

# Besproeiingsbasters Irrigation hybrids



## DKC62-80BRGEN NUUT



- Toppresteerder in besproeiing.
- Uitstekende genetica.
- Geskik vir ultra-kort groeiseisoen.
- Verdraagsaam teenoor Roundup Ready Plus®-onkruidodder.
- Weerstand teen mieliestronkboorder (mon 89034).
- Goeie staanvermoë.
- Presteer goed onder hoë plantpopulasies.
- Presteer goed onder besproeiing.
- Baie goeie graankwaliteit.
- Gebruik DKC62-84R as toevlugsgebied.



## DKC62-80BRGEN NEW



- Top performer in irrigation.
- Excellent genetics.
- Suitable for ultra-short growth season.
- Tolerant to Roundup Ready Plus® herbicide.
- Resistance to maize stalk-borer (mon 89034).
- Good standability.
- Performs well under high plant populations.
- Performs well under irrigation.
- Very good grain quality.
- Use DKC62-84R as refuge area.



## DKC64-78BRGEN NUUT



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- Goeie staanvermoë.
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## DKC62-84R NUUT



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- Geskik vir ultra-kort groeiseisoen.
- Verdraagsaam teenoor Roundup Ready Plus®-onkruidodder.
- Goeie staanvermoë.
- Presteer goed onder hoë plantpopulasies.
- Presteer goed onder besproeiing asook droëlande in die ooste.
- Baie goeie graankwaliteit.



## DKC62-84R NEW



- Top performer in irrigation.
- Excellent genetics.
- Suitable for ultra-short growth season.
- Tolerant to Roundup Ready Plus® herbicide.
- Good standability.
- Performs well under high plant populations.
- Performs well under irrigation and in dry lands in the east.
- Very good grain quality.



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- Verdraagsaam teenoor Roundup Ready Plus®-onkruidoder.
- Weerstand teen mieliestronkboorder (mon 810).
- Goeie staanvermoë.
- Presteer goed onder hoë plantpopulasies.
- Presteer goed onder besproeiing.
- Baie goeie graankwaliteit.
- Gebruik DKC62-84R as toevlugsgebied.



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- Excellent genetics.
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- Resistance to maize stalk-borer (mon 810).
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# Meer oor Besproeiingskultivars

Monsanto het homself die afgelope paar jaar wêreldwyd gevestig as die leier-maatskappy op die gebied van geentegnologie in graangewasse. In Suid-Afrika het Monsanto met sy DEKALB®- handelsmerk ook uitgestyg as voorloper wat droëland wit- en geelmielies betref.

Resultate van die afgelope seisoen se proewe in die land se besproeiingsgebiede het getoon dat DEKALB®-kultivars in die marksegment uiters mededingend was. Drie nuwe, ultra-kort, geel besproeiingskultivars het uitstekend in die proewe gevaar en volgens Monsanto se tegniese personeel het die kultivars die potensiaal om hul merk in die ultra-kort besproeiingsmark te maak.

Die nuwe besproeiingskultivars is DKC64-78BR en DKC62-80BR wat beide insekbeskerming en onkruidoder-verdraagsaamheid bied. Die derde kultivar is DKC62-84R wat die Roundup-geen vir onkruidbeheer bevat en wat gebruik kan word vir die toevlugsarea vir beide die genoemde dubbelgeen-basters, DKC64-78BR en DKC62-80BR.

DKC62-80BR en DKC62-84R was reeds gedurende die 2009-2010 plantseisoen kommersieel beskikbaar. Die twee kultivars het uitstekend gevaar in die Hopetown-area waar DKC62-80BR 'n opbrengs van 14,7 t/ha graan by mnr Joël le Roux gelewer het. Die opbrengs het goed vergelyk met ander kultivars wat hy aangeplant het. Volgens mnr le Roux het DKC62-80BR vinnig afgedroog en maklik gestroop. DKC62-80BR het ook by mnr Hannes Bruwer op 'n 50 ha pivot wat in twee verdeel was, 16,9 t/ha opbrengs gelewer in vergeleke met die van 'n opposisie-kultivar op die ander helfte wat 16,3 t/ha gelewer het.

By mnr Alvonso Visser van Vaalharts, Landboukrywers se SA Boer van die Jaar 2008, het DKC62-84R 14,7 t/ha gelewer. Volgens mnr Danna Pienaar, plaasbestuurder van mnr Visser, is dit 'n uitstekende kultivar en het hulle besluit om in die komende plantseisoen 200 ha van dié kultivar aan te plant. DKC62-84R het ook 16,5 ton opbrengs by mnr Basie de Beer in die Barkley-Wes-omgewing gelewer.

Hoewel DKC64-78BR nie vir die vorige plantseisoen kommersieel beskikbaar was nie, was dit in Monsanto en GWK se proefprogram ingesluit.

Al die genoemde kultivars het uitstekend in Monsanto se strookproef-program gevaar. Proewe is op 25 lokaliteite geplant en by al die kommersiële en proefaanplantings het die drie basters uitstekend vertoon teenoor die besproeiingskultivars waarmee dit in die strookaanplantings vergelyk is.

DKC64-78BR het onderskeidelik opbrengste van 16,49 en 15,60 t/ha graan by mnre Kerneels Greyling en Frans Terblanche in die Prieska-omgewing gelewer. In 'n strookproef by mnr Gehard Bruwer van die Douglas-omgewing, het DKC62-84R 'n opbrengs van 17,42 t/ha en DKC62-80BR, 17,27 t/ha gelewer.

Die aanplanting van stapelgeen-kultivars vergemaklik bestuurspraktyke omdat die *Bt*-geen beskerming bied teen stronkboorders en die Roundup®-toleransie die beheer van die teenwoordige onkruidspektrum vergemaklik.

Die aanplanting van 'n toevlugsarea bly egter van kardinale belang in 'n insekweerstandbestuursprogram.

## 'n Toevlugsarea moet aan die volgende kriteria voldoen:

1. Plant die toevlugsarea eerste en maak dan die saadbakke leeg en sorg dat dit behoorlik skoon is. Die *Bt*- of dubbelgeen-saad kan daarna in die planterbakke gegooi en geplant word.
2. Die kultivars wat gebruik word vir die toevlugsarea en hoofaanplanting moet vergelykbare groeilengtes hê, die plantdatums moet nie meer as sewe dae verskil nie en hul moet onder dieselfde agronomiese toestande groei. Beide moet byvoorbeeld onder besproeiing geplant wees.
3. Geen *Bt*-plant mag verder as 400 m van 'n nie-*Bt*-plant in die toevlugsarea wees nie.
4. Jou buurman se lande kan nie dien as 'n toevlugsarea vir jou aanplanting nie.
5. Die toevlugsarea moet altyd gemerk wees vir makliker herkenning.
6. Die Registrateur vereis dat die toevlugsarea aan beide kante van die land aangeplant word.

Net soos 'n insekweerstandprogram gevolg word, moet produsente ook aandag gee aan 'n onkruidoder-weerstandprogram. Die volgende moet in aanmerking geneem word om die moontlikheid te verklein dat onkruidweerstand teen onkruidodders opbou.

1. Die toedieningsdosis moet bepaal word deur die moeilikste beheerbare onkruidspesie in die teenwoordige populasie.
2. Moet nooit die dosis verlaag na minder as wat op die etiket aanbeveel word nie.
3. Dien die onkruidoder so vroeg moontlik toe ten opsigte van die onkruid se groeistadiums.
4. Gebruik gewasrotasie, asook onkruidodders met verskillende metodes van werking as deel van 'n onkruidweerstandbestuursprogram.

Monsanto het nie net uitsonderlike en nuwe besproeiingskultivars vir die komende seisoen nie, maar ook uitstekende onkruidodders soos Roundup Ready Plus®, Guardian S® EC asook Harness® Extra EC. Guardian is 'n beveiligde Acetochloor en Harness Extra 'n onbeveiligde Acetochloor. Guardian sal dus voor-opkoms toegedien word.

Monsanto bied ook aan produsente geleentheid om deel te neem aan 'n lojaliteitsprogram. As produsente DEKALB®-kultivars in kombinasie met Monsanto se onkruidodders gebruik, kan afslag op die onkruidodders verkry word.

Vir verdere inligting, skakel met Steven Bann, Verkoopsvertegenwoordiger by 082 388 0205, of met Anton Swanepoel, Landboukundige by 082 821 6832, of bel ons hoofkantoor by 011 790-8200 of besoek ons webtuiste [www.monsanto.co.za](http://www.monsanto.co.za)

# More about Irrigation Products

Over recent years Monsanto has emerged globally as the leader in the field of gene technology in grain crops. In South Africa, Monsanto with its DEKALB® brand also stands out when it comes to dry-land white and yellow maize.

Results from field trials carried out this past season in the country's irrigation areas showed that DEKALB® cultivars were extremely competitive in this segment of the market. Three new, ultra short, yellow irrigation cultivars performed excellently in the trials and according to Monsanto's technical staff these cultivars have the potential to make their mark in the ultra short irrigation market.

These new irrigation cultivars are DKC64-78BR and DKC62-80BR, both offering insect protection and herbicide tolerance. The third cultivar is DKC62-84R containing the Roundup gene for weed control and which can be utilised for the refuge area for both the mentioned double-gene hybrids, DKC64-78BR and DKC62-80BR.

DKC62-80BR and DKC62-84R were available commercially as early as the 2009-2010 planting season. These two cultivars performed excellently in the Hopetown area where DKC62-80BR produced a yield of 14,7 t/ha grain on Mr Joël le Roux's farm. This yield also compared well with other cultivars planted by him. According to Mr le Roux DKC62-80BR dried off quickly and harvested easily. On Mr Hannes Bruwer's farm, DKC62-80BR produced a yield of 16,9 t/ha on the one half of a divided 50 ha pivot - this compared to the yield of an antagonistic cultivar on the other half which produced a yield of 16,3 t/ha.

On the farm of Mr Alvonso Visser from Vaalharts, Agricultural writers' SA Farmer of the Year 2008, DKC62-84R produced 14,7 t/ha. According to Mr Danna Pienaar, farm manager on the Visser farm, it is an excellent cultivar and consequently they have decided to plant 200 ha of this cultivar in the next season. DKC62-84R also produced 16,5 ton yield on Mr Basie de Beer's farm in the Barkley West area.

Although DKC64-78BR was not commercially available during the previous planting season, it was included in Monsanto and GWK's trial programme.

All the above-mentioned cultivars performed excellently in Monsanto's strip trial programme. Trials were planted on 25 locations and in all the commercial and trial plantings the three hybrids performed outstandingly against the irrigation cultivars with which they were compared in the strip plantings.

DKC64-78BR produced yields of 16,49 and 15,60 t/ha grain respectively at Messrs Kerneels Greyling and Frans Terblanche in the Prieska area. In a strip trial carried out at Mr Gerhard Bruwer's farm in the Douglas area, DKC62-84R produced a yield of 17,42 t/ha and DKC62-80BR, a yield of 17,27 t/ha.

The planting of stacked gene cultivars facilitates management practices as the *Bt* gene renders protection against stalk borers and the Roundup® tolerance on the other hand simplifies the control of the present weed spectrum.

The planting of a refuge area, however, remains crucial in an insect resistance management programme.

## **A refuge area must adhere to the following criteria:**

1. Plant the refuge area first before emptying the seed trays, ensuring that they are thoroughly clean. Thereafter the *Bt* or double-gene seed can be put into the planters and planted.
2. The cultivars used for the refuge area and general planting area, must have comparable growth lengths, planting dates should not differ by more than seven days and they must grow under the same agronomic conditions. For example, both must be planted under irrigation.
3. No *Bt* plant may be situated more than 400 m away from a non-*Bt* plant in the refuge area.
4. Your neighbour's fields cannot double as a refuge area for your planting.
5. The refuge area must always be clearly marked for easy identification.
6. The Registrar requires the planting of a refuge area on both sides of the field.

Just like an insect resistance programme is followed, producers should also give attention to a herbicide resistance programme. The following should be taken into account to lessen the possibility for weeds to build up a resistance to herbicides.

1. The application rate must be determined by the weed species in the present population that is the most difficult to control.
2. Never decrease the rate to less than recommended on the label.
3. Apply the herbicide as early as possible in terms of the growth stages of the weeds.
4. Use crop rotation as well as herbicides with various modes of action as part of a weed resistance management programme.

Not only does Monsanto have outstanding and new irrigation cultivars for the upcoming season, but also excellent herbicides such as Roundup Ready Plus®, Guardian S® EC as well as Harness® Extra EC. Guardian is a protected acetochlor and Harness Extra an unprotected acetochlor. Guardian will, therefore, be applied as a pre-emergence herbicide.

Monsanto also offers producers the chance to be part of a loyalty programme. If producers use DEKALB® cultivars in combination with Monsanto's herbicides, they will receive a discount on the herbicides.

For additional information, contact Steven Bann, Sales representative at 082 388 0205, or Anton Swanepoel, Agronomist at 082 821 6832, or phone our head office on 011 790 8200 or visit our website [www.monsanto.co.za](http://www.monsanto.co.za)