

# UMHLA WOKUTYALA kunye NOKUCHUMISA kubalulekile

YOYILE KAJONGILANGA YENYE YEEYOYILE EZIPHAMBILI ZEMIFUNO EZISETYENZISWA KUSHISHINO LOKUTYA. NGAPHAYA KOKO, NGENXA YODIDI LWAYO OLUPHEZULU, UKUSEBENZISEKA KWAYO NENQANABA LAYO LEPROTHEYINI ELIPHEZULU, IKHOLISA UKUSETYENZISWA EKWENZENI IIMVELISO EZILIQELA EZITHENGISWAYO. UJONGILANGA UQHELE UKULINYWA PHANTSI KWEENKQUBO EZIXHASWA NGEMVULA NGENXA YOKUYINYAMEZELA KWAKHE IMBALELA NOKO.

Oku kunyamezela imbalela kunokunxulunyaniswa nenkqubo yakhe yeengcambu eziphuhle kakuhle nezingena nzulu emhlabeni ngendlela evumela isityalo ukuba sisebenzise izondlo nokufuma okusemhlabeni okuncomeka ngokuthe chatha. Nangona kunjalo, ukususela kwisigaba sokudubula kwangoko kweentyatyambo ukuya kwesokuhlohleka kweenkoko, ujongilanga unobuntununtunu obuthile kunqongophalo lwamanzi neqondo lobushushu. Imibandela yobume obumngqongileyo efana nobushushu, ubude bosuku, imitha yelanga ephazamisekayo kunye nokubila, ezo ziimeko eziba neziphumo ezahlukahlukileyo ekukhuleni kukajongilanga nezigaba zokuphuhla kwakhe kuwo wonke umjikelo wobomi bakhe.

Ukungabikho kozinzo kubushushu nasekufumeni okufumanekayo kuchaphazela isixa (ubunzima beenkoko) nodidi lweoyile eqokele-

lana kujongilanga. Ngoko ke, kulandelwa imigaqo yesithethe ukuze kuqwalaselwe iziphumo ezingafunekiyo. Phakathi kwale migaqo, impumezo yomhla wokutyala ethile kunye nokufakwa kwesichumiso senitrogen (N) yeminye yemibandela ebaluleke kakhulu ekulinyweni kukajongilanga ngempumelelo.

## UKUFAKWA KWESICHUMISO SENITROGEN

I-N sesinye sezondlo eziphambili ekukhuleni nasekuphuhleni kukajongilanga, kwaye isentloko ekwakhekeni kweziziqalelo zezondlo zeeseleli zesityalo nakwimisebenzi yazo, ezifana neeamino acid, iiprotheyini, iinucleic acid kunye nee-enzayim. Ujongilanga ufunxa iN ubukhulu becala, kwiimoletyehuli ezingenakhabhoni ezinjengeammonium ( $\text{NH}_4^+$ ) nenitrate ( $\text{NO}_3^-$ ).

Ngelixa kufunxwa iN, ukukhula kwezityalo ngokuzandisa kuyavuseleleka, kwaye kuhambelana nokubumbeka kwezifunxi zokukhanya kunye neemveliso ezikhapha ukubumbeka kweziziqhamo nembewu. Ufundonzulu lukhuthaza ukwandiswa kwembewu kajongilanga nemveliso yeoyile ngokokude ifikelele kuma40% xa ixhaswa ngezinto eziluncedo kwiN.

Izihlandlo eziliqela zofundonzulu lwehlabathi zinike ingxelo yokuba ukugalelwa kwe100 kg yeN/ngehektare kokona kulungele ukulinywa kukajongilanga. Nangona kunjalo, ukugalelwa kweN engaphantsi okanye engaphezulu kuleyo ekuluhlu olufanelekileyo kunciphisa ukuncomeka kokusetyenziswa kwesi sondlo sisityalo, kuze oko kukhokelele ekuncipheni kwesivuno.



## UMHLA WOKUTYALA kunye...

Ukugalelwa kwamathambo agqithisileyo eN, kungenza oku, umzekelo, kungavuselela ukukhula kwesityalo (ukuphakama) kangangokuba kuwandise kakhulu umngcipheko wokuxinana kwiindawo ezinemi-moya egqithisileyo.

Ngaphaya koko, kungakho ukungalungelelani phakathi kwezigaba zokuzandisa kweeseli nokwanda ngokwezini zesityalo ngexesha lezi meko, xa kuvuseleleka ukukhula okungalawulekiyo kokuzandisa kweeseli zesityalo kanti ukuvuthwa kwesityalo kuyabambezeleka. Oku kukhokelela ekuncipheni kwesityalo kunye nokwanda kokuba sisilulu sezonakalisizityalo.

Izihlandlo zofundonzulu nazo zinike ingxelo ngokuncipha kwe-siqulatho seoyile nesesivuno sembewu ngokwenqanaba le150 kg yeN/ngehektare. Kwelinye icala, zikhona izihlandlo zofundonzulu ezixele ukuba ama80 kg eN/ngehektare alingene, lo gama ezinye zibonise ukuba ukwandisa amanqanaba eN kukhokelela ekwandeni okuthe chu kwesityalo, iziqulatho zeprotheyini nelinoleic acid ngaxeshanye apho kuncipha khona isiqulatho seoyile nepesenti yeoleic acid.

Akwenziwanga phando okanye luncinane oluqhutywe eMzantsi Afrika, malunga nokumisela isixa esisesona sifanelekileyo sokufakwa kweN kwiimeko zokulinywa kukajongilanga kweli lizwe. Eli nqaku liza kulutyhila noko uphando olwenziwa ngoku yiARC-Grain Crops ukuze kuhlangatyezwe olu nqongophalo lweenkcukacha zeli lizwe ngokunjalo kunikelwe ngeenkukacha ezibalulekileyo malunga nokuchumisa ngeN kutyhilwe neziphumo zemihla yokutyala kwesityalo sembewu nakwisiqulatho seoyile.

### UMHLA WOKUTYALA

I-Free State ebharhe ngokungagqibelelanga kunye noMntla Ntshona, ngokunjalo neemeko zayo ebezingaqikeleleki nebeziyangozi ngexesha lokulima, zisisibonakaliso sendawo elinywayo kajongilanga emalunga nama 80% iphelele eMzantsi Afrika. Njengesiphumo, ezi meko semozulu zinganefuthe elikhulu kwesityalo sembewu nakwisiqulatho seoyile.

Ukutyalwa kukajongilanga emva kwexesha nako kuyaqubisana neemeko eziyangozi, kuquka ukuba sesichengeni kwembewu okanye izithole kumaqondo obushushu aphezulu angoDisemba nawangoJanuwari, kodwa umvumvuzelo kunye nokuphuhla kwembewu kuya kwenzeka phantsi kwamaqondo ehla ngokukhawuleza.

Kwelinye icala, elona xesha lokutyala esi sityalo lifaneleke kakhulu livumela inqanaba elilelona liphezulu ngokufanelekileyo lokusetyenziswa kwayo yonke imithombo yendalo ehambelana neemeko ezizezona zifanelekileyo zobume obusingqongileyo kunye nezigaba zokukhula ngokwendlela esisebenza ngayo isiqu sesityalo neziya kuqinisekisa ukuntshula kwembewu okufanelekileyo nokumila kwezithole, ukuphuhla kwenkqubo yeeengcambu, ukukhula kunye nesivuno. Izityalo ziya kukwazi ukuzimilisa phucukileyo futhi zifunxe izondlo ezingundoqo kumthamo omkhulu womhlaba.

EMzantsi Afrika, ujongilanga uqhele ukutyalwa ukususela

ngoNovemba ukuya esiphakathini sikaJanuwari. Ukuba le mihla ibambezeleke, izivuno zeenozo zikajongilanga kunye neoyile zincipha kakhulu.

### UPHANDO LWEARC-GRAIN CROPS

Inkxasomali evela kwiOil and Protein Seeds Development Trust nakwiBhunga loPhando ngoLimo (ARC) yenze ukuba uphando lweARC-Grain Crops lukwazi ukwenzeka. Injongo yofundonzulu ibi-kukufumanisa isiphumo sokugalelwa kwesichumiso iN kwesityalo sikajongilanga xa silinywe kwimihla yokutyala efaneleke kakhulu (esiphakathini sikaDisemba) nasemva kwexesha (emva kwasesiphakathini sikaJanuwari). Ukuphumeza oku, kwenziwe iimvavanyo ezimbini kwifama yophando eseARC-Grain Crops' Potchefstroom kumaxesha amabini okulima (ngo2020/2021 nango2022/2023).

- Umhla wokuqala wokutyala (kutyalwe ngomhla we15 kuDisemba ngowama2020 nangowama2022, ngokulandelelana kwayo) ubonwe njengomhla ongowona ufanelekileyo wokutyala.
- Umhla wesibini wokutyala (ngomhla wama26 kuJanuwari ngowama2021 nangomhla we18 kuJanuwari ngowama2023, ngokulandelelana kwayo) ubonwe njengomhla osemva kwexesha.

Imihlanganisela emihlanu kajongilanga, iquka eyesiqhelo emibini (iPAN 7080 neAGSUN 8251), emibini yeClearfield (oweAGSUN 5106 CLP nowepAN 7160 CLP) kunye nomnye umhlanganisela weoleic ephezulu (iPAN 7158 HO), iye yatyalwe ukwenza ufundonzulu ngezi ziphumo.

Kugalelwe imigangatho emihlanu eyahlukileyo yesichumiso seN equka nendawo yothelekiso engafumenanga N esisichumiso. Yona ibibandakanya:

1. 45 kg/ngehektare yeN efakwa njengesiseko ngexesha lokutyala; kananjalo
2. 45 kg/ngehektare yeN inyanga isenye phambi kokutyala. Oku kulandeliswe ngomaleko ongaphezulu kwinyanga enye emva kokutyala ogalelwe kule migangatho:
3. 0 kg/ngehektare.
4. 45 kg/ngehektare (isixa esipheleleyo sama90 kg/ngehektare); kananjalo
5. 75 kg/ngehektare (isixa esipheleleyo sama20 kg/ngehektare).

### ISIPHUMO SOMHLA WOKUTYALA KWISIVUNO SEMBEWU, KWISIQULATHO SEOYILE NAKWISIVUNO SEOYILE

**Itheyibhile 1** ibonisa isiphumo semihla emibini yokutyala kwesityalo sembewu kajongilanga, kwisiqulatho seoyile nakwesityalo seoyile ngamaxesha amabini okulima. Ngexesha lokulima lama2021/2022, umhla wokutyala ongowona ufanelekileyo ube nesivuno sama2,39 eetoni/ngehektare xa kuthelekiswa neetoni ezi1,77 ngehektare eveliswa ngomhla wokutyala osemva kwexesha (ukuncipha kwesityalo kangangama25%).

Ixesha lokulima lama2022/2023 libonise isiqhelo esinoyelelwano, apho imveliso ibiziitoni ezi2,30 ngehektare, kanti ukutyala okwenzi-

1

*Isiphumo semihla yokutyala kwesityalo sikajongilanga, isiqulatho seoyile nesivuno seoyile kumaxesha amabini okulima.*

Intengiso	ixesha lokulima lama2020/2021 growing season		ixesha lokulima lowama2022/2023 growing season	
	Okufanelekileyo	Ukutyala mva	Okufanelekileyo	Ukutyala mva
Isivuno sembewu (t/ha <sup>-1</sup> )	2,39	1,77	2,30	1,85
Isiqulatho seoyile (%)	38,91	40,98	38,88	40,30
Isivuno seoyile (t/ha <sup>-1</sup> )	0,93	0,73	0,91	0,75

2

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OPDT

**Yenza isikeni sekhawudi yeQR ukuze ulifunde lonke inqaku, kuba liquka iziphumo ezithe kratya malunga nolu fundonzulu.**



we mva kube nemveliso eziitoni ezi1,85 ngehektare (isivuno sinciphe nge19%). Ezi ziphumo ziqinisekisa ezezinye izihlandlo zofundonzulu, ezibonisa ukuba xa ujongilanga etyalwe kwangoko ukhupha izivuno eziphezulu kunaxa etyalwe emva kwexesha.

Umhla wokutyala wesibini ukhuphe imveliso enesiqulatho seoyile esingaphezulu nge5% (ngowama2020/2021) ize ibe yi4% (ngowama2022/2023) kunaleyo efumaneka ngemihla yokutyala eyiyona ifanelekileyo (ltheyibhile 1). Nangona kunjalo, isivuno seoyile kajongilanga obelinywe ngoDisemba (iitoni ezi0,93 ngehektare neetoni ezi0,91 ngehektare, ngokulandelelana kwazo) besiphezulu kunesemihla yokutyala yangoJanyuwari (iitoni ezi0,73 ngehektare neetoni ezi0,75 ngehektare, ngokulandelelana kwazo).

- Ezi ziphumo zikubonakalisa ngokucacileyo ukuba xa imihla yokutyala ibambezeleke kwade kwayiveki yokugqibela kuJanyuwari, isivuno seoyile siya kuncipha.

### ISIPHELO

- Umhla wokutyala namanqanaba ahlukileyo eN efakwa ngamaxesha ahlukileyo unesiphumo esibalulekileyo kwimveliso kajongilanga.
- Xa ulima emva kwexesha (emva kwasesiphakathini kuJanyuwari) kunangomhla wokutyala ongowona ufanelekileyo (esiphakathini kuDisemba), ukucutheka kwesivuno sembewu kangange19% ukuya kuma25% kuye kwaxelwa.
- Ngaphaya koko, esona sivuno sembewu siphezulu siphunyezwe kumanqanaba aphezulu okufakwa kweN (angange120 kg eN/ngehektare), nokuba ukutyala kwenziwe ngomhla ofanelekileyo okanye ngomhla osemva kwexesha.
- Nangona kunjalo, ngokubhekiselele kwimpumezo yeN ngokwezululwazi yezomhlaba ngokunjalo nembuyiselo eyiyona igqibeleleyo kutyalomali, ama45 kg eN/ngehektare egalelwe kwisityalo xa sihlwayelwa ngomhla wokutyala ofanelekileyo ngokunjalo nama45 kg eN/ngehektare kwinyanga ephambi kweyokutyala, xa kutyalwa ngomhla wokutyala osemva kwexesha, ngawona ancomeka ngokugqibeleleyo. ■

### UBUSAZI?

- Ujongilanga (*Helianthus annuus L.*) sisityalo sembewu yeoyile yonyaka esilinywa kwihlabathi jikelele.
- Ngexesha lokulima lama2022/2023, izigidi ezingama28, 25 ezivele ngehektare ngaphezu kwezigidi ezingama55,8 zemetric toni, ezalathe isi8,41% sentengiso yembewu yeoyile yehlabathi (USDA 2023).
- EMzantsi Afrika, umyinge wendawo elinywa ujongilanga kunye nesivuno sakhe sonyaka ukususela ngowama2007 waba yingxelo ebhalwayo engama565 563 eetoni ngehektare ngokunjalo nama740 832 eetoni, ngokulandelelana kwazo.

**UGQ SAFIAH MA'ALI, UMPHANDI OKWISIKHUNDLA ESIPHEZULU: ARC-GRAIN CROPS, POTCHEFSTROOM. LIQALE UKUPAPASHWA KWISA GRAAN/GRAIN, KUSEP-TEMBA NGOWAMA2023.**



## AMAZWI AVELA... Phumzile Ngcobo



**QHALO ELAZIWA KAKHULU LITHI: 'OKUQALE ENTLOKO SISIQALO ESIBALASELEYO.' ISIVUNO ESINEMPUMELELO SIBONAKALA NGEMIBANDELA ELIQLA, EQUKA IIMEKO EZILUNGILEYO ZOKULIMA NGOKUSEBENZISWA UMJIKELO WOKULIMA IZITYALO – NGAKUMBI NGETHUBA LEZIGABA EZIBALULEKILEYO ZOKUKHULA KWESITYALO.**

Nangona kunjalo, umlimi akanalo ulawulo phezu kwalo mba. Impumezo yemigaqo yolawulo eyenziwa ngexesha, umlimi unako ukufikelela kuyo kangangoko kwaye ufanele ukulangazelela ukukwenza oku ngenkuthalo efanelekileyo.

Ukutyala ngokulandelelanisa ngumgaqo wokulima izityalo ezahlukileyo kwindawo enye esinye emva kwesinye kwixesha elinye lokulima, kodwa zahluke ngokwemihla yokuvuthwa, ukuze kolulwe isivuno. Iinzuzo zempumezo yalo mgaqo wolawulo zibonakele ngeziphumo ezincomeka ngokumangalisayo kubalimi abakwiingqi zokulima ezisempuma.

Ukutyala ngokulandelelanisa kuvumela ikroba elide lokutyala, ukuze umngcipheko abakuwo abalimi wandlaleke.

Ukugcina ixesha kuyinto yonke! Ukutyala ngokulandelelanisa kuvumela ikroba elide lokutyala, ukuze umngcipheko abakuwo abalimi wandlaleke kanti kukwavumela ixesha elaneleyo lokusebenzisa imigaqo yolawulo lwezityalo efana nokufakwa kwezichumiso kunye neekhemikhali.

Umahluko wemozulu nawo ufaka abalimi kwimingeni emininzi, kwaye oko kuchaphazela isivuno. Iindawo ezininzi zifumene iimeko ezifanelekileyo zemvula, ezikhatshwa ziimeko zobushushu obugqithisileyo, ezichaphazela ukukhula kwesityalo ngendlela enobungozi. Ukuzingana kwezi meko kuya kufaka abalimi kwiilahleko zezivuno – sinovelwano nabo malunga nezi meko.

Phofu likhona ithemba lokuba iimeko ezingathandekiyo zangoku ziza kuphucuka, kwaye umlimi ngamnye uya kufumana isivuno esihle esiya kukhokelela kwimbuyiselo yotyalomali lwexesha lokulima langoku.

– UPhumzile Ngcobo ngumphathi ongumncedisi wengingqi kwiofisi yaseDundee. ■

# Iimpuku zasendle

## Zingasitshabalalisa isivuno seenkozo

IIMPUKU ZASENDLE ZEZINYE ZEZONAKALISIZITYALO KULIMO EZIBHIDA ABALIMI BEENKOZO. NGELISHWA, UKUNGAZI NGEEMPUKU ZASENDLE KUBONAKALA KUYINGXAKI NGENXA YOKUBA ABALIMI BAKHOLISA UKUNGABUQONDI KWAPHELA UBUKHO NOKUZIPHATHA KWAZO.

### IIMPAWU ZOHLASELO LWEEMPUKU ZASENDLE

Ezi zonakalisizityalo zincinane zingakwazi ukunciphisa isivuno seenkozo ngama70% ukuba umonakalo awuhlangatyezwa kwangexesha kwaye ngendlela encomekayo.

Iimpawu zokuqala zobukho beempuku zasendle zikholisa ukuba yimingxuma embalwa engqukuva yobukhulu obumalunga nama50 mm enxulumene namatonela akhokelela kwiindawo ezingaphandle zamasimi. Iimpuku zasendle zihlala ngaphantsi komhlaba zize ziphume kuphela xa ziye kuzingela ukutya – okukholisa ukwenzeka emva kwe-mini silisiya kutshona ilanga kude kube sekuseni. Zisebenza nasebusika zisemba imingxuma zisenza nemixokelelwano yamatonela ekulula ukungayihoyi ngenxa yokuba igqunywe luhlaza lwendalo.

Nangona kunjalo, kwakuba kuqaliswe ngokutyala kwasehlotyeni, zihamba ziye emasimini ziseke izicuku kuwo wonke amasimi. Kwimitha esisikwere nganye kungabakho imingxuma elishumi, kanti amatonela akholisa ukuba makhulu kangokuba iitrektara noomatshini bayaxinga kuyo. Ezi meko zalatha uhlaselo olungubhubhane oludinga amanyathelo angxamisekileyo.

### INDIMA YOKUHLAKULA NGOMGAQO WOLONDOLOZO

Nangona imigaqo yokuhlakula eyiyona ingephi iluncedo kumlimi, kwisityalo nakubume obusingqongileyo obuyindalo, esi sesinye sezizathu ezingundoqo esibangele ukuba iimpuku zasendle zibe yinkathazo kubalimi abaninzi beenkozo kumashumi amabini eminyaka adlulileyo. Indima yokuhlakula okunzulu kwimpilo yomhlaba ikholisa ukujongelwa phantsi, naxa iinzuzo zayo zininzi kumlimi weenkozo.

'Kwiintsuku ezazilungile zakudala', xa amasimi ayehlakulwa nzulu kwixesha ngalinye lokulima, iintsalela zezityalo bezingcwatywa ngaphantsi komhlaba kunye nezifo ezihamba nazo, izonakalisizityalo kunye nokhula, kanti ngaxeshanye izicuku zeempuku zasendle nazo bezichaphazeleka ngendlela ezityhafisayo.

Ukuhlakula nzulu bekutshabalalisa iindawo zazo zokuhlala nokukhulisa kanti bekuphinda kutshabalalise iindawo zazo zokubalekela. Iinkozo ezichithekileyo nazo bezingcwatywa. Kaloku beziya kuba kukutya kweempuku zasendle xa amasimi ebengahlakulwanga. Xa kusetyenziswa ukuhlakula ngomgaqo wolondolozo, akufane kuhlakulwe. Oku akupheleli ekubeni kuyeke iimpuku zasendle ziphila zingaphazanyiswa, kodwa kuphinda kushiye iintsalela zezityalo apho izifo zezityalo nezonakalisizityalo ezifana nempehla esisishunqu ziphila khona. Kodwa malunga nokuhlakula nzulu ixesha ngalinye lokulima liya kubangela iziphumo ezinobungozi emhlabeni ngokwawo.

### IZISOMBULULO

Eyona njongo ibalulekileyo yokuthintela umonakalo weempuku zasendle kukuthintela ukunyuka kwamanani azo. Kubhetele uku-

qubisana nengxaki ngokuphelela kwayo kunokusebenzisa izibulali zezikrekrethi (okanye ityhefu yeempuku, njengoko kusaziwa).

### Izikhova

Ubukho bezikhova yindlela engummangaliso yokunciphisa amanani eempuku zasendle. Zonke iintlobo zezikhova kwiindawo ezilima iinkozo ziyazizingela iimpuku zasendle.



*Mema izikhova kwikhaya lakho ngokuzakhela indlu efana nale apho zinokuzandisa khona. Izikhova ziya kunceda ngengxaki yezikrekrethi. (Umthombo weenkukacha: <https://www.owlrescuecentre.org.za/Owl-House-Project/>)*

Misela iindawo zokuchopha iintaka ezifanelekileyo ngeepali ezinobude be1,4 m ukuya kwezi2,4 m ukuphakama eziza kuba nomtsalane kwizikhova nakwezinye iintaka eztya amaxhoba azo mihla le, ngoko ke, zikhawuleza zilunqande uhlaselo lweempuku zasendle. Iibhokisi zezikhova, njengeze zeplastiki ezaziwayo zeJoJo kunye nezo bazenzela zona abantu, nazo zingabekwa njengendawo yokukhulisela izikhova zamachokoza (isihuluhulu) kunye nezikhova ezinobuso obumile njengentliziyo.



Eyona njongo ibalulekileyo yokuthintela umonakalo weempuku zasendle kukuthintela ukunyuka kwamanani azo.



### Ukuhlakula nzulu

Ukuhlakula nzulu okungama500 mm obona buncinane kuyacetyiswa ukuba kwenziwe qho kwiminyaka emine kwiindawo apho iimpuku zasendle zingubhubhane khona ukuze unqandeke loo bhubhane. Akukho mfuneko yokuhlakula nzulu xa izicuku zazo zincinane kwaye zilawuleka.



**Le mpuku yasendle (gerbil) ayisayi kuphinda ibe yingxaki.**  
 Umthombo weenkukacha: <https://www.agtag.co.za/category/14/post/23936>



**Iimpuku zasendle azipheleli ekonakaliseni izityalo zombona eziselula, kodwa ziphinda zitye imbewu esandul' ukutyalwa nentshulayo ngokunjalo nezityalo ezivuthwayo.**

**Izibulali zezikrethi**

Izibulali zezikrethi zingasetyenziswa ngempumelelo ukutshabalalisa iimpuku zasendle, kodwa zikhatshwa ngumngcipheko wokuba yityhefu kwizikhova, kwiintaka ezihlasela amakhoba neziwatyayo.

Asizizo zonke iityhefu ezibhaliselwe iimpuku zasendle, ngesizathu sokuba asizizo zonke eziphumelelayo ukugxotha ezi zonakalisizityalo. Kukwakho neminye imixube ekunokukhethwa kuyo efana nezithinteli ezisabumafutha, amahlalutyana (iinkozo ezityunyuziweyo) iibloko zezinamathelisi kunye nomgubo osasazwayo.

- Sebenzisa **isithiyelo esinencasa** xa ukutya okuyindalo kunqabile, njengakwiinyanga zasebusika. Oku kungawanciphisa ngokwaneleyo amanani eempuku zasendle ukuze anganyuki abe ngubhubhane ngexesha lokutyala. Isithiyelo esibekwa xa umbona okanye ingqolowa intshula, uya kuba mncinane kakhulu umtsalane nje ngoko iimpuku zasendle kuba ziza kube zisitya imbewu entshulayo.
- Akukho zibulalizikrethi zingasasazwa naphi emhlabeni. Kodwa zona zineda ngokuba **umgubo onomkhondo olandelwayo** awunxulumenanga nokutya. Igalelwa emingxunyenini ize inamathele eboyeni bempuku yasendle xa igqitha. Iyawuginya umgubo (oqulethe isithako esisebenzayo), *icoumatetral*) xa izikhotha.
- Ukuba imingxuma iyagqunywa emva kwemini okanye matshona, ifanele inciphe nge10% imingxuma emitsha ngentsasa elandelayo. Emva koko uya kuba ufaka umgubo onomkhondo olandelwayo kwimingxuma emitsha kanti oko kuya kulondoloza iindleko zakho, ixesha nomsebenzi.
- Isithiyelo esinye ngesibulalisikrethi esifanelekileyo sifanele ukuwatshabalalisa ngokwaneleyo amanani eempuku zasendle, ukuze izikhova nezinye iintaka ezitya amakhoba zifumane ithuba lokulawula ezishiyekileyo.

**Isithiyelo sezinc phosphide**

Isithiyelo sezinc phosphide sisebenza kakuhle kakhulu, kwaye mncinane kakhulu umngcipheko waso wokubangela ityhefu apho ibingafuneki khona kuba igesi yephosphine ebulala isilwanyana idibana nomongomoya ibe yiphosphoric acid. Kungasetyenziswa neepilisi zealuminium phosphide, kodwa ngenxa yexabiso lazo eliphezulu, ingasetyenziswa kuhlaselo olungephi kuphela. Nangona kunjalo, kulumkele ukuba maxa wambi iimpuku zasendle azifuni kutya nasiphi esinye isithiyelo solunye uhlobo. Kwimeko enjalo, kungasetyenziswa intwana yomgubo kuphela.

**Tyala isityalo sesithiyelo**

Umgaqo ozigcina ngaphandle iimpuku zasendle xa kukho okulinyiweyo, kukutyala isiza esishinyeneyo esinobubanzi bemitha besityalo sesithiyelo. Kungaba siso nasiphi isityalo esintshula nombona okanye ingqolowa nesinika iimpuku ukutya okongezelelweyo ukuze zingatyi isityalo esitsha.

**UKUZIPHATHA NGAMAXESHA OKULIMA**

Kwiindawo ezinemvula yasehlotyeni, iimpuku zasendle zikhangelale ikhusi kunye nokutya ukususela ekupheleni kukaAgasti. Abalimi bafanele ukuhlola amasimi ukuze bafumanise okunokuba kwenziwa ziimpuku zasendle. Ukuba kufumaniseke imingxuma emasimini ekupheleni kukaSeptemba, kufanele kuthathwe amanyathelo okuzitshabalalisa ukuze kuthintelwe ukunyuka kwamanani azo.

Isithiyelo singasetyenziswa ukuba kukho ishumi lezikwere zemitha ezingenanomngxuma omnye, kodwa ukuba kukho ukushinyana okungangomngxuma omnye ngemitha nganye esisikwere, kuceutyiswa ukuqubisana nendawo echaphazekileyo yentsimi ngokuhlakula. Ukuba akunjalo, umntu uya kushiywa lixesha lokuba angenza nantoni ukuze athintele umonakalo oxhalabisayo. Kaloku zona zilinda ide intshule imbewu apho kukhula khona amagqabi amabini, kuze emva koko zilume amagqabi zize zitye imbewu ethambileyo.

Kwiinyanga zasebusika, kufanelekile ukusebenzisa into efana nomxokelelwano wesithiyelo seempuku zasendle ezifumene ikhaya elikhuselekileyo emasimini. Kuba lula ukuba zitye ezi zithiyelo kuba kunqabile ukutya okuyindalo. Oku kuya kuba nefute elikhulu ngokwaneleyo kumanani azo ukuze uhlasele lungabi ngubhubhane ngexesha lokulima. ■



**UGQ GERHARD VERDOORN,**  
**UMPHATHI WEMISEBENZI NAMA-**  
**GOSA, CROPLIFE SA**

# NCIPHISA IILAHLEKO ZOKUVUNA

**N**ANGONA ZIYA KUSOLOKO ZIKHONA IILAHLEKO ZOKUVUNA, UMNTU UFANELE UKUZAMA UKUZINCIPHISA. UKUPHUMEZA IILAHLEKO EZINGEKHOYO, UMATSHINI WOKUVUNA UBHULA UFANELE UKUHAMBA NGESANTYA ESIPHANTSI KANGANGOKUBA KUBE NGATHI AWUSAYI KUGQIBA UKUVUNA NGEXESHA. ISITSHIXO KUKUZUZA ULUNGELELWANO PHAKATHI KWESANTYA ESIFANELEKILEYO SOKUSEBENZA NOKUNCIPHISA IILAHLEKO UKUFIKELELA KUMANQANABA AMKELEKILEYO.

Khetha owona mhlanganisela uyifanele kakhulu ifama yakho ukuze kuncitshiswe iilahleko zokuvuna ujongilanga neemboty zesoya. Kubalulekile ukulima uluhlu lwemihlanganisela yeemboty zesoya nezikajongilanga ezinobude bokukhula obahlukileyo obukwaziyo ukuziqhelanisa nendawo leyo. Oku kuya kulolula ithuba lokuvuna ukuze kuvunwe yonke imihlanganisela ngamaxesha afanelekileyo kanti kuya kunciphisa neelahleko zezityalo.

Iilahleko ezamkelekileyo zokuvuna ujongilanga zimalunga ne3% ukuya kwi5% yesityalo. Malunga neemboty zesoya oko kuphantse kube yi2% ukuya kwi4% yesivuno esinesakhono sipehelele phantsi kweemeko ezilungileyo zokuvuna.

## UKULINGANISA IILAHLEKO ZOKUVUNA

Phambi kokujonga indlela onganciphisa ngayo iilahleko zokuvuna, ufanele ulinganise kwaye uhlole apho zinokwenzeka khona iilahleko. Oku kuya kukuvumela ukuba ubale iilahleko nalapho imbewu ilahleke khona.

Okuqhelekileyo kukuba iilahleko zenzeke kwiinkalo ezine – iilahleko zaphambi kokuvuna, iilahleko kwisixhobo esiyintloko, iilahleko zokubhula ngomatshini kuze kubekho neelahleko zokulayisha nezothutho lwesityalo. Kubalulekile ukulinganisa yonke indawo ukuze kwenziwe uhlehlengiso oluyimfuneko.

Ukulinganisa ilahleko, kubalulekile ukubala iipete ngemitha nganye esisikwere. Oku kungenziwa ngokubeka iibhodi zemitha-ephendaphindwe ngemitha nje emva kokuba kudlule intloko kamatshini. Bala iipete ezingaphezu nangaphantsi kweebhodi, uze uyiphindaphinde ngomyinge wobunzima beepete ukuze ubale ilahleko ngehektare nganye.

Qinisekisa ukuba zonke iintloko zikajongilanga nemidumba yeemboty zesoya zibhulwa zide zicoceke. Njengesikhokelo esingacwangciselwanga, imbewu eli100 ngemitha esisikwere (kuquka imbewu engabhulwanga) ilingana phantse ne100 kg/ngehektare malunga nojongilanga. Ngezi nkcukacha kungenziwa uhlehlengiso olungqaliswayo.

### Iilahleko zaphambi kokuvuna

Apha kulapho ilahleka okanye ichitheka khona imbewu phambi kokuvunwa ngomatshini wokuvuna emva kwexesha, okanye ngenxa yokukhuhlana kweentloko emoyeni, okubangela ukuphuncuka kwayo umatshini wokuvuna ungekasivuni isityalo. Oku kungabangelwa ziintaka okanye izidalwa ezincancisayo ezitya imbewu, izityalo eziwayo kanti neentloko zazo azikacholwa ngomatshini wokuvuna ubhula emva kwethuba, okanye xa iintloko zikhuhlana emoyeni, kuze oko kubangele ukuphuncuka kwembewu.

Iilahleko zaphambi kokuvuna zingancitshiswa ngokulungiselela ukuvunwa kwesityalo xa seyilungele ukuvunwa kuze oko kuqosheliswa ngexesha. Ukulinda ukuba imbewu ide yome kakhulu kwandisa umngcipheko weelahleko zaphambi kokuvuna, ngoko ke,

kuphucuke gabalala ukuvuna nokubhula xa amanqanaba okufuma ephuzulu. Kukwabalulekile nokuvavanywa kweesampulu rhoqo ukuze kufunyaniswe ipesenti yokufuma kwandule ukuqaliswa xa ipesenti yokufuma ihambelana nemithetho yezityalo.

### Iilahleko zentloko kamatshini

Imbewu, iintloko nemidumba kuyalahleka kwintloko kamatshini wokuvuna ubhula ize ingabuyiseleki kamatshini. Inqanaba leelahleko lixhomekeke kwizakhono zomqhubi kamatshini wokuvuna ubhula, kwimeko yesityalo nakuhlobo lwentloko esetyenziswayo kamatshini. Ngamanye amaxesha indlela eqhuba ngayo intloko kamatshini ingaphuculwa kangangoko, lula ngokunciphisa isantya sokuya phambili nangokuqinisekisa ukuba intsimbi esikayo ikwimeko efanelekileyo. Kungaluncedo kuwe ukuba ube nomonde ngethuba lokuvuna.



Iilahleko zaphambi kokuvuna zingancitshiswa ngokulungiselela ukuvunwa kwesityalo xa seyilungele ukuvunwa kuze oko kuqosheliswa ngexesha.



Inkoliso yeentlobo zeentloko zoomatshini iya kumelana nojongilanga kunye neemboty zesoya xa zisetwe ngokuchanekileyo, kwaye ukutyala imali kwiintloko zoomatshini eziphucukileyo kungaba lutyalo-mali lobulumko. Ngoku kukho imifuziselo eyenziwe kakuhle nenamabaxabiso abonwa njengafanelekileyo ojongilanga neemboty zesoya.

Malunga nokuvunwa kukajongilanga, injongo ephambili kukuqokelela iintloko ukuze zibe mbalwa izikhondwana ezingena kumatshini wokuvuna ubhula ukuze ibe ncinane imbewu elahleka ngenxa yokucumka. Oku kungaphunyezwa ngokuphakamisela intloko kamatshini wokubhula phezulu ngokwaneleyo ukuze uthathe iintloko lo gama unciphisa inani lezikhondwana ngenjongo yokucina iintloko zingenzakalanga – ngoko ke zigqitha kumatshini wokuvuna ubhula ziphelele okanye abe mbalwa amaqhekeza amakhulu. Intloko enye kajongilanga iqulethe imbewu eninzi, ngoko ke, kuya kunceda kakhulu ukuqinisekisa ukuba zonke zidlula kumatshini wokuvuna nokubhula ukuze kunciphe iilahleko zokuvuna ojongilanga.

Injongo malunga neemboty zesoya kukuqokelela imidumba emininzi kangangoko, kodwa izikhondwana ezingena kumatshini wokubhula zibe mbalwa kakhulu ukuze ilahleko yembewu ngokucumka ibe ncinane kangangoko. Oku kungaphunyezwa ngokwenza oku kulandelayo:

- Ukunciphisa isantya sakho sasemhlabeni.
- Ukubeka intsimbi yokusika kufutshane kangangoko emhlabeni.
- Misela iminwe yokucholachola kancinane kwisixhasi esingasemva ukuze zitsalele izityalo ezinxinanisekileyo ngamandla kwintsimbi esikayo. Cutha igophe leminwe ukuba izityalo zijinga phezu kwebhobhini ejikeleza ngokucutha.
- Yisa iasi yebhobhini phambili ukuze ibe phambi kwentsimbi esikayo ngama22,5 cm ukuya kuma30 cm.

### Iilahleko zokubhula ngomatshini wokuvuna

Zakuba iintloko zikajongilanga okanye imidumba yeemboty zesoya ziqokelelene kumatshini wokuvuna, umgqomo ongachanekanga, imimiselo egobongqo nezihluzi zingakhokelela kwiilahleko ezigqithisileyo. Oku kubangelwa kukuba imbewu ayibhulwa ngendlela

# ujongilanga neemboty i zesoya

encomekayo ukuze iphume kwiintloko okanye kwimidumba, okanye ivunyelwe ukudlula emva ize ikhutshwe kunye nomququ.

Malunga nojongilanga, injongo kukufumana intloko ebhulwe ngokupheleleyo ingene kwisithuthi sesitroyi iliqhekeza elipheleleyo. Nangona oomatshini bokuvuna abahlukileyo baya kuba nemimiselo eyahlukileyo efaneleke koojongilanga, isikhokelo gabalala kukuvuna ngesantya sokuya phambili esilungileyo, ukusebenzisa isantya esicothayo sesilinda, iindawo ezigobongqo zivuleke kakuhle, isantya sibe phantsi emoyeni kuze kuvunwe xa ukufuma kwembewu kwehlile.

Malunga neemboty i zesoya, iingxaki zokwahlukanisa ziba sisi-phumo sobukho beendawo ezonakeleyo kwisilinda okanye kwiphiko likamatshini, kunye nesilinda engafanelekanga okanye kumgama okhokelela kwiphiko okanye imimiselo yesantya. Izixhobo ezahlu-kanisayo zifanele ukuba kwimeko elungileyo yokusebenza ngeemboty i zesoya ezinezikhondo eziluhlaza okanye ezomeleleyo. Uhlengahlengiso olwenziwe kwisilinda okanye kumgama okhokelela kwiphiko nakwisantya konke sisenzo solungelelwaniso phakathi kolwahlukaniso lweelahleko, ukonakala kwembewu, neemboty i eziqhekekileyo. Yenza uhlehlengiso olunye ngexesha uze uhlale ukuceka kweenkoko etankini ukuze ufumanise inkqubela yakho ekunciphiseni ulwahlukaniso lweelahleko nokulunyusa kangangoko udidi lwembewu.

Imbewu kajongilanga kukukhanya, ngoko ke isantya sefeni emoyeni masibe phantsi – xa siphezulu kakhulu, siya kuphephethela imbewu ngaphaya kwesihluzi, ize imbewu iqabele ukuya kwisixhobo sokubhola ukuze ibuyele kwisilinda kanti kungenzeka ihlubeke. Misela ifeni ukuze kudaleke umoya ohambayo owaneleyo kuphela ukuze umququ uhlale undanda kwisihluzi.

Isantya somoya naso sibaluleke kakhulu malunga neemboty i zesoya kanti amathuba ohlolo olwenziwa rhoqo ayadingeka ukunisekisa ukuba iimboty i zesoya aziphethethwa okanye kubekho izinti ezininzi kakhulu kumgqomo weenkoko. Misela ifeni ukuze kudaleke umoya ohambayo owaneleyo kuphela ukuze umququ uhlale undanda kwisihluzi.

Gqalisela kwisantya sikamatshini wokuvuna esimalunga ne5 km ukuya kwi8 km ngeyure. Ukuba isiqulatho sokufuma kwembewu siphantsi, oko kuthetha ukuba kufuneka kusetyenziswe isantya esicothayo ukuze kuncitshiswe ilahleko yokucumka, kodwa isantya esiphezulu singasetyenziswa xa imbewu inesiqulatho sokufuma esiphezulu.

## AMACEBISO APHEZULU NGOKUVUNWA KUKAJONGILANGA NEEMBOTYI ZESOYA

- Musa ukulinda ukuba isityalo side some kakhulu.
- Zikhwebule kulangazelelo lokuxhesha umatshini wokuvuna – umonde yintshinga.
- Gcina intloko phezulu ukuze unciphise inani lezikhondwana ezigqitha kumatshini wokuvuna.
- Yenza uhlehlengiso olunye ngexesha, emva koko qwalasela ilahleko emva kotshintsho ngalunye.
- Sebenzisa intloko egcinwe kakuhle ukwenzela ujongilanga neyeemboty i zesoya.
- Qinisekisa ukuba oomatshini baneentambo ezirhuqa emhlabeni – amatsheyini akholisa ukusebenza kakuhle. Oku kuya kunceda ekunciphiseni iingozi zemililo.
- Nyathela uthuli phantsi qho ukuze kunciphe iingozi zemililo.
- Funda incwadi yoqeqesho lokwenza umsebenzi phambi kokumisela umatshini wokuvuna. ■



PIETMAN BOTHA,  
MOTHUSI YA IKEMETSENG WA TEMO

PROUD TO BE A PART OF  
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PICTURED:  
Farmer: Jeff Hehla  
Farming Entity: Sutherland Farm  
(owned by Jonathan Biggs)  
Area: Ixopo, KwaZulu-Natal  
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Andrew du Plessis



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# Qinisekisa intengiso yeenkozo EYIYONA ILUNGILEYO

**K**WINQAKU ELALIPAPASHWE NGOMATSHI (ZIKHUSELE KWILAHLEKO UKUZE ULAWULE IMINGCIPHEKO YAMAXABISO), UGQALISELO BELUKWIZINTO ONOKUZIKHETHA MALUNGA NENTENGISO, KWACHAZWA IINGCEBISO EZAHLUKENEYO, IINDLELA EZISEBENZA NGAZO KWANIKWA NEMIZEKELO ESEBENZISEKAYO. ELI NQAKU LIZA KUHLOLA UBUCUKUBHEDE BOKUTHENGISA NGENDLELA YOBUSO NGOBUSO KUJOLISWE KWIMIBA EBALULEKILEYO ENGUNDOQO KWIINTENGISO ZOBUSO NGOBUSO NAKWEZEENGQIKELELO ZANGAPHAMBILI.

Eli nqaku lisuka kwingqiqo ngeendleko ngokwendawo olusuka kuyo uthutho ukuya kwifuthe lazo kwisiseko, ekugqibeleni, kwindlela ezinengalelo ngayo kwixabiso lentengiso yobuso ngobuso.

## IINDLEKO NGOKWENDAWO OLUSUKA KUYO UTHUTHO

- Iindleko ngokwendawo olusuka kuyo uthutho zigqaliselwe ekufumaniseni ixabiso leeneko ezithile ukuya kwiingqiqo ezahlukeneyo.
- Ubalo lwendawo olusuka kuyo uthutho luquka, phakathi kweminye imibandela, iindleko ezenziwe luthutho lweenkozo ukusuka kwindawo ethile ukuya eRandfontein.

Kwabo bantu batsha kulo mba, basenokuyifumanisa inkcazelo ilambatha, kuze kufuneka ingcaciso ethe vetshe. Ngeliya xesha bekuchithachithwa umjelo wentengiso olawulwayo, bekubalulekile ukuba iintengiso zeeneko zaseMzantsi Afrika ziphuhlise inkqubo entsha yentengiso. Oku kukhokelele kuphuhliso lweentengiso eziyilwayo nakwizixhobo ezisetyenziswayo.

Okubaluleke kakhulu ngophuhliso lweentengiso eziyilwayo zeeneko lulawulo lokulungelelanisa malunga neendawo zentengiso. Ngethuba lophuhliso lweekhontrakthi eziyilwayo, iindawo zobonelelo loguquguqulo beziseRandfontein. Nangona kunjalo, uguquguqulo lweenkozo luphuhlele kwiindawo zobonelelo ezikulo lonke ilizwe kanti iinkozo aziphindanga zathuthelwa kwindawo enye.

Utshintshiselwano lweMpahla lwaseGoli (The Johannesburg Stock Exchange - JSE) lusebenzisa ummiselo wolungelelaniso, oluquka iindleko zothutho oluya eRandfontein, xa kubalwa iindleko zothutho ngokwendawo olusuka kuyo oluya kwisisele ngasinye zize ezi nkukacha zenziwe zifumaneka eluntwini kwiwebhusayithi yalo. Njengesiphumo soko, isisele ngasinye sifumana iindleko ezizezalo ngokwendawo olusuka kuyo uthutho. Umzekelo, isisele saseBothaville sineendleko ngokwendawo olusuka kuyo uthutho zamaR290/ngetoni, kanti ezaseKoster ngamaR205/ngetoni kuphela. Ezi ndleko zinegalelo kwisiseko, galelo elo linefuthe kwixabiso lentengiso yobuso ngobuso.

## YINTONI URHWEBO OLUSISEKO?

Umngcipheko osisiseko malunga norhwebo lwengqikelelo yangaphambili kushishino lweenkozo uphathelwe kwimeko yokungabikho kozinzo okanye kokunokwenzeka phakathi kwexabiso lemali eyikheshi (*spot*) loqobo lweenkozo kwintengiso yendawo kunye nexabiso leekhontrakthi zeengqikelelo zangaphambili ezihambelana nalo. Ngokwenkcazo elula, ubandakanya umngcipheko onokutshintsha wonxulumano phakathi kwexabiso lemali eyikheshi (*spot*) kunye nexabiso lengqikelelo yangaphambili.



Nantsi ingcaciso:

- **Ixabiso lemali eyikheshi:** Oku kwalatha ixabiso langoku lentengiso yoqobo lweenkozo, elimele okunokuhlululwa ngumntu okanye akufumane xa ethenga okanye ethengisa uqobo lwemveliso.
- **Ixabiso leengqikelelo zangaphambili:** Oku kwalatha ixabiso ekuvunyelwene ngalo namhla ngekhontrakthi yeengqikelelo zangaphambili zeeneko, eziya kusiwa kuloo ndawo ize intlawulo yenziwe mva.
- **Isiseko:** Oku kumele umahluko phakathi kwexabiso lemali eyikheshi kunye nexabiso leengqikelelo zangaphambili, ebalwa njengexabiso lemali eyikheshi xa kuthatyathwa kuyo ixabiso leengqikelelo zangaphambili.



Umngcipheko osisiseko uvela ngenxa yokungaqhubi ngokuhambelana okugqibeleleyo okunokwenzeka kwexabiso lemali eyikheshi nexabiso leengqikelelo zangaphambili.



Umngcipheko osisiseko uvela ngenxa yokungaqhubi ngokuhambelana okugqibeleleyo okunokwenzeka kwexabiso lemali eyikheshi nexabiso leengqikelelo zangaphambili. Imibandela eliqela efana neendleko zothutho, iindleko zolondolozo, intengiso yendawo neenguquguquko zentengo, kunye nezinye iimpembelelo zinganefuthe ekulahlekeni kozinzo kwisiseko. Kubalulekile ukukhumbula ukuba amaxabiso ekhontrakthi yeengqikelelo zangaphambili afumana ixabiso lawo kwintengiso yemali eyikheshi.

Umzekelo, qwalasela imeko apho umlimi asebenzisa khona ikhontrakthi zeengqikelelo zangaphambili ukuze azigcinele ixabiso lesivuno sakhe seenko. Ukuba isiseko asigungqi kangako, uya kufumana ixabiso leengqikelelo zangaphambili xa kusisiwa iinkozo zakhe. Nangona kunjalo, ukuba isiseko siba banzi (siyanda) okanye siba mxinwa (siyancipha) ngexesha lokusiwa kwempahla, isixa osifumanayo singaphantse silingane neso ubusilindele kwasekuqaleni.

## INGQIQO NGENTENGISO YOBUSO NGOBUSO

Ukubonisa iinguquguquko ezenzeka kwintengiso yobuso ngobuso, kuza kunikwa umzekelo oza kuphucula ingqiqo ngazo:

- Cinga ngemeko apho umlimi evune iinkozo waze wakhetha ukuzigcina ukuze azithengise ethubeni. Xa lifika ixesha lokuthengisa,



umlimi ufumanisa ukuba isixa esigciniweyo asikwaneli ukufezekiswa kwekhontrakthi epheleleyo.

- Okunye okunokwenziwa kukuthengisa iinkozo kwintengiso yobuso ngobuso. Akuba ezidibanise nomthengisi wakhe weenkozo, umlimi ufunda ukuba esinye isisele sinesiseko samaR50/ngetoni, lo gama esinye sinesiseko samaR30/ngetoni. Oku kuthetha ukuba ixabiso elifunyanwa ngumlimi liya kuba lixabiso lentengiso elikhoyo nekuthatyathwe kulo isiseko.
- Okusisiphumo, kukuba isisele esinesiseko esinganano siluncedo kumlimi njengoko simnika ixabiso lemali elithe chatha ngesixa esilinganayo seenkoko ezisiweyo.

### ISIPHELO

Elokuphetha, ngokumanyanisa imiba emibini echazwe ngaphambili – eyile, ixabiso ngokwendawo olusuka kuyo uthutho kunye norhwebo olusisiseko – indima ebalulekileyo edlalwa ngumba ngamnye kwintengiso yeenkoko yobuso ngobuso ingacaca. Ukuqaphela nokuyiqonda le miba kuya kusomeleza isakhono sokuthengisa iinkozo ngokuncomekayo kwaye siqonde neenguqunguquko zentengiso. ■



**JOHAN TEESEN, INGCALI  
YEZOQOQOSHO ENGUMFUNDI  
KULIMO, EGRAIN SA**

## SELISONDELE IXESHA LENAMPO YAMA2024

Usuku lweSivuno lweNAMPO lwaseGrain SA luphuma phambili kwikhalenda yolimo. Apha abalimi banokufumana amava ngokuzibonela ubuchwepheshe banamhla kunye neemveliso abanokuzifumana kushishino lokufama kwisihlandlo esinye kuphela. Lithuba elingummangaliselo lokuzidibanisa nabanye kwicandelo lolimo.

Yindlela yokuzikhupha nosapho lonke nokonwaba njengoko kukho abantu bemiboniso engaphezu kwama700 neemveliso zabo ukususela kuyo yonke into edingwa ngumlimi ukuya kuko konke esemaphupheni enkosikazi yomlimi – kaloku kukho izinto zomzi ukuya kubukhazikhazi bezivatho zokuzihombisa. ■

**Ungaphoswa – ngomhla we14  
ukuya kowe17 kuMeyi  
ngowama2024!**

# Imbuyekezo yedizili – amacebiso asebenzisekayo

**K**UBALULEKE KAKHULU UKUBA ABALIMI BAZIGCINE NGQONGQO IINGXELO ZOKUSEBENZISA KWABO IDIZILI. UMTHETHO OMISELWEYO WEERHAFU KWIINTENGO ZAKWAMANYE AMAZWE (WENOMBOLO YAMA91 YOWE1964) UFUNA, PHAKATHI KWEZINYE IZINTO, UKUBA KUBEKHO INCWADI YEENKCUKACHA NGENDLELA EKUSETYENZISWE NGAYO IDIZILI.

Njengoko ingekabikho incwadi yeenkcukacha esesikweni evela eSARS, abalimi bafanele ukugcina iinkcukacha ezizezona zincinane ezifuneka ngokomthetho.

### EZINYE ZEZIKHOKELO NAMACEBISO ASEBENZISEKAYO

1. Faka ibango lembuyekezo yedizili ngokwendlela oyisebenzise ngayo kungabi ngokokuyithenga kwakho.
2. Ngqala kwaye ucacise kangangoko malunga nemisebenzi. “Ugabalala’ akamkelekanga.
3. Enyanisweni, gcina iingxelo ezifanelekileyo ngemisebenzi yezi-gadla nezithuthi ezisebenzisa iindlela ezinetha. Ngaphaya koko, kufumaniseke ukuba kuluncedo ukugcina incwadi yeenkcukacha malunga nezithuthi eyahlukanisiweyo kuleyo yezigadla.
4. Yibonise ngokucacileyo imisebenzi yabucala engeyiyo eyoshishino.
5. Uthutho lwabasebenzi aluyomfanelo.

### NANGA AMACEBISO AMBALWA NGOKUGCINA IINGXELO NGEENKCUKACHA ZAKHO:

1. Umhla ekongezwe ngawo idizili.
2. Isixa sedizili esongeziweyo.
3. Inkcazo ngesithuthi.
4. Okubhalwe ngesigcinixesha okanye ngeekhilomitha phambi nasemva kokusisebenzisa.
5. Isizathu sokusetyenziswa kwedizili. (Kubalulekile ukuqaphela ukuba yeyiphi imisebenzi enemfanelo yembuyekezo yedizili).

### INCWADI YEENKCUKACHA

Yenza isikeni sekhawudi yeQR ukwenzela imizekelo yencwadi yeenkcukacha efunyanwa kwiSARS: ■



**CORNÉ LOUW, INTLOKO: EZOQOQOSHO EZISEBENZISEKAYO &  
IINKONZO ZAMALUNGU, EGRAIN SA. LIPAPASHWE KWISIKHOKELO  
NGEENKOZO SASEGRAIN SA.**

# Amacebiso ngokulwa imililo yasendle efama

**MILILO YASENDLE IXHAPHAKILE EMZANTSI AFRIKA, NGAKUMBI NGAMAXESHA OKULIMA EMBALELA. LE MILILO INGABANGELWA YIMIBA YENDALO EFANA NOKUBETHA KOMBANE OMENYEZELAYO, KODWA IKHOLISA UKWENZIWA ZIZENZO ZABANTU EZIFANA NEMILILO YABO ENGAHOYWAYO, IZISHUNQU ZEESIGARETHI EZILAHLOWAYO, ABANTWANA ABADLALA NGEMATSHISI OKANYE NGOMLILO.**

Imililo yasendle ikholisa ukwenzeka ukususela ngoMeyi ukuya ngo-Okthobha kwiindawo ezisemantla zelizwe kwakhona ukususela ngoNovemba ukuya kuAprili kwiindawo zelizwe ezisemazantsi. Ibangela intshabalalo enokukhokelela kwiilahleko zomlimi zamawaka eerandi. Bonke abaninimihlaba (nabalimi) banyanzelekile ukuba bathintele kwaye bayilwe imililo yasendle. Ezi zinyanzelo zichazwe ku*Mthetho weSizwe ngoMlilo waseNdle namaHlathi (uMthetho wenombolo ye101 wonyaka we1998) - National Veld and Forest Fire Act (Act no. 101 of 1998).*

Injongo yalo Mthetho kukuthintela nokubhangisa imililo yasendle, yamahlati neentaba kuMzantsi Afrika uphela. UMthetho ubonisa amaziko ahlukeneyo, imigaqo nezenzo kwimpumezo yale njongo.

Yintoni ofanele ukuyenza xa kufunyaniswa umlilo onokubangela ingozi? Akufanelanga kuma kufuphi nomlilo wasendle uwubukele unwenwela kwifama yakho. Yenza konke okusemandleni akho ukuwulawula okanye ukuwucima. Naxa kunjalo, khumbula ukuba imililo iyingozi kwaye ayicingeleki kwangaphambili. Yiba soloko ulumkile kwaye uzikhusele wena nako konke okwakho. Abaninimihlaba bafanele ukwazisa umbutho wokhuselo emililweni ongowona ukufutshane kubo kwangoko ngokunjalo nabamelwane babo.

## ZIMISELE

Zininzi iindlela onokuzizama zokuthintela imililo yasendle. Omnye wemigaqo ebalaseleyo yothintelo lwemililo kukwenza amalungiselelo amabala okunqanda umlilo. Yenza umcu okwaziyo ukumelana nomlilo ngaphandle kwamagqabi, inkunkuma okanye izinto ezivutha lula zibe kude endlwini yakho kangangeemitha ezi10. Unako nokwenza amabala okunqanda umlilo kumda wempahla yakho engashenxisekiyo. Xoxa ngale mibandela nabamelwane bakho nize nenze isicwangciso kunye ukuze amabala okunqanda umlilo enziwe kwindawo efanelekileyo.

Qiniseka okulandelayo:

1. Amabala okunqanda umlilo mawabe made kwaye abe banzi ngokwaneleyo ukuze anqande umlilo unganwenwi.
2. Awafanelanga kubangela ukhukuliseko lomhlaba.
3. Qinisekisa ukuba awanazinto zivutha lula.
4. Amabala okunqanda umlilo mawagcinwe ngalo lonke ixesha lokulima.

### Nanga amanye amacebiso:

- Gcina impahla yakho engashenxisekiyo ngokuthena imithi namatyholwana, kusuke onke amagqabi afileyo nenkunkuma, ngokunjalo, kanti neegatha zakho mazicoceke.

- Luluvo olulungileyo ukujoyina umbutho wendawo yakho wokhuselo lomlilo okanye iqela leWhatsApp kuluntu ophila phakathi kwalo ukuze waziswe ngemililo ekwindawo yenu. Yiba soloko uneenombolo zemeko yonxunguphalo eziquka abantu onokuqagamshelana nabo abanoncedo.
- Zazi iindlela ezahlukeyo zokuphuma kwindawo yakho kuba kaloku umlilo unganwenwela kwifama yakho.
- Yenza isicwangciso onokusilandela malunga nemfuyo yakho xa kunokuvela umlilo.
- Yiba nezixhobo eziyimfuneko, impahla yokuzikhusela kunye nabasebenzi abafumene uqeqesho lokucima imililo. Gcina izinto zokunqanda imeko yonxunguphalo, kuquka iimasikhi kunye/okanye oomatshini bokuncedisa ngokuphefumla ezihluza iingqakumbana ezingcolileyo ezisemoyeni eniwuphefumlayo.
- Gcina umthombo wamanzi ahandle uzele. Isanti nayo ngumgaqo osebenza ngokuncomekayo ekulawulweni komlilo ukuba amanzi awakho kufutshane.



Bonke abaninimihlaba bafanele ukuba nezixhobo zokulwa umlilo efama.



## GCINA IZIXHOBOKUSEBENZA

Bonke abaninimihlaba bafanele ukuba nezixhobo zokulwa umlilo efama. UMthetho uthi izixhobo mazifikeleleke lula noko kwiimeko ezinjalo.

Nazi ezinye izikhokelo ezinokuba luncedo xa kukho umlilo:

- 'Izifunxi' zomlilo zemicu yamabhanti erabha okanye iingxowa ezizimanzi. Ukubetha umlilo ngale micu yamabhanti okanye ngeengxowa ezizimanzi kugxotha umoya (ioksijini) odingwa ngumlilo ukuze uvuthe. Xa kungekho moya waneleyo, umlilo uza kulonziza ude ucime ngokucutha.
- Izikophu, iihariki nemihlakulo ingasetyenziselwa ukwenza amabala okunqanda ukunwenwa komlilo. Icala yindawo ecocekileyo emhlabeni apho kungekho nto inokuvutha. Izikophu neehariki nazo zingasetyenziselwa ukususa ingca nezikhondwana ezinokutsha lula. Kunganceda futhi nokucima umlilo ngesanti nangomhlaba.
- Kungasetyenziswa neempompo zeetanki eziphathekayo zokucima umlilo ukuze zimanzise izityalo nengca. Zingaluncedo xa kuqwalaselwa amalangatye amancinci emva kokuba ucinyiwe umlilo.
- Inqwelo erhuqwayo enetanki yamanzi nenokuhlonyelwa emva kwetretara okanye iveni xa oko kunokwenzeka. Qinisekisa ukuba izikhongozelo zamanzi zigcwaliswe ngamanzi. Makubekho nomthombo onempompo enokutshiza amanzi.
- Isixhobo esisicimimililo. Ziyashiyana ngobukhulu nangeentlobo zazo ezifumanekayo – ezomgubo, ezegesi eyi-isile (CO<sub>2</sub>) nezogwebu.

## OKUPHAMBILI LUKHUSELEKO

Khumbula, ukhuseleko lusoloko luphambili xa kukho umlilo wasendle. Sukuphakuze kwaye landela imiqathango efanelekileyo. Qinisekisa ukuba izilwanyana zakho zikhuselekile futhi uzame ukuthintela umlilo unganwenweli kubamelwane. Xelela abeenkonzo zemo yonxunguphalo ngomlilo wasendle, umbutho wokhuselo emleni kunye nabamelwane msinya kangangoko kunokwenzeka.

Nanga amanye amacebiso:

- **Impahla yokuzikhusela** ibalulekile. Izinxibo ezinjengeebhutsi, iihelmethi kunye neeglavu zenzelwe ukukhusela abo balwa nomlilo. Izixhobo zokukhusela ukuphefumla (PPE) kwabacimimlilo ekuphefumleni umsi nezinto ezizikhemikhali ezibangelwa ngumlilo.
- **Unxibelelwano** sisitshixo sempumelelo ekulweni umlilo ovuthuzayo. Kufuneka uyazi into eyenziwa ngumlilo ngawo onke amaxesha. Oku kungenzeka ngokusebenzisa inkqubo yerediyo esebenza ngokuphakelana kwamacala amabini endawo yakho okanye amaqela onxibelelwano loluntu. Ukuba uzibona uvalelekile, sebenzisa inkqubo yakho yonxibelelwano ukuze abantu bakwazi okwenzekayo futhi uxele nendawo okuyo. Ukuba kuyenzeka, sebenzisa ukukhanya okuya kunceda abantu ukuba bakufumane.
- Icebiso elilungileyo xa kusiliwa nemililo kwiindawo ezinengca nohlaza olomileyo, 'kukugcina olunye unyawo ebumnyameni'. Oku kuthetha ukuba abo balwa umlilo bafanele ukubalekela emva kwiindawo (emnyama) etshileyo eyizowuni yokhuselo.
- **Zigcine unamanzi awaneleyo emzimbeni:** Sela amanzi amaninzi ukuze umzimba wakho ungalambathi ngamanzi, njengoko oku kuya kunceda umzimba wakho ukwazi ukumelana nobushushu obugqithisileyo.

## IZALATHISO

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*Luxanduva lomninimhlaba ngamnye ukuba nolwazi ngoMthetho weSizwe ngoMlilo waseNdle namaHlathi. Yenza isikeni sekhawudi yeQR ngeenkukacha ezithe vetshe.*



**LOUISE KUNZ, UMHELI  
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## IPULA IMVULA IFUMANEKA NGEELWIMI EZILANDELAYO:

isiXhosa/isiZulu, isiNgesi, iSeTswana/iSesotho.

Articles written by independent writers are the views of the writers and not that of Grain SA.

# Inkqubo eguqula ubomi babantu



**PGP**  
PHAHAMA GRAIN PHAKAMA

Farmer  
Development  
Programme

Ingxelo

## Ulwazi ngamandla

**KUBALULEKE** kakhulu ukuba umntu andise ulwazi lwakhe xa efuna ukuba ngumlimi onempumelelo. Kwinyanga kaFebruwari iqela loPhuhliso lwabaLimi linikele ngezifundo zoqeqesho ezilishumi elinesinye, ebezixhaswa yiOil and Protein Development Trust (OPDT).

Izifundo bezinikelwa ziifisi zePGP eKokstad, eMbombela, eDundee, eLouwsburg naseLichtenburg. Beziquka intshayelelo ngokulinywa kwamandongomane, ujongilanga neemboty zesoza. Bekukho abalimi abali160 ababeze kwizifundo kanti abali154 kubo baziqoshelise ngempumelelo izifundo.



*Umcebisi nomqeqeshi, uTimon Filter, unikele ngentshayeleyo yezi-fundo ngokulinywa kweemboty zesoza ePixley Ka Seme eMpumalanga. Eli qela labalimi belikuthakazelela ukufunda kwaye ngoku lungxamele ukuqalisa ngokutyalala iimboty zesoza lize lidlulele phambili kujikeleziso lwezityalo.*



*Izifundo ebezibanjelwe eBergville eDukuza bezinabantu abaneminyaka ephakathi kwama32 nama72 ubudala. Kubuzwe imibuzo emininzi esemgangathweni ophezulu. Abalimi asebekhulile bancedwa nangamava abo okwenza umsebenzi, kanti abo basebatsha baqhube kakuhle kwizifundo ezibhaliweyo.*

## Abalimi bazimisele NGOKULIMA

**AMATHUBA** otyelelo lweefama angama78 epehelele, enziwe ngenyanga kaFebruwari. Malunga nabalimi abangama25 asebekwibanga eliphambili batyelelwe liqela, kanti abanye babo bayinxalenye yeSouth African Cultivar and Technology Agency (SACTA) okanye yeprojekthi zeNkxasomali yoPhuhliso zeStandard Bank/Kgodiso.



*Umcebisi uJohan Roux utyelele ulsaac Malakoane kwisiphaluka saseLadybrand. Nangona bekome kakhulu kwaye ifuneka ngobungxamo imvula, isityalo sombona sokuqala besibonakala sithembisa.*



*Isityalo sombona somlimi uRaphael Tamsanqa Masuku sibukeka sisihle kakhulu. Umcebisi uChris de Jager unike ingxelo yokuba kutshatyalaliswe ukhula kwaza ngenxa yoko isityalo saba nesakhono esincomekayo.*



*Nangona uBadge Skosana kwisiphaluka saseMbombela efumene imvula entle, bekukho nomonakalo omkhulu wesiphango emva kwesichotho. Umonakalo wesiphango ufikelele kuma80% kwizityalo zakhe zeemboty zesoza kanti umonakalo emboneni usafanele ukuqikelelwa ngumhloli. Umcebisi uMartin Botha unethemba lokuba imbewu ayonakalanga kangako noko. ■*