baie goed aangepas is in ons area. Staanvermoë en roesweerstand is goed. Die groeilengte van die medium groeiers van Sensako, soos SST835, werk goed hier en afdroging vir strooptyd is goed. Ons is tevrede met die kultivar, opbrengs is baie aanvaarbaar”. ***- Hendrik Odendaal, Villiers***

“Ons familie plant al sedert die 1980’s Sensako koring kultivars. Oor die algemeen is ons baie gelukkig met die hele opbrengs, groeiperiode, staanvermoë en siekte verdraagsaamheid pakket van die SSTs. Die wye reeks van groeiperiodes wat beskikbaar is in die SST koring pakket stel ons goed in staat om ons planttyd goed uit te brei. ’n Ander belangrike eienskap wat baie prominent in die Sensako genetika is, is die stabiliteit oor jare wat gekoppel is aan die kultivars”. ***- Nico Botha, Groblersdal***

“Sensako se koring kultivars plant ons al vir ’n baie lang tyd. Vir die omgewing waar ons geleë is, stabiliteit en groeiperiode vir ons baie belangrike faktore wanneer dit by kultivar keuse kom. Die vinnig en medium tot vinnig groeiperiode kultivars is goed aangepas in ons omgewing. Die opbrengste wat behaal word, is ook baie aanvaarbaar. Van die kultivars wat goed by ons presteer is SST835, SST884 en SST8135.” ***- Pieter du Plessis, Lichtenburg***

“Die Sensako SST reeks bied n uitstekende keuse van kort, medium en lang groei kultivars. Ons plant seisoen is soms tot 2 maande lank en die wye verskeidenheid van SST kultivars help baie om die lang plantseisoen optimaal te bestuur met die regte kultivars. Ons plant al meer as 20 jaar Sensako koring en een ding is altyd seker, die uitstekende opbrengs potensiaal en meer belangrik, die stabiliteit jaar na jaar van die kultivars. Sensako is ook verbind om die genetiese potensiaal van hul kultivars te verbeter deur n uitstekende teeltprogram in plek te hê, sowel as veldproewe reg oor Suid-Afrika om die nuwe kultivars deeglik te toets. Sensako plant jaarliks by my ook proewe en dit gee my groot gemoedsrus om te sien deur die streng maatreëls waardeur kultivars gaan voor dit kommersieel beskikbaar is”. ***- Chris de Villiers, Prieska***

“Ons is baie beïndruk met die goeie stoelvermoë en aarvrugbaarheid wat die Sensako kultivars beskik. Ons het SST8154 die jaar vir die eerste keer geplant en sovêr is ons baie beïndruk. Vir ’n vinnige groeier stoel die kultivar baie goed. Die halms lewer ook are met hoë vrugbaarheid. Die staanvermoë, wat vir ons baie belangrik is, is uitstekend. Wat ook ooglopend is, is hoe groen die blare is. Dit is vir ons ’n goeie teken van hoe gesond die kultivars is en ook die stikstof verbuikings vermoë”. ***- Rudolf Burger, Jan Kempdorp***

“Van die kultivars van Sensako, bly SST806 al vir die afgelope 16 jaar vir ons ’n staatmaker. Dit is ’n goeie kultivar met goeie stabiele opbrengs gekoppel aan goeie siekte weerstandbiedendheid en staanvermoë. Dit is ook die eerste kultivar waarmee ons 10 ton per hektaar gestroop het. SST806 se stabiliteit van sand na swaargronde is ongelooflik. Die nuwe kultivars van Sensako proef ons ook nog elke jaar en vind dat hulle ook goeie hoë opbrengste haal”. ***- Hein Mulke, Douglas***

“By ons in die wisselende omgewing van die Wes-Vrystaat presteer SST347 die beste van die Sensako droëlandkultivars. Die kultivar tref die oog en presteer meestal onder wisselende produksie omstandighede. Die kiemkragtigheid van die kultivar is veral ’n bate”. ***- Le Grange Odendaal, Wesselsbron***

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WHEAT

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WHEAT: Crop yield trials

Sensako's wheat trials.
The yield data presented in the tables is data generated from Sensako's own multi-locality yield trials. These trials cover the whole of the irrigation and dryland areas of central and northern South Africa extending along the Orange River, up to the Lowveld of Limpopo, the high areas of Natal, the Free State and North West. For the dryland production areas, trials are planted across the Free State. On average 10 irrigation and six dryland research trials are planted each year.

How to interpret the trial results.
The trial design that Sensako normally uses is a complete randomised block design. In simple terms, it is a trial design where each entry in the trial is repeated in three different randomisations. The reason for the repetition and randomisation is to ensure that data is generated three times at each trial location, and also to ensure that an entry does not appear next to itself (the same entry) at every repetition.
In using this specific design, certain advantageous statistical methadologies can be utilised, to identify the best performing cultivars in a specific area,.
Some of the specific statistical parameters which appear on the yield tables, are the coefficient of variation (CV) and the Least Significant Difference (LSD).
The CV is an indication of how reliable the trial has been. The smaller the variation of a specific entry within the repetitions is, the lower the CV and the higher the reliability of the trial. A low CV of between O and 15% is accepted as a good trial.
A high CV indicates a high degree of variation between randomisations and indicates that the data generated may not be reliable. An example of a high CV trial can be explained as follows: In repetition one, a specific entry yielded 6 ton/ha. in repetition two, the same entry yielded 8 ton/ha and in the third repetition, 10 ton/ ha. The variation is therefore high between the randomisations and indicates that there may be a high degree of variation in soil/growing conditions through the trial. The data generated from such a trial is therefore not reliable.
Another very useful statistical parameter coming from a complete randomised block design is the lease significant difference (LSD). LSD helps to group cultivars which perform similarly and is useful in identifying a group of cultivars that do not differ statistically in an area. This enables producers to enjoy a wide choice of cultivars that may perform very much the same in a particular area.
A trial with a LSD of 0.45 ton/ha means that there is no statistical difference between the top performing cultivar and any entry that yields LESS than 0.45 tons than the top performer. It is therefore important not to place too much reliance on trial ranking as there may not be a (statistical) difference between a number of top performing cultivars.
Performance of a variety in a performance trial should always be measured taking into consideration the LSD of the trial. Another advantage of LSD is that it can identify and group cultivars with different growth periods into the same yield group enabling producers to identify a portfolio of top performing cultivars with differing growing periods.

KORING: Opbrengsproewe

Sensako se koringproewe.
Die opbrengsdata wat in die tabelle voorgedra word, is die data wat afkomstig is van Sensako se eie multilokaliteit-opbrengsproewe. Onder besproeiing en droëland beslaan Sensako se koringproewe die hele besproeiings- en droëlandgebied van die sentrale en noordelike gebiede van Suid-Afrika. Onder besproeiing strek die proewe van al langs die Oranjerivier tot in die Laeveld van Limpopo en die hoogliggende gebiede van Natal, Vrystaat en Noordwes. Onder besproeiing word elke jaar 'n gemiddeld van 10 lokaliteite geplant. In die sentraal-droëland-koringproduksieareas beslaan die proewe die hele Vrystaat. Daar word gemiddeld elke jaar ses lokaliteite oor die Vrystaat geplant.

Hoe om die proefresultate te interpreteer.
Die proefontwerp wat oor die algemeen gebruik word, is 'n volledige ewekansigheidsblokontwerp. In eenvoudige terme is dit 'n proefontwerp waar elke inskrywing in die proef herhaal word in drie verskeie ewekansighede. Die rede vir herhaling en ewekansigmaking is om te verseker dat data gegenereer word van elke inskrywing drie keer op 'n lokaliteit en ook dat elke inskrywing nie by elke herhaling langs dieselfde inskrywing staan nie.
Deur die spesifieke ontwerp te doen, kan sekere statistiek op die proef geïmplementeer word, wat help om kultivars uit te wys wat die beste vir 'n spesifieke omgewing presteer.
Van die spesifieke statistieke parameters wat in die opbrengs tabelle te voorskyn kom, is die koëffisiënt van variasie (KV) en die kleinste betekenisvolle verskil (KBV).
Die KV is 'n aanduiding van hoe betroubaar die proef op sigself was. 'n KV van tussen 0 en 15% word aanvaar as 'n goeie proef. Hoe kleiner die variasie van 'n spesifieke inskrywing oor die herhalings is, hoe laer is die KV en hoe hoër is die betroubaarheid van die proef. Wanneer daar 'n proef is waar daar groot variasie was tussen die verskillende herhalings, sal die KV hoog wees (groter as 15%).
'n Voorbeeld van 'n hoë KV-proef kan soos volg geskets word: In herhaling een het 'n spesifieke inskrywing 6 ton/ha gegee, in herhaling twee het dieselfde inskrywing 8 ton/ha gegee en in herhaling drie 10 ton/ha. Die voorbeeld skets 'n prentjie waar daar 'n groot grondneiging (trend) is waar herhaling een in 'n swak kol staan en herhaling drie in 'n goeie kol. Die data wat uit so proef gegenereer is, is dus nie betroubaar nie.
Die een baie nuttige statistieke parameter wat uit so volledige gerandomiseerde blokontwerp uitkom, is die kleinste betekenisvolle verskil (KBV). Die parameter help om kultivars te groepeer wat statisties dieselfde presteer in 'n omgewing. Waar KBV's baie nuttig is, is om 'n groep kultivars uit te wys wat baie dieselfde presteer in 'n omgewing wat produsente in staat kan stel om 'n wye keuse te hê van kultivars.
'n Goeie voordeel van die KBV parameter is om top presterende kultivars uit te wys.
As daar na 'n voorbeeld gekyk word en ons neem 'n KBV van 0.45 ton/ha, beteken dit dat as daar verskeie kultivars in die topposisie geleë is en daardie kultivars se opbrengste verskil nie meer as 0.45 ton/ha tussen mekaar nie, presteer die groep kultivars statisties dieselfde. Daar kan 'n situasie wees waar die top-4-kultivars waarvan die opbrengste nie meer as 0.45 ton/ha met mekaar verskil nie dus statisties dieselfde presteer. Wat die parameter nog meer belangrik maak, is dat dit verskillende tipes groeiperiode kultivars kan groepeer in dieselfde opbrengsgroep en die produsent dan help om 'n groter verskeidenheid kultivars met gemoedsrus te plant.

Sensako trial results| **Sensako proefresultate**

Cultivar (PBR) Kultivar (PTR)	WESSELSBRON (Le Grange Odendal)				BULTFONTEIN & HOOPSTAD (Migiel Bredenkamp)				CLOCOLAN			
	2016-2020	RANG	2020	RANG	2016-2019	RANG	2019	RANG	2016-2020	RANG	2020	RANG
OPP 1		8	2,24	9	1,33	9	0,52	2	1,66	9	2,03	9
OPP 2	2,64	1	3,09	2	1,66	3	0,38	6	1,91	4	2,16	8
SST3149	2,38	5	2,86	4	1,62	5	0,36	7	1,84	7	2,26	5
SST3186	2,10	6	2,58	6	1,54	6	0,48	3	1,82	8	2,22	6
SST3197	2,57	3	2,99	3	1,75	2	0,25	9	1,89	5	2,19	7
SST347	2,51	4	2,78	5	1,41	8	0,41	5	2,06	2	2,50	2
SST356	1,73	9	2,38	8	1,65	4	0,74	1	1,93	3	2,46	3
SST374	1,92	7	2,52	7	1,47	7	0,46	4	2,20	1	2,93	1
SST387	2,61	2	3,30	1	1,78	1	0,28	8	1,88	6	2,44	4
Gem/Ave	2,26		2,77		1,58		0,43		1,88		2,30	
KV%/CV%	10,35		10,59		10,62		13,14		11,98		13,11	
KBV/LSD (0.05)	0,29		0,33		0,23		0,11		0,30		0,36	

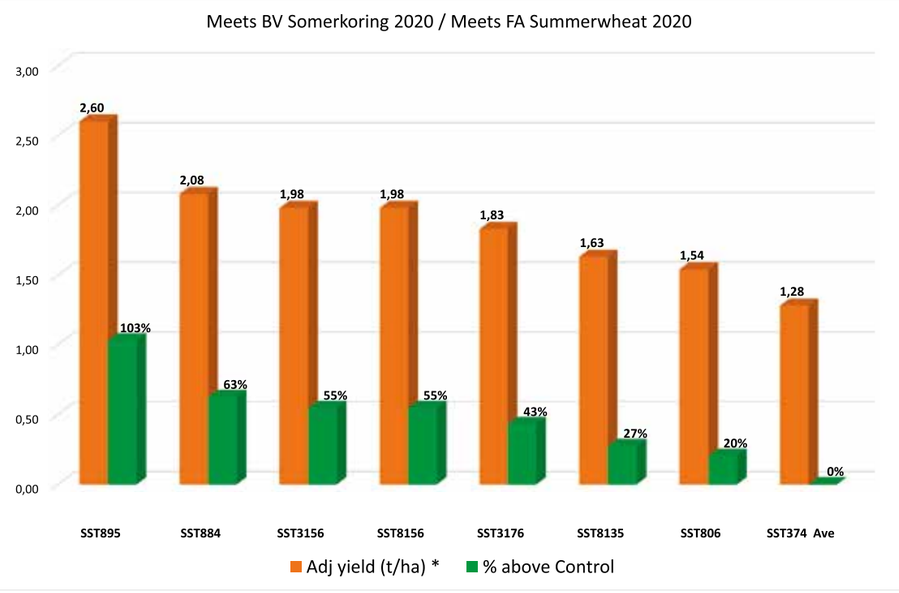
PBR - Cultivars protected by Plant Breeders' Rights
PTR - Kultivar beskerm deur planttelersregte

Sensako trial results| **Sensako proefresultate**

Cultivar (PBR) Kultivar (PTR)	REITZ (Francois Steyn)				BETHLEHEM I (Sensako) 16 JUNIE PLANT				BETHLEHEM II (Sensako) 21 JULIE PLANT			
	2016-2018	RANK	2018	RANK	2016-2018	RANK	2018	RANK	2015-2017	RANK	2017	RANK
OPP 1	1,64	9	0,85	8	1,62	6	1,24	6	1,63	3	1,31	5
OPP 2	2,17	5	1,38	5	1,49	7	0,70	9	1,57	5	1,56	3
SST3149	1,69	8	0,77	9	1,47	9	0,85	8	1,20	9	1,04	9
SST3186	2,20	4	1,22	6	1,85	3	1,31	4	1,59	4	1,54	4
SST3197	2,26	2	1,41	4	1,95	2	1,57	2	1,24	7	1,05	7
SST347	2,24	3	1,53	1	1,84	4	1,25	5	1,22	8	1,10	6
SST356	2,55	1	1,48	3	2,03	1	1,79	1	1,89	1	1,72	1
SST374	2,08	6	1,49	2	1,75	5	1,35	3	1,84	2	1,70	2
SST387	1,94	7	1,16	7	1,47	8	0,94	7	1,42	6	1,04	8
Gem/Ave	2,08		1,25		1,71		1,21		1,51		1,31	
KV%/CV%	10,71		10,94		10,95		13,07		10,10		10,59	
KBV/LSD (0.05)	0,34		0,19		0,24		0,19		0,31		0,16	

PBR - Cultivars protected by Plant Breeders' Rights
PTR - Kultivar beskerm deur planttelersregte

Lentekoring aanplanting 2019/2020 – Bethlehem
Spring planting 2019/2020 - Bethlehem
Dryland | **Droëland**



Herfskoring kultivarstrookproef 2020

LOKALITEIT: ROEDTAN
PLANTDATUM: 09/03/2020
PLANTDIGTHEID: 80Kg/Ha
RYWYDTE: 19cm
GRONDVOG: 60-70cm
BEMESTING: GEEN
OPBRENGS/GRADERING PER KULTIVAR:

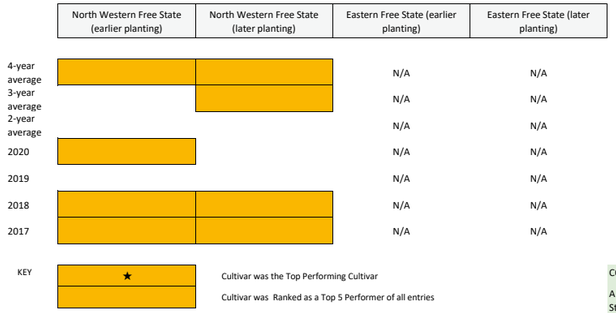
MEDEWERKER: KOBUS SMIT
STROOPDATUM: 30/07/2020

KULTIVARS	OPB/HEKT	RANGORDE	VOG	
OP2C2	489Kg/Ha	1	12.4	KA
SST8154	485Kg/Ha	2	12.3	BS
OP2C1	484Kg/Ha	3	12.5	KA
SST843	466Kg/Ha	4	11.3	BS
OP1C1	421Kg/Ha	6	11.9	KA
SST8135	413Kg/Ha	5	11.9	KA
SST884	366Kg/Ha	7	12.1	KA
OP1C2	321Kg/Ha	8	11.5	KA
SST8156	316Kg/Ha	9	11.7	KA
SST895	270Kg/Ha	10	11.7	KA
SST835	243Kg/Ha	11	12.5	KA
GEMID	389Kg/Ha			

* Toppresterende kultivarpakket vir die Sprinbokvlakte onder onder droëlandtoestande
* Top performing cultivar package for Springbok flats under dryland conditions

SENSAKO SST387 PERFORMANCE IN THE ARC TRIALS

Incidence of This Sensako Cultivar Being Amongst the Top 5 Performers of All Trial Entries (Ranked on Yield.)

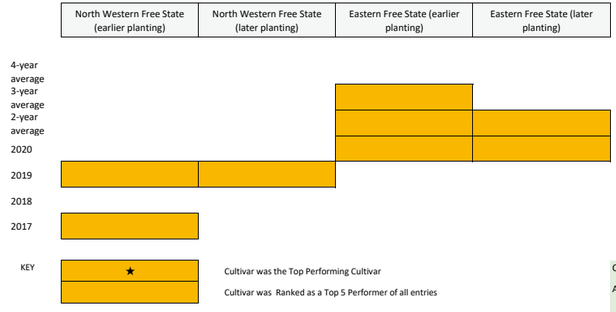


COMMENT:

A very stable performer over time. Especially suited for early planting in the Western Free State dryland areas. This variety is not suited for production in the Eastern Free State.x

SENSAKO SST347 PERFORMANCE IN THE ARC TRIALS

Incidence of This Sensako Cultivar Being Amongst the Top 5 Performers of All Trial Entries (Ranked on Yield.)

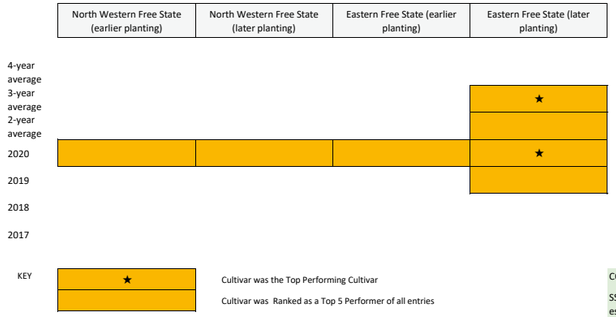


COMMENT:

A very stable performer over time, suiteble for planting in all dryland production areas .

SENSAKO SST356 PERFORMANCE IN THE ARC TRIALS

Incidence of This Sensako Cultivar Being Amongst the Top 5 Performers of All Trial Entries (Ranked on Yield.)

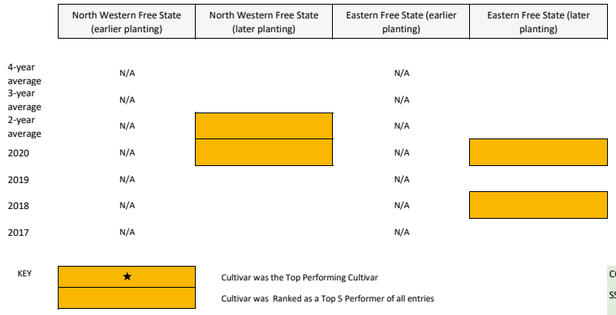


COMMENT:

SST356 is medium growing season variety. Suitable for planting in all production areas, especially later plantings in the Eastern Free State.

SENSAKO SST374 PERFORMANCE IN THE ARC TRIALS

Incidence of This Sensako Cultivar Being Amongst the Top 5 Performers of All Trial Entries (Ranked on Yield.)



COMMENT:

SST374 is medium-short season variety. Suitable for late winter to early spring plantings.

Sensako trial results| Sensako **proefresultate**

Cultivar (PBR) Kultivar (PTR)	BERGVILLE (Christof Brits) \AANVULLEND BESPROEI				BERGVILLE (Christof Brits) VOL BESPROEI				DOUGLAS (Hein Mulke)			
	2018-2020	RANG	2020	RANG	2018-2020	RANG	2020	RANG	2018-2020	RANG	2020	RANG
OPP 1	8,20	4	7,70	7	8,37	5	7,22	10	10,99	9	9,52	4
SST806	8,50	1	7,96	5	8,03	9	7,90	4	11,23	5	9,25	5
SST8135	7,49	10	8,10	3	7,71	11	7,32	9	11,40	3	9,82	2
SST8154	6,68	11	6,49	12	8,23	6	8,46	1	9,97	12	5,60	12
SST8156	8,19	5	8,24	2	8,03	8	7,42	8	11,65	2	10,58	1
SST8175	8,24	3	8,09	4	8,05	7	7,12	11	11,31	4	9,71	3
SST8177	8,08	6	7,14	9	8,01	10	7,77	7	10,98	10	9,07	9
SST8205	7,68	8	8,37	1	9,23	1	8,26	2	11,74	1	9,24	6
SST835	8,45	2	7,54	8	8,51	2	7,95	3	11,13	6	9,10	7
SST875	7,63	9	6,79	11	8,42	4	7,83	5	11,01	8	8,22	11
SST884	6,51	12	6,96	10	8,47	3	7,79	6	11,05	7	9,09	8
SST895	7,93	7	7,84	6	7,10	12	6,50	12	10,35	11	8,62	10
Gem/Ave	7,80		7,60		8,18		7,63		11,07		8,98	
KV%/CV%	5,96		5,56		5,02		6,29		3,58		4,31	
KBV/LSD (0.05)	0,36		0,55		0,32		0,57		0,31		0,51	

PBR - Cultivars protected by Plant Breeders' Rights
PTR - Kultivar beskerm deur planttelersregte

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Sensako trial results| Sensako **proefresultate**

Cultivar (PBR) Kulti-var (PTR)	GROBLERSDAL (Nico Mostert)				HARTSWATER (Theo Boshoff)				KOEDOESKOP (Andries Pretorius)			
	2018-2020	RANG	2020	RANG	2018-2020	RANG	2020	RANG	2018-2020	RANG	2020	RANG
OPP 1	8,08	12	7,36	12	7,83	12	8,66	5	8,39	10	7,15	9
SST806	8,54	9	8,93	8	8,21	9	8,48	8	8,48	9	6,58	12
SST8135	8,78	7	8,56	10	8,40	7	8,93	3	8,57	7	6,93	10
SST8154	8,88	6	9,71	4	8,55	4	8,35	9	8,36	12	7,22	6
SST8156	8,57	8	9,08	7	8,54	5	8,82	4	8,37	11	6,88	11
SST8175	9,49	2	10,11	2	8,51	6	8,20	10	9,03	2	7,64	3
SST8177	8,53	10	8,90	9	8,71	3	8,50	7	8,57	8	7,42	4
SST8205	9,84	1	9,99	3	9,12	1	8,94	2	9,40	1	8,22	2
SST835	8,33	11	8,28	11	8,05	10	8,60	6	8,95	3	7,18	8
SST875	9,11	4	9,17	6	8,78	2	9,29	1	8,58	6	7,20	7
SST884	9,06	5	9,52	5	8,22	8	7,89	12	8,88	4	8,31	1
SST895	9,16	3	10,58	1	7,94	11	7,90	11	8,82	5	7,29	5
Gem/Ave	8,86		9,18		8,41		8,55		8,70		7,33	
KV%/CV%	5,23		4,93		4,02		3,61		4,12		3,87	
KBV/LSD (0.05)	0,36		0,62		0,26		0,41		0,28		0,38	

PBR - Cultivars protected by Plant Breeders' Rights
PTR - Kultivar beskerm deur planttelersregte

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Sensako trial results| Sensako **proefresultate**

Cultivar (PBR) Kultivar (PTR)	LICHTENBURG (Pieter du Plessis)				ORANIA (Dissie Kruger)				PRIESKA (Chris de Villiers) MET GROEIREGULEERDERS			
	2018-2020	RANG	2020	RANG	2018-2020	RANG	2020	RANG	2018-2020	RANG	2020	RANG
OPP 1	9,10	12	9,52	10	9,32	12	6,68	12	11,21	4	11,16	2
SST806	9,34	11	10,16	6	9,86	6	8,24	5	10,71	11	10,73	8
SST8135	9,82	4	10,86	3	9,91	5	8,57	3	11,53	2	10,82	6
SST8154	9,96	3	11,01	2	9,66	10	7,47	11	10,96	7	9,82	9
SST8156	9,98	1	11,09	1	9,68	9	7,50	10	10,50	12	7,50	12
SST8175	9,41	9	9,71	9	10,39	2	8,71	1	10,74	10	11,06	4
SST8177	9,44	8	9,25	12	9,84	7	8,16	6	10,92	9	11,07	3
SST8205	9,97	2	10,47	4	10,77	1	8,62	2	11,54	1	11,21	1
SST835	9,38	10	9,30	11	10,29	3	8,47	4	11,18	5	10,83	5
SST875	9,64	6	9,76	7	9,64	11	7,56	9	10,95	8	9,19	11
SST884	9,65	5	9,72	8	9,77	8	7,66	8	10,97	6	9,54	10
SST895	9,54	7	10,44	5	10,08	4	7,83	7	11,27	3	10,81	7
Gem/Ave	9,60		10,11		9,93		7,96		11,04		10,31	
KV%/CV%	4,67		4,92		4,67		5,53		3,87		3,59	
KBV/LSD (0.05)	0,35		0,66		0,35		0,61		0,34		0,52	

PBR - Cultivars protected by Plant Breeders' Rights
PTR - Kultivar beskerm deur planttelersregte

syngenta.

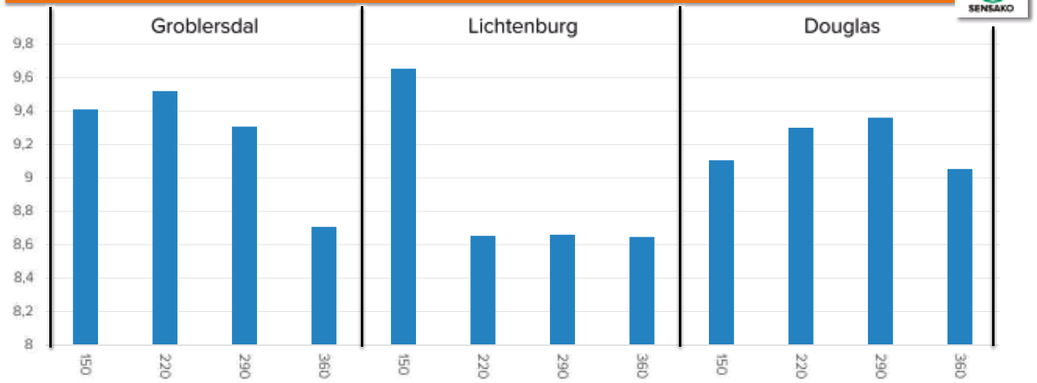
Sensako trial results| Sensako **proefresultate**

Cultivar (PBR) Kultivar (PTR)	PRIESKA (Chris de Villiers) SONDER GROEIREGULEERDERS				VILLIERS (Hendrik Odendaal)				WINTERTON (Mauritz Koster)			
	2018-2020	RANG	2020	RANG	2018-2020	RANG	2020	RANG	2018-2020	RANG	2020	RANG
OPP 1	11,30	5	10,95	4	8,86	11	9,11	9	8,19	10	7,33	10
SST806	11,17	7	10,39	7	9,81	3	9,55	6	8,35	7	7,54	7
SST8135	11,53	2	10,24	8	9,38	8	9,50	7	8,79	2	8,72	1
SST8154	10,61	11	9,58	12	9,56	6	9,61	4	8,43	6	8,22	3
SST8156	11,44	4	10,60	6	9,48	7	9,36	8	8,02	12	7,02	12
SST8175	11,09	9	11,09	3	8,90	10	8,07	12	8,65	4	7,47	8
SST8177	11,28	6	9,99	9	9,14	9	9,05	10	8,28	9	7,54	6
SST8205	12,24	1	11,33	2	10,19	1	9,56	5	8,77	3	7,74	5
SST835	11,46	3	11,64	1	9,79	4	10,09	1	8,61	5	8,58	2
SST875	10,83	10	9,63	10	10,03	2	9,80	2	9,04	1	7,86	4
SST884	10,42	12	9,63	11	9,57	5	9,64	3	8,08	11	7,35	9
SST895	11,09	8	10,93	5	8,79	12	8,67	11	8,32	8	7,21	11
Gem/Ave	11,20		10,50		9,43		9,33		8,46		7,71	
KV%/CV%	3,89		3,96		4,23		4,07		4,95		4,75	
KBV/LSD (0.05)	0,34		0,57		0,42		0,47		0,33		0,48	

PBR - Cultivars protected by Plant Breeders' Rights
PTR - Kultivar beskerm deur planttelersregte

SENSAKO

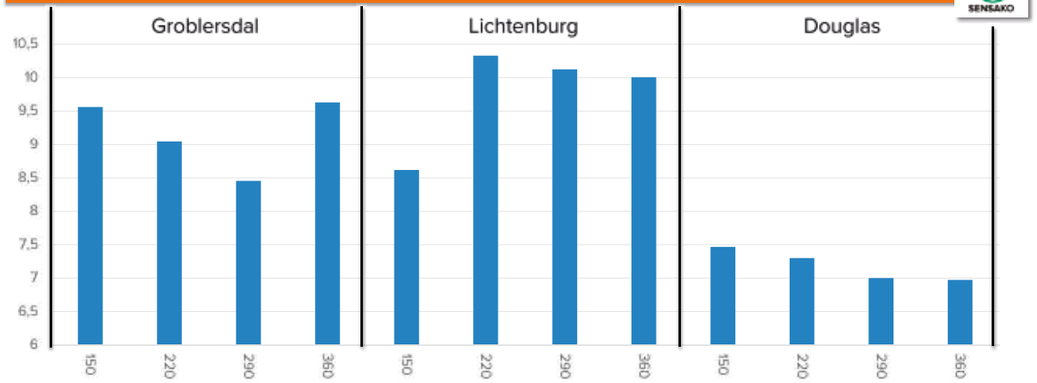
SST8135



	150 plante/m²	220 plante/m²	290 plante/m²	360 plante/m²
DKM van SST8135 – 40.3g	75kg/ha	110kg/ha	145kg/ha	180kg/ha

Plant population trial data | **Plantestandproefdata 2020**

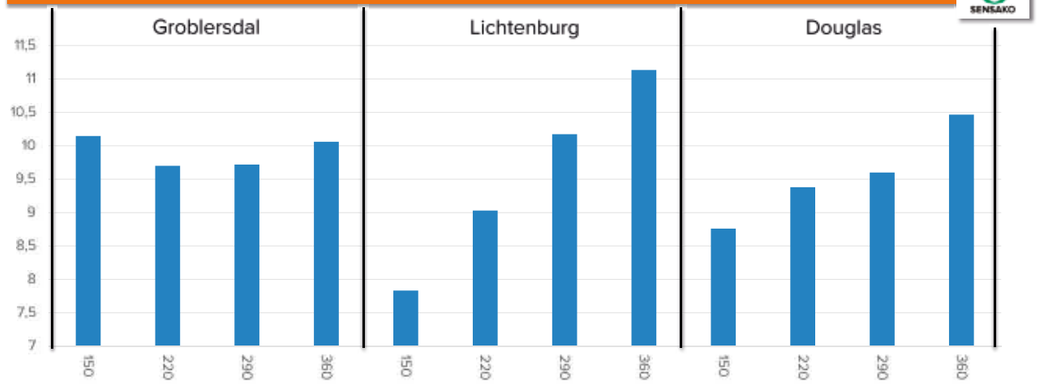
SST8154



	150 plante/m²	220 plante/m²	290 plante/m²	360 plante/m²
DKM van SST8154 – 30.5g	57kg/ha	83kg/ha	110kg/ha	137kg/ha

Plant population trial data | **Plantestandproefdata 2020**

SST8156

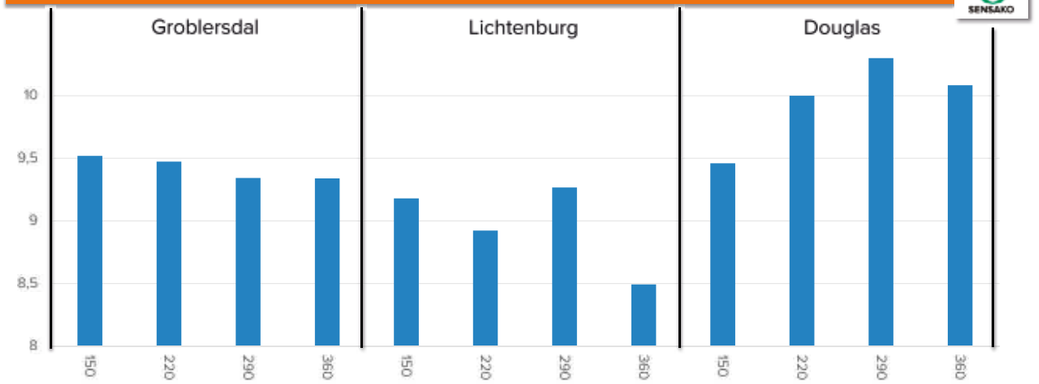


	150 plante/m²	220 plante/m²	290 plante/m²	360 plante/m²
DKM van SST8156 – 37.2g	69kg/ha	101kg/ha	134kg/ha	166kg/ha

syngenta

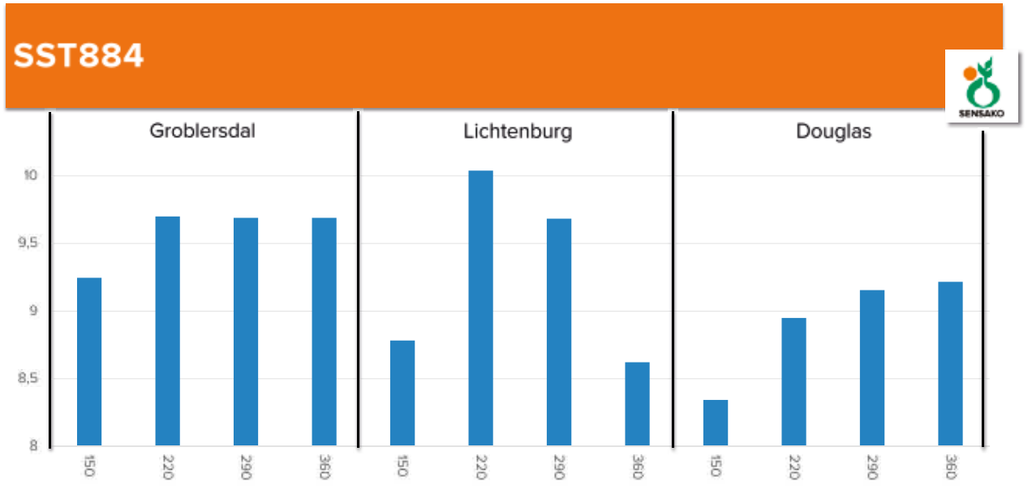
Plant population trial data | **Plantestandproefdata 2020**

SST8175



	150 plante/m²	220 plante/m²	290 plante/m²	360 plante/m²
DKM van SST8175 – 45.0g	84kg/ha	123kg/ha	162kg/ha	200kg/ha

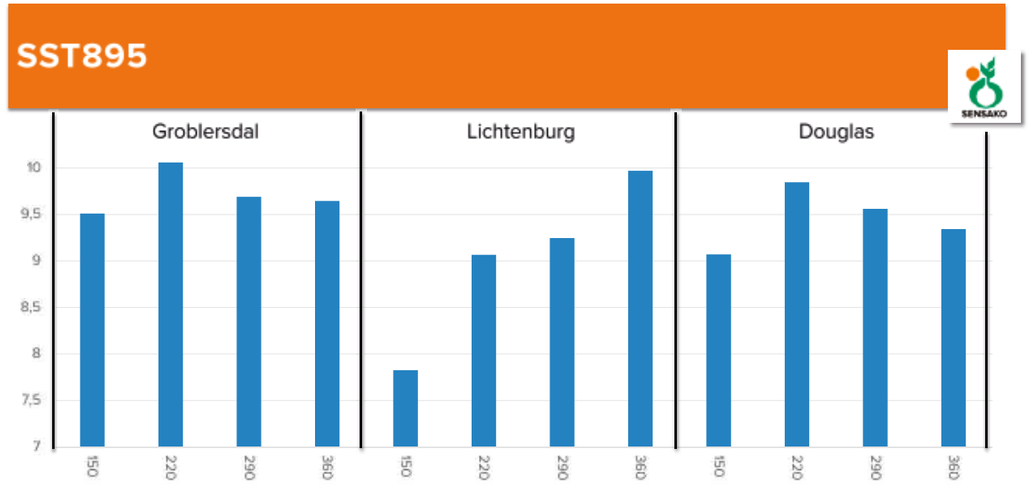
SENSAKO



	150 plante/m²	220 plante/m²	290 plante/m²	360 plante/m²
DKM van SST884 – 41.2g	77kg/ha	112kg/ha	148kg/ha	184kg/ha

syngenta

Plant population trial data | **Plantestandproefdata 2020**



	150 plante/m²	220 plante/m²	290 plante/m²	360 plante/m²
DKM van SST895 – 41.0g	76kg/ha	112kg/ha	147kg/ha	183kg/ha

SENSAKO

Wheat strip trial: Summary warm areas
Koring kultivarstrookproef: Opsomming warm gebiede

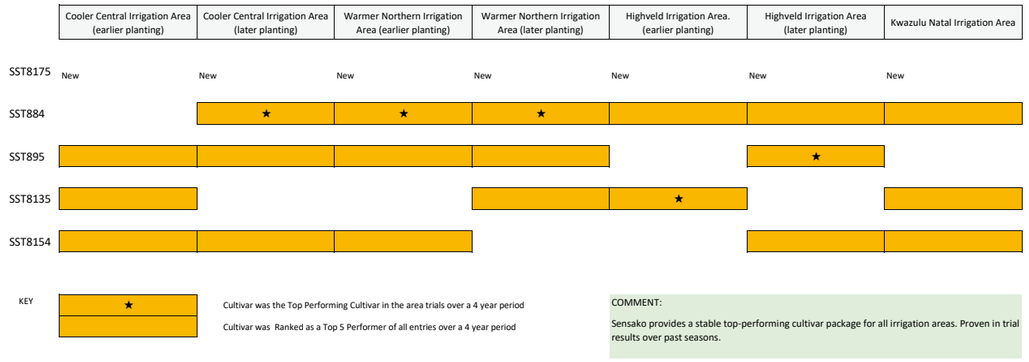
LOKALITEITE OPBRENGS TON/HA									
KULTIVAR	**MARBLE HALL**	**MAKOPPA**	**KOEDOE-SKOP**	**ATLANTA**	**OPBR/ GEMID**	**RANG**	**ROEDTAN**	**OPBR/ GEMID**	**RANG**
SST 8154	7.591	5.901	5.783	5.596	6.218	3	5.681	6.111	1
SST 884	7.981	5.301	6.034	5.926	6.311	1	5.251	6.099	2
SST 8135	6.706	5.201	5.484	5.596	5.747	6	5.111	5.619	6
SST 895	7.727	6.001	5.747	5.596	6.268	2	5.201	6.054	3
SST 875	7.385	5.301	5.533	0	6,071(3)		4.841		
SST 806	5.673	6.301	5.114	0	6,073(3)				
SST8156				5.103	-				
OP1C1	7.532	3.801	5.897	5.103	5.583	7			
OP1C2	7.627	5.901	6.121	5.103	6.188	4	3.761	5.703	5
OP2C1	7.042	4.801	5.791	5.926	5.891	5	4.981	5.709	4
OP2C2	5.891	3.801	5.261	6.091	5.261	8	5.371	5.283	7
GEMID/LOK	7.115	5.231	5.676	5.561	5.933		4.955	5.797	

* Toppresterende cultivarpaket soos in strookproewe oor die Noordelike warm besproeiingsgebiede gedemonstreer
* Top performing cultivar package as shown in strip trials over the Northern warm irrigation areas

ARC/**LNR** - NCEP

TOP PERFORMING SENSAKO CULTIVARS IN THE ARC TRIALS

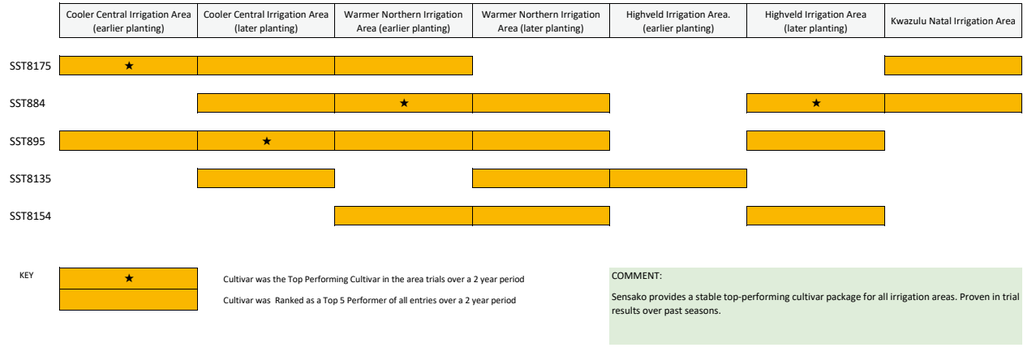
Sensako Cultivars Amongst the Top 5 Performers of All Trial Entries. Ranked on Average Yield for the Past 4 Years (2017-2020)



ARC/**LNR** - NCEP

TOP PERFORMING SENSAKO CULTIVARS IN THE ARC TRIALS

Sensako Cultivars Amongst the Top 5 Performers of All Trial Entries. Ranked on Average Yield for the Past 2 Years (2019-2020)



SENSAKO SST8175 PERFORMANCE IN THE ARC TRIALS

Incidence of This Sensako Cultivar Being Amongst the Top 5 Performers of All Trial Entries (Ranked on Yield.)

	Cooler Central Irrigation Area (earlier planting)	Cooler Central Irrigation Area (later planting)	Warmer Northern Irrigation Area (earlier planting)	Warmer Northern Irrigation Area (later planting)	Highveld Irrigation Area (earlier planting)	Highveld Irrigation Area (later planting)	Kwazulu Natal Irrigation Area
4-year average	New	New	New	New	New	New	New
3-year average	New	New	New	New	New	New	New
2-year average	★						
2020							
2019							
2018	New	New	New	New	New	New	New
2017	New	New	New	New	New	New	New

KEY

★ Cultivar was the Top Performing Cultivar

Cultivar was Ranked as a Top 5 Performer of all entries

COMMENT:

SST8175 is a consistant top 5 performer and trial winner in all areas with the exception of the later planting on the Highveld. A more than suitable replacement for SST875 and cultivar to look out for in future.

SENSAKO SST884 PERFORMANCE IN THE ARC TRIALS

Incidence of This Sensako Cultivar Being Amongst the Top 5 Performers of All Trial Entries (Ranked on Yield.)

	Cooler Central Irrigation Area (earlier planting)	Cooler Central Irrigation Area (later planting)	Warmer Northern Irrigation Area (earlier planting)	Warmer Northern Irrigation Area (later planting)	Highveld Irrigation Area (earlier planting)	Highveld Irrigation Area (later planting)	Kwazulu Natal Irrigation Area
4-year average		★	★	★			
3-year average		★		★		★	
2-year average			★			★	
2020							
2019		★		★			
2018		★		★		★	
2017			★	★			

KEY

★ Cultivar was the Top Performing Cultivar

Cultivar was Ranked as a Top 5 Performer of all entries

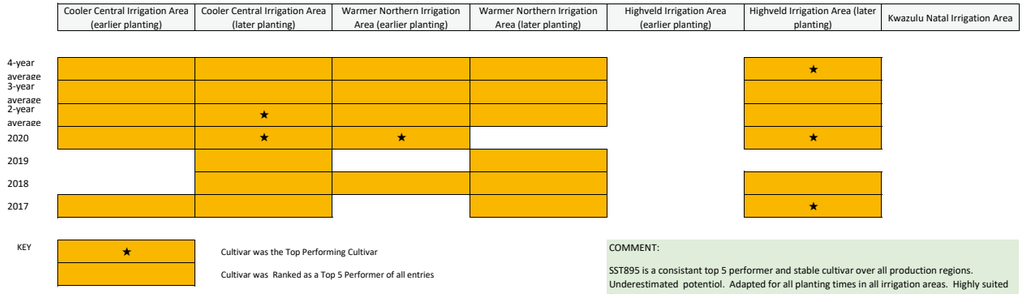
COMMENT:

SST884 is a National Top Seller - the absolute market leading cultivar. A consistant top 5 performer and perennial trial winner over seasons. Adapted for all planting times in all irrigation areas. Highly suited for late plantings without yield loss.

ARC/**LNR** - NCEP

SENSAKO SST895 PERFORMANCE IN THE ARC TRIALS

Incidence of This Sensako Cultivar Being Amongst the Top 5 Performers of All Trial Entries (Ranked on Yield.)



COMMENT:

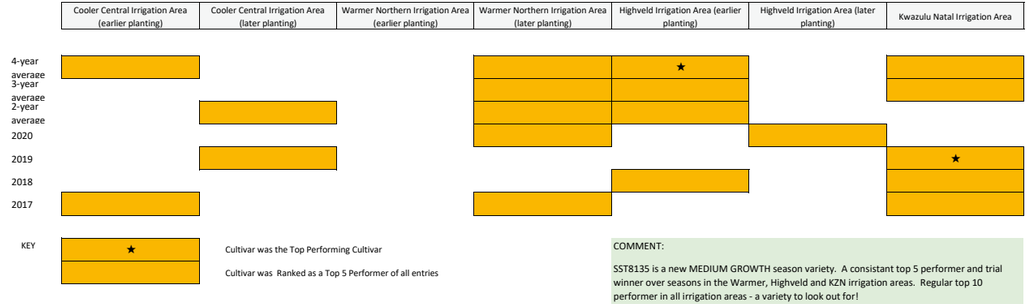
SST895 is a consistant top 5 performer and stable cultivar over all production regions. Underestimated potentiol. Adapted for all planting times in all irrigation areas. Highly suited for late plantings in the Highveld irrigation areas

syngenta

ARC/**LNR** - NCEP

SENSAKO SST8135 PERFORMANCE IN THE ARC TRIALS

Incidence of This Sensako Cultivar Being Amongst the Top 5 Performers of All Trial Entries (Ranked on Yield.)



COMMENT:

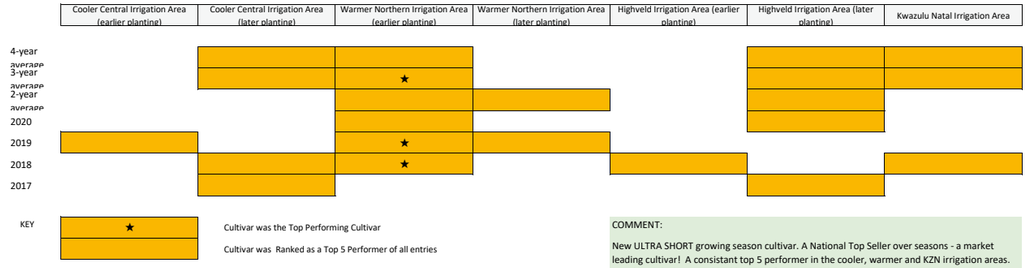
SST8135 is a new MEDIUM GROWTH season variety. A consistant top 5 performer and trial winner over seasons in the Warmer, Highveld and KZN irrigation areas. Regular top 10 performer in all irrigation areas - a variety to look out for!

SENSAKO

ARC/**LNR** - NCEP

SENSAKO SST8154 PERFORMANCE IN THE ARC TRIALS

Incidence of This Sensako Cultivar Being Amongst the Top 5 Performers of All Trial Entries (Ranked on Yield.)



COMMENT:

New ULTRA SHORT growing season cultivar. A National Top Seller over seasons - a market leading cultivar! A consistant top 5 performer in the cooler, warmer and KZN irrigation areas. Regular trial winner and highly suited for very late late plantings.

Sensako trial results| Sensako **proefresultate**

Area	Variety	2018	2019	2020
Standerton	SSS5052	2,18	2,07	1,22
	SSS5449	1,68	1,82	1,90
Standerton Ave		**1,93**	**1,95**	**1,56**
Leandra	SSS5052	2,80	0,00	0,99
	SSS5449	2,69	0,00	1,56
Leandra Ave		**2,75**	**0,00**	**1,28**
Bergville	SSS5052	3,54	1,70	2,90
	SSS5449	2,95	1,57	2,74
Bergville Ave		**3,25**	**1,64**	**2,82**
Koedoeskop	SSS5052	3,73	4,88	0,00
	SSS5449	3,35	4,27	0,00
Koedoeskop		**3,54**	**4,58**	**0,00**
Clarens	SSS5052	1,51	2,50	1,95
	SSS5449	1,75	1,86	1,75
Clarens Ave		**1,63**	**2,18**	**1,85**

Strip Trials | **Strookproewe**

GTP SOYBEAN STRIP TRIALS

Sensako Cultivars in the Top 7 Performers of all trial entries.

	Planting Date	Harvest Date	SSS5052	SSS5449
Beestekraal - Theo du Plessis	20/11/2019	2020-11-05		
Chrissiesmeer - Chrissiesmeer Studiegroep	2019-06-11	2020-05-05		
Hoopstad - Geluksbult BDY	2020-05-12	N/A		
Middelburg - GP Anderson	25/11/2019	N/A		
Petrus Steyn - SONOP BV	31/12/2019	2020-08-06		
Skuidsdrif - D v Rensburg	20/12/2019	23/4/2020		

KEY

Cultivar was Ranked as a Top 7 Performer of all entries

COMMENT:

SSS Soybeans have consistently performed well in strip-trials in the Highveld and Eastern as well as the irriagation areas. Sensako provides a well balanced, stable soya cultivar package.

ARC/**LNR** - NCEP

Cooler production area | **Koeler produksiegebied** 2018/2019 & 2019/2020

BAPSFONTEIN
2018/2019
- SSS 5449 (tuc) – 4.77 t/ha – 91% van proefgemiddeld
- SSS 5052 (tuc) – 6.11 t/ha – 117% van proefgemiddeld

2019/2020
- SSS 5449 (tuc) – 5.28 t/ha – 103% van proefgemiddeld
- SSS 5052 (tuc) – 4.82 t/ha – 94% van proefgemiddeld

BETHLEHEM
•2018/2019
- SSS 5052 (tuc) – 3.06 t/ha – 104% van proefgemiddeld

2019/2020
- SSS 5449 (tuc) – 2.98 t/ha – 98% van proefgemiddeld

CLARENS
2018/2019
- SSS 5052 (tuc) – 2.23 t/ha – 104% van proefgemiddeld

2019/2020
- SSS 5449 (tuc) – 1.88 t/ha – 96% van proefgemiddeld

KINROS
2018/2019
- SSS 5449 (tuc) – 3.30 t/ha – 106% van proefgemiddeld
- SSS 5052 (tuc) – 2.85 t/ha – 91% van proefgemiddeld

2019/2020
- SSS 5052 (tuc) – 4.45 t/ha – 107% van proefgemiddeld

KOKSTAD
2018/2019
- SSS 5449 (tuc) – 2.92 t/ha – 99% van proefgemiddeld

2019/2020
- SSS 5449 (tuc) – 3.48 t/ha – 97% van proefgemiddeld
- SSS 5052 (tuc) –3.38 t/ha – 94% van proefgemiddeld

BAPSFONTEIN
2018/2019
- SSS 5449 (tuc) – 4.77 t/ha – 91% of trial average
- SSS 5052 (tuc) – 6.11 t/ha – 117% of trial average

2019/2020
- SSS 5449 (tuc) – 5.28 t/ha – 103% of trial average
- SSS 5052 (tuc) – 4.82 t/ha – 94% of trial average

BETHLEHEM
2018/2019
- SSS 5052 (tuc) – 3.06 t/ha – 104% of trial average

2019/2020
- SSS 5449 (tuc) – 2.98 t/ha – 98% of trial average

CLARENS
2018/2019
- SSS 5052 (tuc) – 2.23 t/ha – 104% of trial average

2019/2020
- SSS 5449 (tuc) – 1.88 t/ha – 96% of trial average

KINROS
2018/2019
- SSS 5449 (tuc) – 3.302 t/ha – 106% of trial average
- SSS 5052 (tuc) – 2.85 t/ha – 91% of trial average

2019/2020
- SSS 5052 (tuc) – 4.45 t/ha – 107% of trial average

KOKSTAD
2018/2019
- SSS 5449 (tuc) – 2.92 t/ha – 99% of trial average

2019/2020
- SSS 5449 (tuc) – 5.085 t/ha – 97% of trial average
- SSS 5052 (tuc) – 5.082 t/ha – 94% of trial average

** Good cultivar performance above 90% of trial averagesmeasured over years*
** Goeie cultivar prestasie van meer as 90% van proefgemiddelde oor jare gemeet*

ARC/**LNR** - NCEP

Moderate production area | **Matige produksiegebied** 2018/2019 & 2019/2020

BERGVILLE
2018/2019
O SSS 5449 (TUC) – 4.19 T/HA – 108% VAN PROEFGEMIDDELD
O SSS 5052 (TUC) – 4.05 T/HA – 104% VAN PROEFGEMIDDELD
2019/2020
O SSS 5449 (TUC) – 4.04 T/HA – 98% VAN PROEFGEMIDDELD
CEDARA
2018/2019
O SSS 5449 (TUC) – 4.568 T/HA – 95% VAN PROEFGEMIDDELD
2019/2020
O SSS 5052 (TUC) – 3.45 T/HA – 92% VAN PROEFGEMIDDELD
GREYTOWN
2018/2019
O SSS 5052 (TUC) – 4.61 T/HA – 96% VAN PROEFGEMIDDELD
2019/2020
O SSS 5052 (TUC) – 3.66 T/HA – 96% VAN PROEFGEMIDDELD
KROONSTAD
2018/2019
O SSS 5052 (TUC) – 2.61 T/HA – 124% VAN PROEFGEMIDDELD
2019/2020
O SSS 5449 (TUC) – 2.53 T/HA – 92% VAN PROEFGEMIDDELD
O SSS 5052 (TUC) – 2.80 T/HA – 102% VAN PROEFGEMIDDELD
STOFBERG
2018/2019
O SSS 5052 (TUC) – 1.88 T/HA – 106% VAN PROEFGEMIDDELD
2019/2020
O SSS 5449 (TUC) – 3.84 T/HA – 128% VAN PROEFGEMIDDELD
O SSS 5052 (TUC) – 3.73 T/HA – 124% VAN PROEFGEMIDDELD

BERGVILLE
2018/2019
O SSS 5449 (TUC) – 4.19 T/HA – 108% OF TRIAL AVERAGE
O SSS 5052 (TUC) – 4.05 T/HA – 104% OF TRIAL AVERAGE
2019/2020
O SSS 5449 (TUC) – 4.04 T/HA – 98% OF TRIAL AVERAGE
CEDARA
2018/2019
O SSS 5449 (TUC) – 4.568 T/HA – 95% OF TRIAL AVERAGE
2019/2020
O SSS 5052 (TUC) – 3.45 T/HA – 92% OF TRIAL AVERAGE
GREYTOWN
2018/2019
O SSS 5052 (TUC) – 4.61 T/HA – 96% OF TRIAL AVERAGE
2019/2020
O SSS 5449 (TUC) – 3.66 T/HA – 96% OF TRIAL AVERAGE
KROONSTAD
2018/2019
O SSS 5052 (TUC) – 2.61 T/HA – 124% OF TRIAL AVERAGE
2019/2020
O SSS 5449 (TUC) – 2.53 T/HA – 92% OF TRIAL AVERAGE
O SSS 5052 (TUC) – 2.80 T/HA – 102% OF TRIAL AVERAGE
STOFBERG
2018/2019
O SSS 5052 (TUC) – 1.88 T/HA – 106% OF TRIAL AVERAGE
2019/2020
O SSS 5449 (TUC) – 3.84 T/HA – 128% OF TRIAL AVERAGE
O SSS 5052 (TUC) – 3.73 T/HA – 124% OF TRIAL AVERAGE

** Good cultivar performance above 90% of trial averagesmeasured over years*
** Goeie cultivar prestasie van meer as 90% van proefgemiddelde oor jare gemeet*

ARC/**LNR** - NCEP

Warm production area | **Warm produksiegebied** 2018/2019 & 2019/2020

BRITS
2018/2019
o SSS 5449 (tuc) – 4.37 t/ha – 119% van proefgemiddeld
o SSS 5052 (tuc) – 4.20 t/ha – 115% van proefgemiddeld
GROBLERSDAL
2018/2019
o SSS 5052 (tuc) – 4.39 t/ha – 109% van proefgemiddeld
HOOPSTAD
2019/2020
o SSS 5052 (tuc) – 2.95 t/ha – 92% van proefgemiddeld
MARBLE HALL
2018/2019
o SSS 5052 (tuc) – 3.67 t/ha – 104% van proefgemiddeld
2019/2020
o SSS 5052 (tuc) – 3.01 t/ha – 94% van proefgemiddeld
SCHWEIZER-RENEKE
2019/2020
o SSS 5052 (tuc) – 3.22 t/ha – 107% van proefgemiddeld

BRITS
2018/2019
o SSS 5449 (tuc) – 4.37 t/ha – 119% of trial average
o SSS 5052 (tuc) – 4.20 t/ha – 115% of trial average
GROBLERSDAL
2018/2019
o SSS 5052 (tuc) – 4.39 t/ha – 109% of trial average
HOOPSTAD
2019/2020
o SSS 5052 (tuc) – 2.95 t/ha – 92% of trial average
MARBLE HALL
2018/2019
o SSS 5052 (tuc) – 3.67 t/ha – 104% of trial average
2019/2020
o SSS 5052 (tuc) – 3.01 t/ha – 94% of trial average
SCHWEIZER-RENEKE
2019/2020
o SSS 5052 (tuc) – 3.22 t/ha – 107% of trial average

** Good cultivar performance above 90% of trial averagesmeasured over years*
** Goeie cultivar prestasie van meer as 90% van proefgemiddelde oor jare gemeet*

Sensako trial results| Sensako **proefresultate**

Region	Area	2018	2019	2020
Central FS	Vredefort			2,09
	Kroonstad			2,39
Central FS Ave				**2,24**
Eastern FS	Excelsior		2,06	
	Petrus Steyn		2,66	
	Senekal	2,28	1,19	
	Reitz	1,43		2,00
Eastern FS Ave		**1,85**	**1,97**	
North West	Delareyville1			2,20
	Delareyville2			1,90
	Delareyville3			1,70
	Koster		2,06	
North West Ave			**1,27**	**1,57**
Springbok Flats	Settlers		0,88	0,41
	Settlers2			0,95
Springbok Flats Ave			**0,88**	**0,68**

Sensako Strip trials | **Strookproewe**

GTP SUNFLOWER STRIP TRIALS

Sensako SY 3970 CL in the Top 7 Performers of all trial entries.

	Planting Date	Harvest Date	Top 7 Perfomer	Yield % of Mean	Yield
Marquard - Willem Botha	11/01/2019	n/a	★	127	1.19
Koster - Koster BV	10/1/2018	n/a		115	2.96
Petrus Steyn - SONOP BV	22/11/2018	n/a		100	2.79
Hoopstad - HN Saad	26/11/2018	26/4/2019		106	1.50
Excelsior - Bertus Wessels	11/1/1018	7/6/2019		101	2.06
Senekal - Pierre Truytsman	15/1/2019	31/5/2019		94	2.15

KEY

★ Cultivar was the Top Performing Cultivar

Cultivar was Ranked as a Top 7 Performer

COMMENT:

At Excelsior strip trial SY 3970 CL was ouside the Top 7 ranked performers but yielded in line with the mean for all entries.

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ARC/**LNR** - NCEP 2019/2020

BOSKOP
SY3970CL
- 3.1 t/ha – 96% van proefgemiddeld

FOCHVILLE
SY3970CL
- Top 10 presteerder
- 2.28 t/ha – 105% van proefgemiddeld

KROONSTAD-OOS
SY3970CL
- Top 10 presteerder
- 3.44 t/ha – 112% van proefgemiddeld

KROONSTAD-WES
SY3970CL
- 2.03 t/ha – 103% van proefgemiddeld

MAKWASSIE
SY3970CL
- 2.89 t/ha – 99% van proefgemiddeld

MARQUARD
SY3970CL
- Proefwenner
- 1.83 t/ha – 117% van proefgemiddeld

SY3970CL – laat aanplanting
- Top 10 presteerder
- 2.31 t/ha – 114% van proefgemiddeld

POTCHEFSTROOM
SY3970CL – vroeë aanplanting
- 3.03 t/ha – 101% van proefgemiddeld

SY3970CL – middel aanplanting
- 2.29 t/ha – 96% van proefgemiddeld

SY3970CL – laat aanplanting
- 2.78 t/ha – 98% van proefgemiddeld

VALSRIVIER
SY3970CL
- 2.32 t/ha – 95% van proefgemiddeld

BOSKOP
SY3970CL
- 3.10 t/ha – 96% of trial average

FOCHVILLEY
SY3970CL
- Top 10 performer
- 2.28 t/ha – 105% van proefgemiddeld

KROONSTAD EAST
SY3970CL
- Top 10 performer
- 3.44 t/ha – 112% of trial average

KROONSTAD EAST
SY3970CL
- 2.03 t/ha – 103% of trial average

MAKWASSIE
SY3970CL
- 2.89 t/ha – 99% of trial average

MARQUARD
SY3970CL
- Trial WInner
- 1.83 t/ha – 117% of trial average

SY3970CL – late planting
- Top 10 performer
- 2.31 t/ha – 114% of trial average

POTCHEFSTROOM
SY3970CL – early planting
- 3.03 t/ha – 101% of trial average

SY3970CL – middle planting
- 2.29 t/ha – 96% of trial average

SY3970CL – late planting
- Top 10 performer
- 2.78 t/ha – 98% of trial average

VALSRIVIER
SY3970CL
- 2.32 t/ha – 95% of trial average

* *Good cultivar performance, achieved above 90% of trial average for the combine trial results over the different aeas*
* *Goeie cultivar prestasie, behaal meer as 90% van die proefgemiddelde oor die gekombineerde proefresultate oor die verskeie areas*

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Strip Trials | **Strookproewe**

SNK220-65BR

	Trial	Population (plants/ha)	YIELD (Ton/ha)
Irrigation	WINTERTON	73000	10,39
	CRADOCK	80000	15,45
	VANDERKLOOF	85000	15,14
	HOPETOWN	98000	16,83
	PRIESKA	100000	15,04
	UPINGTON	110000	8,80
Dryland	BETHLEHEM(MEETS)	34000	9,06
	STANDERTON	40000	5,31
	UGIE	45000	9,30
	STANDERTON 2	50000	5,68
	MIDDELBURG	55000	11,88

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sedert 1958.

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