

# PULA IMVULA

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IMAGAZINI YAKWAGRIN SA YOPHUHLISO LWABAVELISI



*Amandongomane mawavunwe xa ama 75% emidumba efikelele eku-vuthweni. Kulo mfanekiso kusetyenziswa umgago wokucukanisa apho izityalo zikhululwa khona ukuze zikhutshwe ngesandla emhlabeni.*

## Intshayelelo ngokulinywa **KWAMANDONGOMANE OKUSISISEKO**

**U**BUKHULU BECALA AMANDONGOMANE ASETYE-NZISWA NGABANTU NJENGEMBEWU EKRWADA, NJENGBHOTOLE YAMANDONGOMANE, IOYILE KUNYE NEZINYE IIMVELISO EZENZIWAYO. UKULINYWA KWAMANDONGOMANE OKUCHANEKILEYO KUNGANIKA ABALIMI NABATHENGI ISITYALO ESINEZONDLO EZININZI KAKHULU NESIXABISEKE NGENXA YENGENISO EPHEZULU.

Kweli lizwe, amandongomane alinywa kwiingqiqi ezifumana imvula ehlotyeni phantsi kweemeko zokunkcenkcesha nezomhlaba owomileyo. Ekuqaleni, abalimi abarhweba kancinane, ubukhulu becalo, abakwiindawo ezisemantla nezisempuma yaseMzantsi Afrika bebewalimela ukuwasebenzia kwabo amandongomane; futhi asengumthombo obalulekileyo we-zondlo kwiindawo ezisemantla KwaZulu-Natal naseMpumalanga.

Kutshanje abo balimi bangene kwisigaba sokurhweba ngokuxhaswa yimitsalane eyenziwa ngabaguquguquli bawo ukuze kuphuculwe amanani abo bawalimayo nokugcina ushishino Iwamandongomane luhila. Oku kuvule amathuba amanini amatsha oshishino anokufunyanwa ngumlimi osaphuhlayo nangumlimi orhwebabay, apho omabini la maqela ancediswa ukuze abe nobudlelwane obomeleleyo nobusebenzayo ngenjongo yokuqinisekisa ushishino olunozinzo Iwamandongomane.

Kwaqaliswa ngenkqubo yokulima amandongomane ePotchefstroom (ARC-GC) ngeminyaka yoo-1960, apho uhlolo IweSpanish-bunch Iwemihlanganisela yamandongomane lusalinywa khona nangoku (**Isazobe 1**).

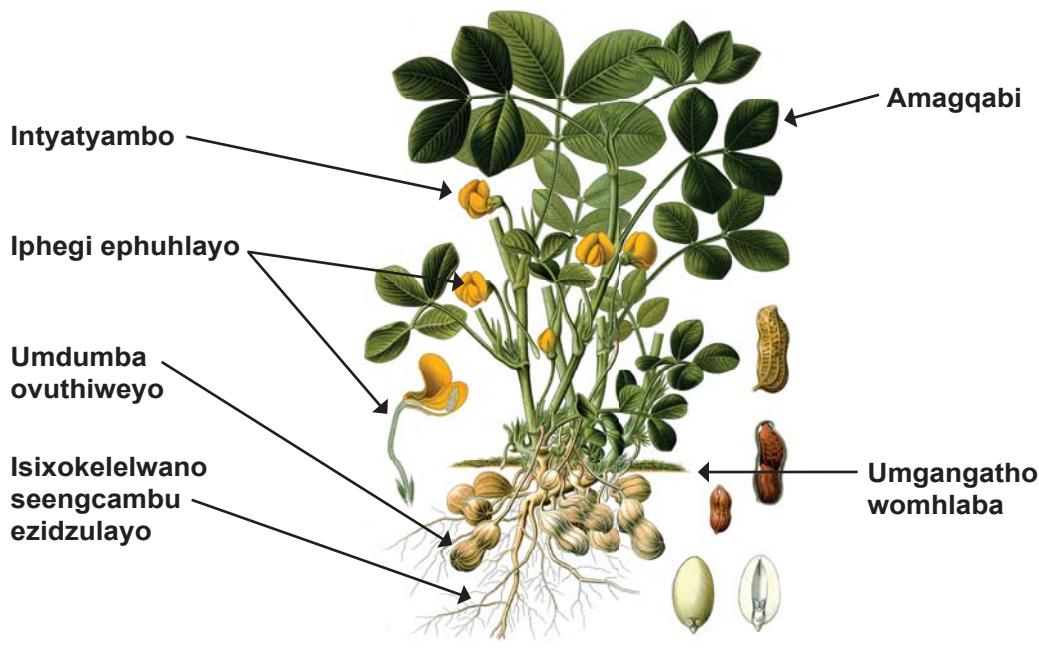
### INTUKAPHI

Amandongomane (*Arachis hypogaea* L.) ahlulwa ngokwamaqela amabini, elibizwa ngokuba yiVirginia neliyiSpanish-Valencia. Intsukaphi yamandongomane iseMelika eseMzantsi. Singatsho ukuthi ilifa lamandongomane eMzantsi Afrika laziswa ngabahambi ngolwandle

## Intshayelelo ngokulinywa...

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Umboniso wesityalo samandongomane.



nabarhwebi bamakhoboka babaPhuthukezi njengomhlanganisa weNatal-Common.

Ukubaluleka kwamandongomane kummandla wentengiso wase-Mzantsi Afrika ugxininisa ixabiso lawo esizweni nanjengemveliso ethengiswa emazweni angaphandle, ngakumbi malunga nesakhono sawo sokungenisa imali ehlabathini ukususela ngo1967. UVan der Merwe (1981) uchaze wathi abemi kwilizwe elitsha kwaNatal yakuqala baqhuba iimvavanyo zokuqala zamandongomane ngo-1853, xa umhlanganisa obusowukhona kweli lizwe kunye nohlobo IweVirginia oluthandwa ngabemi kwilizwe elitsha babesenza iimvavanyo zezi ntloblo eMzantsi Afrika.

Olu hlobo IweSpanish lutzilungele kakhulu iimeko zaseMzantsi Afrika kuba luyakwazi ukuziqhelanisa neemeko ezihselelayo zobume obulungqongileyo, lubonakala lumelana ngokuthe kratya nezifo, luxhasa umjikelo omfutshane wokukhula kwaye lubonakalisa ukungabi nalongamelo kwimbewu entsha, ngokutsho kukaHammans ngo-1994.

### UKUQALISA NGOMSEBENZI WAKHO WOKUFAMA NGAMANDONGOMANE

#### Umhlabo

Kucetyiswa ukuba imihlabo ekhethelwa ukulima amandongomane ithande ukuba nesanti. Amandongomane anesixokelelwano esidzulayo seengcambu esiphuhle ngokupheleleyo, ngokuxomekeka kuhlobo lomhlaba, singafikelela kubunzulu be-1,8 yeemitha. Imihlabo enesakhono esiphezelu sokukhupa amandongomane iba yimihlabo enzulu (kangange-1 500 mm ukuya kwi-2 000 mm), amanzi angagwantyi kuyo, yimihlabo ebomvu kunye/okanye emthubi enesanti enenxenyen enini necolekileyo yomhlaba oluvunduvunu olunesanti ukuya emhlabeni ongaphezulu ovakala njengesanti esandleni. I-pH (ye-KCl) ifanele ukuba phakathi kwe-5,5 ukuya kwisi-7.

Kubaluleke kakhulu ukulungiswa kukamndlalo wezithole. Umandlalo wezithole ufanele ukufuma, ulungelelane kwaye ube ngqindilili ukuvumela ukudibana phakathi kweengqakumbana zemihlabo nembewu ukwenzele ukuntshula okulungileyo nokupuhla kweengcambu. Imihlabo emihle kakhulu ekulinyweni kwamandongomane yiAvalon, iBainsvlei, iCloverly, iHutton neGlencoe. Izithintelo eziphathekayo ziqlaka umhlabo osidibi, imihlabo eqinileyo okanye iimaleko ezigangathekileyo ezifanele ukuthintelwa kuba zinqanda ukupuhla kweengcambu ezidzulayo.

Ukuntshula kwembewu kuyakhawuleza ukuba ukufuma nobushushu



bomhlaba bobufaneleke ncam (ngaphezu kwe 18°C). Imbewu engekho enzulwini yomhlaba (nganeno kuma-50 mm obunzulu) mayilinywe emhlabeni ofudumeleyo. Imbewu elinywe emihlabeni esidibi kakhulu ikhawuleza yome kanti ukuntshula kwayo kunobuntununtunu, ngenxa yoko azichumi ezo ntsimi.

#### Amanzi

lindawo ezifumana iimvula ezintle apho amandongomane anokukhula ngempumelelo khona, zinqabile kaloku ukufuma ngumba obalulekileyo ekulinyweni kwamandongomane. Kucetyiswa uhlobo IweSpanish kwezi ndawo, njengoko luwasebenzisa ngendlela encomeka ngakumbi amanzi (WUE) ngenxa yomkhwa wokukhula kwalo ngokuthe nqo kunye nexesha lalo lokukhula elifutshane. Iimvula eziphakathi kwa-ma-500 mm nama-700 mm ngonyaka ziimeko ezipakathi zilunglele ukulinywa kwamandongomane.

Makungalinywa phambi kokufumaneka kwemvula engama-50 mm obona buncinane. Inkqubo yokuntshula kwembewu ingakhawulezi-swa ngokuyityala emihlabeni efumileyo nefudumeleyo.

#### Ubushushu

Intsukaphi yamandongomane ikwiindawo zetropika zaseMelika eseMzantsi ngoko ke, afuna ithuba lokukhula leentsuku ezili-160 ezingenaqabaka kunye namaqondo obushushu aphezulu. Kuthinte ukulima emhlabeni owomileyo futhi ufanele ukuncenkceshela ngamaxeshwa engqeles naxa utyale emhlabeni obandayo nomanzo. Ukutyala emhlabeni onobushushu be 15°C nakubunzulu bomhlaba be-5 cm kuqinisekisa ukukhawuleza kokuntshula kuvelise nezithole ezinempilo entle.

Isantya sokuntshula sama 95% sinokuphunyeza kubushushu obuphakathi kwe 18°C nama 30°C. Ukuhula okufanelekiyelo ngoku-ziphindaphinda kwenzeka kakuhle phakathi kwama 20°C ukuya kuma 35°C, kanti ubushushu basemini bama 27°C bobona bukulungele kakhulu ukupuhla kweentyatyambo. Amaqondo obushushu angawona alungele ukubumbeka kwemidumba kwimini efudumeleyo ngama 29°C nama 23°C kubusuku obupholileyo.

#### Isichumiso

Amandongomane awaxhomekekanga kakhulu ekufakweni kwesi-chumiso senitrogen kuba, njengomdumba, ayakwazi ukusebenzisa



initrogen esemoyeni ngoncedo lweebhaktiriya zeengcambu eziguqula iN<sub>2</sub> esemoyeni ibe yiNO<sup>3</sup> (ukwenzeka kwenitrogen). Amaqhuqhuva enitrogen aququzelayo anembonakalo epinki kanti angenzi nto abonakala eluhlaza xa eqhaqwa. Nangona kunjalo, emasimini asemaphandleni, inqanaba lephosphorous likholisa ukuba sezantsi kungako ifanele ukugalelwaa njengesongeza.

Njengezinye izityalo, amandongomane afuna amanqanaba alingeneyo epotassium ukuze akhule futhi aphuhle kakuhle. Kvisiganeko esingenakufane senzeke aphoon amanqanaba epotassium aphantsi khona, inganikwa njengesixhaso esongezelelwayo ide ifikelele kwi-10 kg ha<sup>-1</sup>. Icalcium, kwelinje icala, isisiqalelo sesondlo esibalulekileyo ekulininyeni kwamandongomane kanti ikwabalulekile nasekupuhhleni kwembewu. Ipotassium egqithisileyo emhlabeni inganako ukubangela ukuncipha kwecalciun. Emhlabeni engenacalcium eyaneleyo, amandongomane aya kuba nesivuno esiphantsi futhi neenkozo zingabi semgangathweni ofanelekileyo.

#### Imigaqo yokulima

Ukuyala kuqalisa xa umhlabu ufume ngokwaneleyo nasemva kokuba umandlalo wezithole ulungiselelwae kakuhle. Ukuze kumiselwe ukushinyana okulungileyo kwezityalo, kuhlwayelwa imbewu engama-50 kg kwihektare.

Kwiziqwengana ezincinane zomhlabu, ukuvulwa kwezithuba phakathi kwembewu kumqolo kungaba yi-8 cm ukuze izithuba ezipifikathi kwe-miqolo zibe ngama-90 cm. Kwiindawo zeemvula ezinkulu izithuba phakathi kwemiqolo zingaba ngama-75 cm.

Imbewu ifanele ukufakwa kubunzulu be-5 cm kanti kufuneka kufakwa uxinzelo oluncinane xa kufakwa imbewu kvimiqolo ukuze kukhuthazwe okona kuyondelelana kuphezulu phakathi komhlabu nembewu. Xa kusetyenziswa oomatshini bokutyala, imbewu nesichumiso zifakwa ngexesha elinye. Xa kutyalwa ngesandla, isichumiso singasasazwa ngokubanzi nangokulungelelana ngesandla emva kokutyalu.

Uhlobo lwestichumiso lukhethwa ngokohlalutyo lwemihlabu. Kubalulekile ukufaka ikhemikhali yokhula yaphambi kokuhluma, xa kunjalo kucetyiswa umxube weStrongarm edityaniswa neAlachlor. Utukshatyalaliswa kwezonakalisi zezityalo nezinambuzane kukholisa ukungabi ngumba ophambili. Nangona kunjalo, xa kukho uhlaselol olungange 10%, kufuneka kuthathwe amanyathelo. Intwala, irusi kune nama-chokoza emaggabini ziingxaki ezenzeke kaninzi ngakumbi kunezinye iingaki ezibangelwa zezinye izidalwa.

Ukuze kutshatyalaliswe intwala, kufuneka ikhemikhali yezinambuzane ene-mercaptopthion, ipirimicarb okanye ithiomefon njengesithako esisebenzayo esinokufakwa. Xa kutshatyalaliswa irusi namachokoza emaggabini kufuneka iikhemikhali zomngundo ezinezithako ezisebenzayo ezifana ne-carbendazim okanye itebuconazole zingasetyenziswa. Kubalulekile ukugcinwa kwamasimi amandongomane kakuhle kulo lonke ixesa lokulima.

Ukuvuna kwenzeke kwintsuku ezili-150 emva kokutyalu. Isityalo siphanyiswa siphelele sikhutshwe emhlabeni kwaye singafunjwa okanye sibekwe ngemiqolo ukuze some. Emva kweeveki ezimbini amaggabi nezikhondo zingasuswa, kuze kuqalisa ngokuchuba. Kufuneka kubekho unonophelo xa kuchutuya ukuze kuthintelwe ukonakala kweenkozo. linkozo ezaphukileyo nezonakeleyo ziya kuhokelela kwingeniso ephantxi xa kuthelekswa neenkozo ezipheleleyo (umgangatho okhethekileyo). Isivuno samandongomane siba phakathi kwe-1,5 t ha<sup>-1</sup> ne-4 t ha<sup>-1</sup>.



UGQR WIKUS SNIJMAN,  
UMPHATHI WEPREJEKTHI:  
KWAGROUNDNUT BREEDER  
SEED, EARC-GRAIN CROPS



## AMAZWI AVELA... Graeme Engelbrecht

**E**MELIKA UBUDALA OBUQHELEKILEYO BOMLI-MI BUYIMINYAKA ENGAMA-57,5, E-UNITED KINGDOM YIMINYAKA ENGAMA-59 KANTI E-KENYA YIMINYAKA ENGAMA-60. UMBUZO OTHI INGABA NGUBANI OYA KULIMA UKUTYA KWETHU KWIXESHA ELIZAYO, UBANGELA INKKALABO KULO LONKE IHLABATHI.

Ucwangciselo lobundalifa asikokunikela kolandelayo kuhela, kodwa luqinisekisa impumelelo yexesha elizayo. Abalimi abaninzi abayinxenye yeNkubo yoPhuhliso Iwabali Limi abasengobantu abatsha. Ndingafane nditsho ukuba kubalimi abaninzi abarhweba kumashishini ahlukahlukeneyo, kunjalo nakubo.

Nangona kunjalo, inkxalabo endiyibona idinga ingxoxo isondele kakhulu kuthi - mhlawumbi singathi ingqalile, futhi ingajika, iphindie incedise ekugxotheni ingxaki yokulinywa kokutya kwixesha elizayo. Sithetha ngokudluliselwa kwezakhono zobuchule ezifundiweyo, ulwazi olungqalileyo ngentsimi nganye emasimini ethu nangeemeko zemozulu ezingephi ajongana nazo umlimi ngamnye.

Ulwazi nendlela yokulima ukutya lungafundwa ezikolweni, kwiikhleji, kwiuyunivesithi nakwizifundo ezaahlakahlukeneyo, kodwa umlimi amava awafumeneyo ahlala entliziyeni yomlimi ngamnye zizifundo azifunde ebunzimeni futhi ethubeni elide. Olu lwazi lubaluleke kakhu-lu. Kwixesha lemida yenzuzu emxinwa, olu lwazi lungabakha okanye lubaphule abalimi abatsha.

Kusetyenzwe nzima kangangoko, kusenziwa umsebenzi oqobayo ukuze iifama namasimi zibe kwiimeko ezikuyo namhla. Ngokuqinisekileyo kuya kubaluleka ukuba lo mjikelo ungaphindi ugale ekuqaleni nje kuhela kwisihlandlo esilandelayo kwihiabathilolimo.

'Ubutyebi bezizukulwana' eli libinzana lamagama eliphilayo nelingesetyenziswa kakuhle, lifane lisetyenziswe nanjani kubume obungqonge ezopolitiko – kaninzi kuba ngathi lisebe lokusithela, ngamnye amaxesha libe njengesityholo, kodwa alifane lisetyenziswe njengogqaliselo, kanti kufuneka kubekho. Oku akusoloko kuthetha ukuggithisela ubutyebi bemali ukusuka kwisizukulwana ukuya kwesinye ukuze kubekho ukufikelela kwimpumelelo, nokuphucula umsebenzi nokukhula phezu kwento eseyiphunyeziwe.

Ubudala babalimi kulo lonke ihlabathi, nakuyo le nkubo yethu, banokutsho ukuba basemngciphekweni wokwenza njalo nabo, ukunkela – ngobutyebi bezizukulwana – kubathathinxaxheba abalandelayo. Luxanduva lomlimi ngamnye ukujinisekisa ukuba oko kufunyenwego, akulahleki. Oku asiyonto abanokuyenzelwa kwaye akunakuqinisekiswa ngomthetho futhi akunakunyanzelwa. Kufanele ukuba kukuzikhethela komntu ukufumana umntu okanye amfundise umsebenzi ukuze aqhube ngento eseyiqaliwe – ubundlalifa obusingisa empumelelweni.

# UMLIMI WONYAKA: Dibana nabaphumeleleyo

NJONGO ENGUNDOQQ YOKHUTSHISWANO LWASEGRAIN SA LOMLIMI WONYAKA ASIKOKUGQWESA, KODWA KUMALUNGA NOKUBHIYOZELA UKUFUNDA, UKUKHULA, UKUPHUHLA NOKUSEBENZA NZIMA KWAMAWAKA ABA-LIMI ABAYINXENYE YENKQUBO YOPHUHLISO LWABALIMI.

Emva kokuba abagwebi bebejunge amashishini abatyunjwa okufama, kuhethwe abalimi abalandelayo njengabaphumelele kuhutshiswano lwango-2022:

## UMLIMI ORHWEBAYO WE-NEW ERA (NGAPHEZU KWEETONI EZINGAMA-250)

**ULucky Khumalo (71)** noonyana bakhe abangamawele bafama ngombona nangeemboti zesoya eLiesbethdale, ifama yeehetkare ezingama-672 kwindingqi yaseDannhauser KwaZulu-Natal. Nangona waba nomdla kulimo eselula kakhulu, waqaliswa mva ngomsebenzi woqequesho lwakhe lokufama ngowe-1978, ngo-nyaka awathenga ngayo itrektara yokusungula ukufamela inzu-zo – kwaye zange aphinde ajonge emva. Weva ngoRemember Mthethwa owalandulelayo eli malunga nexabiso elingongenzwa yiGrain SA kwishishini lakhe lokufama waze wangena kulo mbutho ngo-2015. Ngokusebenzisana neNkqubo yeGrain SA yoPhuhliso IwabaLimi eli qela lalo tata-kunye-noonyana liphuhlise imisebenzi encomeka kakhlulu yolimo. Banephupha lokwandisa ishishini labo lokufama nelokuba ngabalimi abarhwebayo.



Ngoko wayesesikolweni **uMapidinyana Phillip Manoto (46)** uyise wamfundisa ukuqhube itrektara ukuze amncedise emasimini xa befanele ukulima nokutyalala. Akuba ephumelele kwizifundo zakhe zemfundu ephakamileyo, uncedise utata wakhe efama ngo-2001. Imisebenzi yabo yokufama iphumelele kangangoko emasimini ahlanganyelweyo kwaze kwathengwa ifama ilusthof kwindawo yaseLichtenburg eMntla Ntshona ngo-2005 ngemalimboleko yaseLand Bank. Kungoku nje banayo ithayitili yobunini bayo, njengoko sebelihlawule lonke ixabiso lefama. Lo mlimi onothando olushushu ungene kwiGrain SA ngo-2016 kwaye ufuno ukukhulisa ishishini lakhe lokufama ngokulandisa ngezinye iintlobo zoshishino kwixesha elizayo.



**UMzewakhe Clifford Mthimkulu (33)** unesiqinisekiso semfundo yonyango kanti ukhe wasebenza njengomthengisi weenkqubo zo-kuhlaba umkholi ngobuchwephesh. Ngo-2008 uncedise uyise kwifama iAstoria, kwisithili sase-Senekal eFree State waze waba yinto ebisoloko enqwenela ukuba yiyo – umlimi. Ukhaphe utata wakhe xa ebesiya kwintlanganiso yakhe yokuqala yeqela lofundonzulu ngoJuni 2014 kanti ngoku uya rhoqo kwizifundo zoqeesho. KuClifford kubalulekile ukuba ilizwe libe nako konke elikudingayo. Ukholelwla ekubeni umlimi osemtsha angaba nendima ebalulekileyo xa elima ukutya futhi abonise ukuba isizukulwana esilulutsha singakwazi ukuthatha aphi bazishiye khona iintamblo abadala babo ukuze sibe ngabalimi abanempumelelo.



## UMLIMI ONESAKHONO SE-NEW ERA (IIHEKTARE EZINGAMA-51 UKUYA KWEZINGAMA-249)



**UBheki Isaac Mabuza (49)** waqaliswa ngokulima umbona ngo-2007, kodwa zange afumane sivuno simnika inzu-zo. Wangena kumaqela ofundonzulu aseGrain SA ngowama-2014 kwaze ukususela ngoko izakhono zobuchule zakhe zaphuhlala, oko kwabonakala ngokuphucuka kwasivuno sakhe. Lo mlimi onobubele kwindawo yaseLydenburg eMpumalanga uncedisa amalungu oluntu adinga ukutya nomgubo womboma. Impumezo eyiyona inkulu kaBheki kude kuge ngoku ibe kukubamba kwakhe indawo yesithathu kuluhlu lokulinywa kombo-

na kwindingqi yeHighveld esempuma kuKhutshiswano loLuhlu IwesiVuno seSizwe lokuLimela iGolide Iwango-2021 IwaseGrain SA. Wakhuphisana nabalimi bombona bodumo abarhwebayo baseMzantsi Afrika.



**UTamsanqa Raphael Masuku (74)** waqalisa ukufama ngo-2001, xa wayethenga iFama iKwagga's Drift cebu bucala eDundee KwaZulu-Natal. Nangona kunjalo, umdla wakhe kulimo wavusa uthando lwakhe lokufuna ulwazi eselula, njengoko usapho lwakhe lwalulimela ukubeka ukutya etafileni.

UTamsanqa wangena kwiGrain SA ngo-2019 waze ukususela ngoko wabona ukuphucuka okukhulu kwizityalo zakhe ngenxa yophuhliso lwemigaqo yolimo echanekileyo. Unethemba lokwandisa iihektaare zombona wakhe nezeesoya aze ongeze inani leenkomo emhlambini kwixesha elizayo. Unephupha loka-ba ngumlimi omkhulu orhwebayo, onokuthenga iitrektra ezinkulu kunezo anazo ngoku.



Uthe eseyintombazana **uMampho Adeline Thaele (44)** wabe sele-nephupha lokuba ngumlimi. Ngo-2014 ipupha lafezeka xa kwa-kuthengwa ifama iPerlot ngaseHennenman eFree State liSebe loPhuhliso IwaMaphandle nokuTshintshwa kweMithetho yeMihlaba (DRDLR) yaze ikhontrakthi yokuqeshisa yafunyanwa lusapho Iwa-kwaThaele. Utatomncinci wakhe, owayongamele efama, wamnika umsebenzi wokuba ngumphathi wefama. Uye entlanganisweni

yakhe yokuqala yeqela lofundonzulu ngomhla wama-30 kuJulayi ngo-2015, waze ngokuncediswa yiNkqubo yaseGrain SA yoPhuhliso IwabaLimi waphuhla waba ngumlimi. Unethemba lokuba inkqubo iya kusuka kwinqanaba elithile lamandla iye kweliphezulu ukuze iqhube ngokuxhasa abalimi abatsha.



### UMLIMI ORHWEBA KANCINANE (IIHEKTARE EZILI-11 UKUYA KWEZINGAMA-50)

**UTD Hlatswayo (41)** wakhula encedisa uyise efama. Wasebenza kumzimveliso ekwakusensiwa kuwo ifanitshala yeofisi phambi kokuba angene eAfrican Cables, efaka iikheyibhile ezintsha endaweni yezindala emigodini kulo lonke elaseMzantsi Afrika. Ekupheleni kuka-2015, uthenge iibhokhwe kwifadesi e-Ermelo aplo eve khona ngeGrain SA. Ungene iqela lofundonzulu eDaggakraal kufuphi eAmersfoort ngo-2016 kanti ngoku ngusihlalo weqela lofundonzulu iBethamoya kwindawo yakhe. lifama zikaTD eMooipoort zikwisithili saseAmersfoort eMpumalanga kwaye unamaphupha okuba nentsimi enkulu ayil Mayo. Unomnqweno wokubona ulutsha IwaseMzantsi Afrika lunomdla othe kratya emsebenzini wolimo.



**UJoseph Tuelo Mokaleng (54)** ukhulele emaphandleni, aplo ubomi babo bebuxhomekeke kulimo. Ootatomkhulu noomakhulu kanye nabazali bakhe bonke bebelima. Wayengazange wayazi enye indawo yomsebenzi ngaphandle komoya ohlaziyekileyo wasefama. Ngenxa yomsebenzi wokufama lo mlimi uphumeleleyo weLali iMorena ngaseDelareyville eMntla Ntshona uphuhle umdla omkhulu

kulimo. Waba ngumlimi ngowe-1983 waze wangena kwiGrain SA ngo-2006 emva kokuqoshelisa izifundo zoqequesho zakhe zokuqala. Unomnqweno wokuba nefama yakhe. Nangona ebekhe wasengxakini yobusela neemeko zemozulu eziyimingeni, uzi-misele ukuba ngumlimi ophucukileyo.

Phantse yiminyaka engama-20

**uDinabantu Lawrence Nqubuka (68)** esebenza njengomsebenzi jikelele eGoli phambi kokusabela kubizo lwakhe lokufama kwixesha elipheleleyo. Ukuze afunde okuthe vetshe malunga nokufama, ungene kumaqela ambalwa amancinane asentlalweni phambi kokufumanisa iGrain SA. Kwaba kuphela xa esiba lilungu leGrain SA ngo-2016 aplo aphuhle khona imigaqo yolimo emncede ngokuphucula umsebenzi wakhe wokufama kwingingqi yase-Estcourt KwaZulu-Natal. Unethemba lokuba nobomi obude ukuze akhulise ishishini lakhe lokufama futhi alime ngaphezu kweehktare ezili-100.



### UMLIMI OLIMELA UKUZIPHILISA (IHEKTARE E-1 UKUYA KWEZILI-10)

**ULindiwe Maureen Kubheka (56)** waba nomdla emsebenzini wokufama esafunda esikolweni samabanga aphantsi, njengoko usapho lwakhe belulima imifuno esitiyeni esisemva kwendlu. Emva kokungena eGrain SA ngo-2014 njengelungu lexesha elipheleleyo, wavuseleleka kakhulu kwiQela loFundonzulu iDoornkop kangangokuba Wade waqalisa ngokufamela

inzuzo kwisiqwengana somhlaba wehektare enye kwingingqi yase-Dundee KwaZulu-Natal. Unethemba lokuphuhla kwicandelo lokufama aze afumane umhlaba omkhulu noko, ukuze alime ngokuthe chatha xa kuthelekiswa noku akwenza ngoku. Uyakunqwenela ukudala amathuba emisebenzi yamalungu abahlali bakhe kwifama yakhe ngenye imini.



## Umlimi wonyaka...

**UKhuphukile Vinah Mazibuko (62)** usebenza kwiSebe lezeMpilo njengomgcinimpilo woluntu. Uqale ukufumana ingcqo ngokubaluleka kolimo ngo-1984, xa wayebona indlela iintsapho kwindawo yakhe ahlala kuyo zilima imbewu kuze kuvele ukutya. UKususela ekungeneni kwakhe kwiGrain SA ngo-2015, akasalimeli kuphela ukuba abeke ukutya etafileni kodwa wenzela ukufumana inzuzo. UKhuphukile, ovela kwindingqi yase-Estcourt KwaZulu-Natal, unephupha lokwandisa intsimi yakhe yombona ukuze afame kwindawo enkulu. Uyakunqwenela ukufuya iinkukhu.



**UHezekia Ndinda Mkhonza (66)** ufama eHereford East kwindingqi yase-Albert Luthuli ngase-Ermelo eMpumalanga. Emva kokusebenza eSwaziland kwiminyaka eminzi, ubuyelete Mzantsi Afrika ngo-2009 waze waqalisa ngesitiya esincinane emva kwendlu yekhaya lakhe, apho alime



khona imifuno ethile kune nombona. Wazimisela ngakumbi emsebenzini wokufama emva kokungena eGrain SA ngo-2016. Ngoncedo IweNkqubo yo-Phuhliso IwabaLimi, isivuno sakhe sande ukususela kwiingxowa ezintlanu okanye ezintandathu ngehektare ukuya kwiiton ezingaphezu kwezintandathu zombona ngehektare. Ufuna ukukhula njengomlimi kwaye unethemba lokuthenga itrektara yakhe kune noomashini ngenye imini.



## ABATYUNJWA



**UMoniwa Badge Skosana wase-Witbank, eMpumalanga (umlimi oRhwebayo we-New Era).**



**UGo Serema waseLichtenburg, eMntla Ntshona (umlimi oRhweba kaNcinane).**

Aba ngabatyunjwa abangabalimi abalimela ukuziphilisa:



**UWinile Patience Hlongwane waseLoskop, KwaZulu-Natal.**



**UAbraham Mankge wase-Lydenburg, eMpumalanga.**



**UNontuthuzelo Mbele wase-Mount Ayliff, eMpuma Koloni.**



**UZanele Nkosi waseNewcastle, KwaZulu-Natal.**



**IQELA LABAHLELI BEPULA IMVULA**

# Kubalulekile ukulutshabalalisa kakuhle

## UKHULA LWASEBUSIKA

**U**KHULA LWASEBUSIKA LONYAKA LUKHULA OLUNOKUNTSHULA EKWINDLA LUZE LUPHILE KUBO BONKE UBUSIKA. OLU KHULA LUQHUBA NGOKUVUTHWA, LUDUBULE IINTYATYAMBO UKUZE LUMILISELE IMBEWU ENTLAKOHLAZA LUZE LUFE EHLOTYENI.

Ifleabane (*Conyza spp*) neragwort (*Senecio consanquineus*) yimizekelo exaphakileyo yokhula lwasebusika lonyaka lwamaggabi amakhulu. Ukhula lwasebusika luziqhelanisa kakuhle neemeko zasebusika ngoko ke lunako ukusebenzisa izixa ezikhulu zamanzi ngethuba lobomi balo. Entlakohlaza, imvula inqabile. Ukhula lwasebusika luya kuqhube ngokomisa umhlaba kude ukuntshula kwembewu yezityalo kubambezeleke.

Kwiindawo apho lushinyene khona ukhula lwasebusika, isityalo siya kuthatha ixesha elide ukuhluma ukuba oko kude kwenzeka. Ukhula lwasebusika lonyaka lughinda lukwazi ukuba ngumamkeli wezifo eziliqela ezifana ne*Sclerotinia sclerotiorum* (isclerotinia kukubola kwesikhondo seembotyi zesoya), izinambuzane ezifana nombungu osikayo kunye nemibungu ebhityleyo enefuthe elibi kwisivuno sesityalo esilandelayo sehlobo.

### UKUTSHATALALISWA KOKHULA LWASEBUSIKA

Nantsi imiba jikelele emayikhunjulwe ngokutshatalaliswa kokhula lwasebusika lonyaka:

- Ukhula oluyingxaki lufanele ukuchongwa ngokuchanekileyo phambi kokukhethwa kwekhemikhali yokhula, kuba yona ikwazi ukutshabalala kuhela ukhula olubhalwe kwileyibeli yayo.
- Ukhula oluyingxaki lufanele ukuchongwa ngokuchanekileyo phambi kokukhethwa kwekhemikhali yokhula, kuba yona ikwazi ukutshabalala kuhela ukhula olubhalwe kwileyibeli yayo.
- Kubalulekile ukuzazi naziphi iziphumo ezinokubangelwa yintsalela (ithuba elithathwa yikhemikhali yokhula isasebenza emhlabeni) yekhemikhali ebikhethiwe yokhula ukuze kuthintelwe umonakalo kwisityalo esiya kulandeliswa, nokuba sityalwe sekudlule iinya emva kokufakwa kwekhemikhali yokhula. Umzekelo owaziwayo sisiphumo sentsalela yekhemikhali yokhula ezisekwe kwitriazine ezifana neutrazine, ezikholisa

ukusetyenziswa ngokubanzi ekutshatalalisweni kokhula olunamaggabi abanzi emboneni. Ezi ntlobi zeekhemikhali zokhula zihlala iinya eziqhele emhlabeni ziphiha kwaye ziya kuzonakalisa izityalo ezilandeliswayo zamaggabi amakhulu njengeembotyi zesoya.

- Phambi kokufaka iikhemikhali zokhula, kufuneka kwensiwe imilinganiselo kwihapulasaka okanye kwisitshizi esoluliweyo setrektara ukujinisekisa inqanaba elichanekileyo lokuyifaka.
- likhemikhali zokhula kucetyisa ukuba mazifakte kukhula oluselula (olunganan kwi-10 cm ngokuphakama okanye ngokomyalelo okwileyibeli), kuba azinamandla kakhulu kwizityalo ezidala. Ukhula oselukhullile luya kudinga amanqanaba amakhulu amathamo kanti naphe, inqanaba lokutshabalala alisayi kusoloko lincomeka.

### Ukutshatalaliswa kwefleabane neragwort

Ukutshatalaliswa kwefleabane (**Isazobe 1**) neragwort (**Isazobe 2**) kunga-phunyeza ngokuhlakulela phezulu kuze kufakwe ikhemikhali yokhula kwizityalo ezilula, ezincinane xa isiya ekupheleni ianya kaMatshi nokuba kusekuqaleni kukaApreli. Nangona kunjalo, njengoko izityalo zasehlotyeni zisekhona emasimini xa olu khula luqalisa ukuntshula, ukusetyenziswa kwekhemikhali yokhula kungaba yingaksi.

Ukfakwa kweekhemikhali ezilolo hlobo phakathi kwemiqolo (ngokungqalileyo) ngokusebenza izitshizi zehapulasaka kwiindawo ezincinane okanye izixa ezikhulu kwiindawo ezinkulu yinto enokwenzeka ngeli xesha. Abalimi abanezitsizhi eziqhelekileyo zeetrektara bangkwazi ukuzisebenzisa kuphela ngokufaka ezi khemikhali zokhula emva koku-vuna, xa sebekwazi ukungena emasimini.

Iragwort ingatshizwa emva kokuvuna kuditianiswe nekhemikhali yokhula esebeza ndawozonke efana neglyphosate okanye ikhemikhali engqalayo efana neparaquat. Xa kukho ifleabane, ukutshabalala okuncomeka kakhulu kwenzeka ngokubanzi xa kukho umxube wetanki we-glyphosate enenye ikhemikhali yokhula esebeza ngenye indlela efana ne-2,4-D okanye iatrazine, kuxhomekeka kwisityalo sasehlotyeni esilandeliswayo (iziphumo zentsalela).

Abalimi bavumelekile ukuqhagamshelana noGq Craven apha 018 299 6346 ngolwazi oluthe vetshe.

1

Ifleabane kwizityalo zesigaba sezithole neserosette (A) nokudubula kweentyatyambo (B).



A



B



10



# Amanyathelo asentloko OKUGCINA IMPILO YOMHLABA

**U**KUTHATHWA KWEESAMPULU ZOMHLABA SISI-SEKO SAZO ZONKE IINGCEBISO EZIFANELEKE KAKHULU MALUNGA NEZICHUMISO KUNYE NEKALIKA UKUZE KWANDISWE ISIVUNO NENZU-ZO. ZAKUBA ZIFUMANEKILE IZIPHUMO ZESA-KHONO SOMHLABA, EZOKUTHATHWA KWEESAMPULU, EZOHLALUTYO LWASELABHORATRI NEZEZONDLO, KUNGA-FUNYANISWA EYONA NKQUBO ILUNGILEYO YOKUFAKWA KWEKALIKA NEZICHUMISO.

## IMIGAQO

Ukuba iisampulu zomhlaba azithathwanga ngokuchanekileyo, iziphumo azisayi kubonisa isimo somhlaba ukuze isiphumo sibe kukungafikeleki kwesona sivuno sifanelekileyo. Ngenxa yokufakwa kwasichumiso ngo-kwemicu nangenxa yemigaqo yokulima ekholisa ukungasixubi kakuhle isichumiso kuwo wonke umhlaba, izondlo zezityalo zisuka zingasazeki ngokulungelela emhlabeni. Kubalulekile ke ngoko ukuqaphela ukuba iisampulu zomhlaba zithathwa kakuhle.

Nantsi eminye imiba ebalulekileyo efanele ukuqatshelwa:

- Ukuthembeka kohlalutyo lomhlaba kuxhomekeke ekubenit ingaba iisampulu zomhlaba zithathwe kwiindawo ngeendawo zentsimi na.
- Ukuba intsimi ineentlobo ezingaphezu kohlobo olunye lomhlaba, kufuneka iisampulu zomhlaba zithathwe kuzo zonke iintlobo ezikhoyo zomhlaba kuba kungenzeka ukuba isakhono sesivuno sahluke ngo-kweentlobo ezahlukahlukileyo zemihlaba.
- Kufuneka kuthathwe iisampulu zomhlaba ongapezulu nezomhlaba ongaphantsi. Isampulu zomhlaba ongapezulu zithathwa kubunzulu be-0 mm ukuya kwi-150 mm, ukuze iisampulu zomhlaba zibe kubunzulu obuqala kwi-150 mm ukuya kuma-600 mm.
- Isampulu enye emele uhlolo lomhlaba ifanele ibe khona qho kuma-50 eehektare, kodwa kungabhetete xa iisampulu zithe kratyat koko.
- Isampulu nganye ifanele ukuba neesampulu eziyinxenye yayo ezingama-20 obona buncinane futhi zithathwe ngaphandle kokukhetha ngokomgaqo kuzo zonke iziqwenga zentsimi okanye iintlobo zemihlaba.
- Isampulu eziyinxenye yenku mazixutwyne ngocoselelo phambi kothuthwa kwsampulu eza kumela uhlolo oluthile.
- Akukho mfuneko yokuthathwa ngaphezu kweesampulu ezintlanu eziyinxenye zezinkulu ngesiqwenga ngasinye sentsimi xa iisampulu zithathwe nasemhlabeni ongaphantsi.
- Ukuba kuqhutwywa ukufama ngocoselelo, iisampulu zithathwa kwigridi eseyalathwe kwangaphambili – malunga nemihlaba yohlobo oluhlambulukileyo iya kwanelia isampulu enye qho kwihektare ezi-5, kodwa kuqheleke ukuba kufuneke isampulu enye ngehektare enye okanye ngezimbini.

• Ukuthathwa kweesampulu ngobuchule yinkqubo apha kuchongwa khona iindawo ezithile zokuthathwa kweesampulu ngenjongo yokuhlo-la ingxaki ethile. Kusetyenziswa imifanekiso ethathwa apha naphaya, iinkcukacha zoqwalaselio lwezivuno kunye nohlolo olwenziwa ngendlela ephathekayo ukuze kuchongwe iziza ekunokuthathwa kuzo iisampulu.

Imigaqo eyahlukahlukileyo yokuthatha iisampulu zemihlaba ipapashwe kwesti sikhokelo *Maize Information Guide seBhunga loPhando lezoLimo* (Agricultural Research Council – ARC). Zama ukulufumana olu papasho, njengoko luqulethe iinkcukacha ezincomeka kakhulu.

Zidibanise nomthengisi wakho wezichumiso phambi kokuthatha iisampulu ngokunjalo qiniseka ngomgaqo.

## UKUTHATHA IISAMPULU ZOMHLABA

Iisampulu zomhlaba mazithathwe emva kokuvuna kodwa phambi kokugqitywa komsebenzi wokuqala wokuphethula umhlaba. Isampulu ezimele imihlaba ezithathwe kumcu obanzi wama-300 mm kwimiqolo enezityalo zihlalutywa ngokuzahlukanisa kwiisampulu zaphakathi kwemiqolo, njengoko kuboniswa ngobubanzi bemiqolo bama-900 mm **kwiSazobe 1**.

Ziphelele, zintlanu iisampulu ezithathwayo – ezintathu kwimiqolo ukuze ezimbini zithathwe phakathi kwayo.

Isampulu eziyinxenye zemiqolo (■): Isampulu ezintathu zithathwa kwimiqolo ukuze kufunyanwe iisampulu kumcu wesichumiso. Isampulu ezintathu zimele umcu wobubanzi bama ±300 mm.

Isampulu eziyinxenye zaphakathi kwemiqolo (●): Kuthathwa iisampulu ezimbini kule ndawo. Isampulu yomhlaba enye ithathwa esizikithini nciam semiqolo emibini (ukususela kuma-450 mm kububanzi bomqolo wama-900 mm). Isampulu yomhlaba yesibini ithathwa esizikithini nciam sesampulu engaphantsi kwimiqolo (■) kunte nesampulu engaphantsi phakathi kwemiqolo (●) (kuma-300 mm ukususela kumqolo wesityalo kububanzi bemiqolo bama-900 mm).

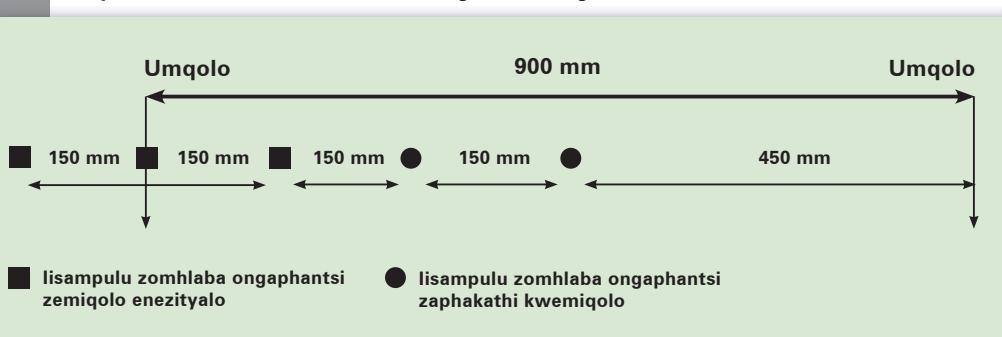
- Qinisekisa ukuba kusetyenziswa isixhobo esifanayo xa kuthathwa iisampulu.
- Kwizigaba zobunzulu – ezizezi 0 mm ukuya kwi-150 mm, 150 mm ukuya kuma-300 mm kunte nama-300 mm ukuya kuma-600 mm – kufanele ukuthathwa iisampulu kuzo.
- Inkqubo yokuthathwa kweesampulu iphindaphhindwa kahlanu ngesiqwengana ngasinye somhlaba weehktare ezingama-50.
- Isampulu ezintlanu ukususela kwi-0 mm ukuya kwi-150 mm mazixutwyne ngocoselelo kuze kuthathwe isampulu enye eyinxenye kumxube lovo ukuze ihlalutywe. Kuphinda kulandelwe kwayona luo nkqubo malunga neesampulu ezikwi-150 mm ukuya kwezingama-300 mm na-kwezikuma-300 mm ukuya kuma-600 mm.

Isampulu zemihlaba maziphathwe ngokuchanekileyo. Isampulu mazomiswe emoyeni okanye zikhenkciswe ukuba kufuneka uhlalutyo lwenitro-



1

*Umgao wokuthatha iisampulu zomhlaba kwiiimeko aphi izondlo eziyintsalela kanye nobumuncu bomhlaba izizinto ezingasazeki ngokuhlambuluka.*



gen (N) naxa iisampulu zingenakusiwa elabhoratri kwiiyure ezingama-24. Kuzo zonke iimeko, iisampulu mazingabi sesichengeni sokukhanya kwe-langa okungqalileyo. Ubunzima bomhlaba obuphakathi kwama-500 g nama-1 000 g bufuneka ngesampulu nganye ukuze buhlalutywe.

### ULAWULO LOBUMUNCU BOMHLABA

Ubumuncu bufunyaniswa kwiinkukacha zeesampulu zomhlaba kanti bungabonakala nakufundonzulu ngenkangeleko yomhlaba. Ukulinywa kombona nembewu yeoyile kuphazamiseka ngenxa yobumuncu bomhlaba kuphela xa amanqanaba asabutyhefu kwiziqalelo zeondlo ezifana nealuminium (Al) kanye nemanganese (Mn) zikhona nokuba ayi-danga yaphantsi ipH.

Ubutyhefu beAl bunxulunyaniswa ubukhulu becala nobumuncu bomhlaba, ngelixa ubutyhefu beMn bungafane bunxulunyaniswe nobumuncu bomhlaba – nangona zombini ezi ntloblo zobutyhefu zisenokwenzeka ngaxeshanye.

Ingozi yobutyhefu beAl emboneni iba khona kuphela xa ipH (yeKCl) inganeno kwi-4,5, okanye ipH (yeH<sub>2</sub>O) inganeno kwi-5,5. Ubutyhefu beAl bufunyaniswa ngolwalamanu lweAl nolwehydrogen (H), xa kuthelekiswa neeyayoni ziphelele zepotassium (K), icalcium (Ca), nemagnesium (Mg). Olu lwalamanu lubalulwa njengepesenti, kwaye Iwaziwa njengeqondo lokuhlohleka ngokugqithisileyo kweasidi.

lilahleko zezivuno ziya kwanda kokuhlohleka ngokugqithisileyo kweasidi ngama 20%, njengoko sukuba kuphazamisekile ukufunxeka kwamanzi nezondlo. Akukho sivuno seenkozo silindeleke kwimeko yokuhlohleka ngokugqithisileyo kweasidi kuma 80%. Phantsi kweemeko aphi bunokwenzeka khona ubutyhefu beAl nobeMn, ubutyhefu beMn buya kuthomaliseka ngokwaneleyo ukuba ukuhlohleka ngokugqithisileyo kweasidi kuyalawuleka kube nganeno kuma 20%.

Ikalika isetyenziselwa ukulungisa amanqanaba epH nawokuhlohleka ngokugqithisileyo kweasidi. Imfuneke yekalika ijoliswe ekufikelekeni okuphakathi kwe 0 ne 15% koku-hlöhleka ngokugqithisileyo kweasidi, ukuze kufumanekе isithintelo sokuphinda kunyuke ubuasidi kwhona ngokunjalo nobutyhefu beAl.

Nangona kunjalo, ulawulo lokuhlöhleka ngokugqithisileyo kweasidi nanganeno kwi 15% lufanele ukugqalwa. Ukufakwa kwekalika, ngaphezu kwemfuneko, ukuze ukuhlöhleka ngokugqithisileyo kweasidi kube ku 0%, umzekelo, yinkubo eneendleko.

Nangona kunjalo, kubalulekile ukufumanisa ukuba ingaba ubumuncu bomhlaba buphezelu ukufikelela kubunzulu obungakanani ngokunjalo kungathomataliswa ukufikelela kubunzulu obungakanani phambi kokubalwa kwenqanaba lekalika negypsum.

### IINTLOBO ZEKALIKA

Ikalika yedolomite neyecalcium ziayafumaneka kwiindawo zentengiso. Isimo seMg yomhlaba siya kwalatha ukuba ingaba kufuneka ikalika yedolomite okanye yecalcium na.

Ikalika yedolomite icetylisa ngaphezu kwekalika yecalcium xa isimo seMg sisezantsi emhlabeni (<40mg kg<sup>-1</sup>) okanye sisezantsi noko xa sithelekiswa neseCa, ngaphandle kokuba imfuneko yeMg ingahlangatyeza ngokusebenzisa izichumiso eziqulethe iMg. Thelekisa iindleko zemithombo eyahlukahlileyo yekalika. Cela umthengisi wezichumiso ukuba akunedise.

Umatshini onemilinganiselo wokusasaza ikalika uyadingeka ekufakweni kwekalika. Ngaphandle kodidi, ukusebenza kwekalika emhlabeni kuxhomekeke kakhulu ekuyixubeni ngocoselelo ikalika nomhlaba. Oku kuphunyeza ngokuqala ukrazule umhlaba, uze ulandelise ngokuhlakula okanye ngokuwukrazula nzulu. Ukuba kuyenzeka, ikalika mayifakwe futhi ihohlisiswe kwiinyanga ezimbini obona buncinane phambi kokyalya ukuze kuqinisekiswe ukuba ukusebenza kwekalika kuqoshelisiwe phambi kokutyalala.



**PIETMAN BOTHA,  
UMCEBISI OZIME-  
LEYO KWEZOLIMO**

# Ukhuselo *kugala*



NJONGO ESENTLOKO YEMPAHLA YOKHUSELO KUKU-KHUSELA ABASEBENZI XA BESENZA IMISEBENZI YABO. UMQESHI MAKAHLANGANISELE UMGAQONKQUBO WEMPAHLA YOKHUSELO AZE AXOXE NGAYO NABASEBENZI.

- Yonke impahla yokhuselo mayithengwe ngenjongo ethile. Abaqeshi mabanike abasebenzi impahla yokhuselo ngokwemingcipheko abasesichengeni sayo.
- Abaqeshwa banelungelo lokufumana impahla yokhuselo. Umqeshi unokunikela ngempahla yokhuselo simahla okanye anike abasebenzi imali yokuthenga impahla yabo yokhuselo.
- Ukuba umqeshi unikela ngempahla yokhuselo, loo mpahla yeyakhe. Ukuba umsebenzi uzbeka phantsi iintambo zenkonzo yakhe kwimrhu, ufanele ukubuyisa impahla yokhuselo kumqeshi.
- Impahla yokhuselo yeyokusetyenziswa kwindawo yempangelo kuphe-la ngoko ke ayifanelanga kusetyenziswa ngezinye iinjongo. Abasebenzi

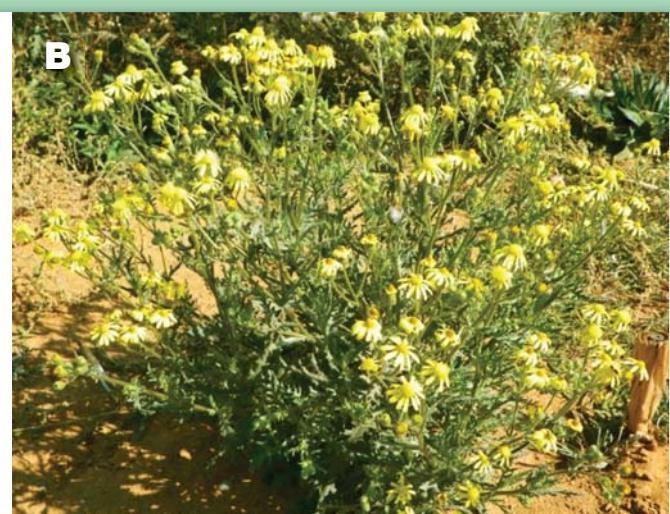
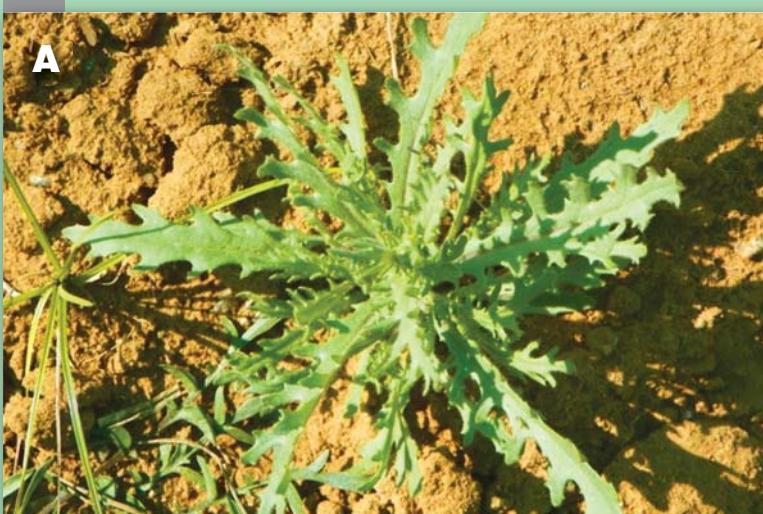
mabayigcine ngocwangco impahla yabo. Nangona kunjalo, ukuba impahla yokhuselo iyonakala kwaye ayisenakuphinda isetyenziswe, umqeshi makathenge enye endaweni yayo.

- Abasebenzi mabaziqwalasale rhoqo izihluzi zeemaskhi ezithile. Uku-sebenza kakuhle kwezi maskhi kuyetha xa seliphefile ixesha lazo.
- Umsebenzi osebenza ngeekhemikhali makafumane impahla yokhuselo ethe kratya ngaphezu kweyesiqhelo. Kwakhona abaqeshi mabanikele ngobonelelo apho impahla yokhuselo (kwiikhemikhali) ingahlanjwa khona simahla, njengoko abasebenzi bengafanelanga kuzihlambela impahla yokhuselo lwabo kwiikhemikhali ekhaya.
- Umqeshi ufanele ukunikela ngobonelelo apho abasebenzi banokutshixela khona impahla yabo yokhuselo nezixhobo zabo ezisetyenziswa kwindawo yokusebenzela. ■

**UCHARL SAAYMAN, UMCEBISI WEMPILO NOKHUSELO  
EMEGA HEALTH AND SAFETY**

## Kubalulekile ukulutshabalalisa...

**2** *Iragwort kwisityalo esiselula (A) nokudubula kweentyatyambo (B).*



**Okubalulekileyo:** Kuya kuhlala kunyanzelekile ukuba abalimi banamathele ngokungqongqo kwiingcebiso ezibhalwe kwiileyibheli zeemveliso malunga nokhula oluthile olunokutshataliswa, isityalo(izityalo) ebbhaliselwe sona ikhemikhali yokhula, inqanaba lethamo elifanele ukusetyenziswa kune nazo naziphi iziphumo zentsalela enokuba nazo ikhemikhali yokhula. Abalimi mabazidibanise nomcebisi weekhemikhali onokubanceda ngokukhetha eyona khemikhali isebezenza ngendlela encomekayo ukwenzela izidingo zabo ezithile futhi baxele ukuba leliphi inqanaba lethamo elifanele ukusetyenziswa. ■

**UGQ MARYKE CRAVEN,  
UMPHANDI WESIKHUNDLA ESI-PHEZULU, EARC-GRAIN CROPS**



# Sazi isonakalisizityalo sakho: UMBUNGUMKHOSI OHLASELAYO

KUNYANZELEKILE UKUBA ABA-LIMI BAKWAZI UKUCHONGA IZONAKALISIZITYALO UKUZE BAQINISEKISE ULAWULO LWA-ZO KWANGOKO NGEZIXHOB EZILUNGILEYO.

Umbungumkhosi ohlaselayo (*Spodoptera fru-giperda*) ungene eMzantsi Afrika ngo-2016, waze lwaba neziphumo ezitshabalalisayo kwizityalo ozikhetho njengoomamkeli bawo, umbona neenkozo ezsitswiti.

Iququzelala matshona nasekuseni, kakhlukazi izimela kwizazinge zezityalo okanye phakathi kwamaggabi xa kusemini. Amaqanda abekelwa ngezicuku ezaahluka ukususela kumaqanda angama-50 ukuya kwangama-300 kwaye agqunywa ngamaxolo nangoboya obvula emzimbeni wovingane lwasikhomokazi. Izicuku zokuqala ezimbalwa zifikufuku kwaye zigqumekha ngokupheleleyo xa zithelekiswa nezicuku zamva ezinokuba ze okanye zibe namaxolo ambalwa kuphela.

Emva kweentsuku ezimbini ukuya kwezi-tathu, inkoliso yamaqanda iqanduselwa phantse ngaxeshanye. Umjikelo wobomi bombungumkhosi ohlaselayo uxhomekeke kwiqondo lobushushu kwaye uqgibeka kwixesha elifutshane kumaqondo aphezulu obushushu, apha eMzantsi Afrika liphakathi kweentsuku ezingama-24 ukuya kwezingama-40.

Uhlaselalo lokuqala lukholisa ukwenzeka lungabonakalanga, njengoko ophunguphungu abancinane bezonakalisa kancinane izityalo,

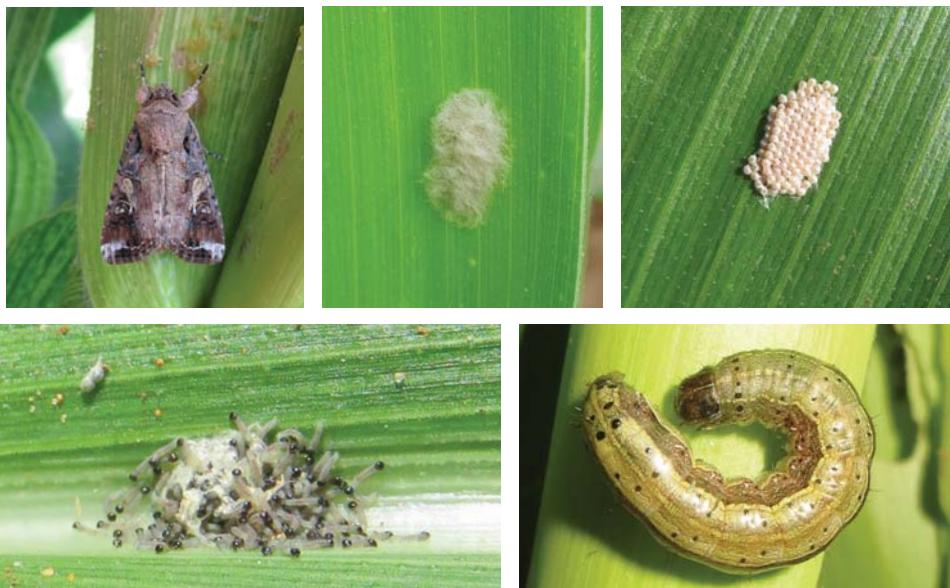
ubukhulu becalala batya kwizazinge zezityalo ba-vule 'ifesitile' ezincinan. Xa besiya ngokukhula aba phunguphungu, kupuhla iimpawu ezi-chongekayo ezipana namachokoza amane asabumnyama kwisahlulo sesibhoso, umcu obanzi ombatshileyo namachokoza asabumnyama azoba ujinge kwisahlulo ngasinye, imilo ka-Y oquyudiweyo osabumhlophe phakathi kwame-hlo kune namehlo anepateni esabumnatha.

Uphunguphungu omkhulu utya ama 80% okutyala kwakhe kwiintsku zokuggibela ezimbalwa zophuhliso. Xa bengena kumpha, kulandela ukuntshula okungephi kune nomonakalo onobuzaza ode uzibonakalise nakwibanga lokuqina kwembewu.

Iyafumaneka imbewu ecukeneyo yeGMO, unyangalwazi kwenye nezinye iindlela ngeendlela ezibhalisiweyo zokusetyenziswa kweekhemikhali ukwenzela ukutshabalalisa umbungumkhosi ohlaselayo. Ukuhlola izicuku zovivingane nokulandela ngeliso izigu zencindi ephuma kuzo (pheromone) kunganceda ekuchongeni uvivingane kwangoko, futhi oko kwalatha uhlaselalo nobungakanani balo.

Kubalulekile ukuhlolwa kwentsimi kwintsuku ezintathu nokuba zine ekekini ukuze kuchongwe izicuku zamaqanda, ophunguphungu abancinane okanye 'fesitile' yomonakalo. Zakuba zifunyenwe, umlimi kufuneka asebenze ngokukhawuleza kuba ophunguphungu abakhulu kunzima ukubatshabalalisa, ngakumbi xa sebefike kwimipha.

Ngolwazi oluthe vetshe, tyelela apha [www.croplife.co.za/KnowYourPest\\_FAW](http://www.croplife.co.za/KnowYourPest_FAW).



Impawu ezaalatha ubukhlu bombungumkhosi ohlaselayo emboneni. ■

UELIRZA THERON, UMPHATHI WEENTENGISO NONXIBELELWANO, ECROLIFE

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# Inkqubo egugula ubomi babantu



Ingxelo

## Ukwabelana ngolwazi nokwakha uthungelwano lonxibelewano

**IINTSUKU** zabalimi zinceda ngokwakha uthungelwano lonxibelewano. Imitsalane esentloko ngokubanwa kweentsuku zabalimi yile 1) ukudlulisewa kolwazi kwabanye, kananjalo 2) ukolula uthungelwano lonxibelewano olunika abalimi inkxaso. I-Grain SA iphumeza le micimbi ngenjongo yokwakha uthungelwano phakathi kwabali ukwenzela ukufunyanwa kwenkxaso ethe kraty.

Iintsuku zabalimi zilixesha lokuba abalimi babe kune ukuze baphulaphule, babone ngokunjalo bafunde omnye komnye nakviwingcaphephe. Zikwanika ithuba lokubuka okuhle, okubi nokungabukekiyo kwimiboniso nakwiiplothi zeemvavanyo. Ubhubhane ukhe wazinqumamisa ezo ndibano kodwa kutshanje kuhphinde kwenzeke ukuphumeza imicimbi enjengaleyo ukube kwakhwi ngokunjalo kuxhotyiswe uluntu lwabalimi oluphuhlayo.

Inyanga kaApreli ibone **imicimbi emithandathu yeentsuku zabalimi** ebibaniwe nezinyaswe ngabalimi abangaphezu kwama-400. Ibibanjwe kwezi ndawo zilandelayo:

- eLouwsburg (ngowe-13 nangowama-26 kuApreli)
- eMbombela (ngowe-13 nangowama-22 kuApreli)
- eKokstad (ngowama-20 kuApreli)
- eDundee (ngowama-21 kuApreli)



Ilanga likhanyise isibhakabhaka ngosuku lwabalimi eLouwsburg.



Umphathi wophuhliso lwengingga uLuke Collier eebbhexasa usuku lwabalimi eColana kwisithili sase-Mount Frere.



Iintsuku zabalimi zase Mbombela zityebise abalimi ngeenkukacha ezinomda.



Usuku lwabalimi eZyverfontein eLimpopo obelulungiselelwwe amaqela ofundonzulu amathandathu aseGrain SA ngomha we-14 kuApreli beluzinyaswe kakuhle.

## IINTSUKU ZEEMVULA ezintle nezimbi

**IXESHA** iokulima iinkozo zasehlotyeni ngowama-2021/2022 beliluhambo lwamahlandinyuka. Saze sammandi isiqabu kuxanduva lokuhlolahlola ngenxkalabo amafu emvula elundini. Kodwa endaweni yoko, abalimi banyenzeleke ukuba balungise iindlela ebezinuke zaba yimilambo yamanzi okanye ziminxwe ludaka, kanti nemingxuma ibivulekile ezindleleni futhi zabangelaoko kubangele ingozi yemingxuma yokuwohloka komhlaba.

USolomon Masango, omnye wabalimi abangabacebisi kwinginqqi yaseLouwsburg, ebetyelele umlimi uNtombizethu Shongwe waze wanika le ngxelo: ‘Onke amasimi amanzi kakhulu emva kwe-mvula. Siqwala sele amasimi athile kodwa asikwazanga kufika kulawo ebemanzi kakhulu. Ngoku sijongene nengxaki kuba izityalo seziqalisu ukuphuma amaqivi, ngokungathi kusentlakohlaza. Akukho nto abanokuyenza abalimi ngenxa yeemeko ezimanzi. Asazi ukuba siza kuzivuna njani iimveliso zethu. Nam njengomcebisi andinamacebiso. Sifanele nje ukuthandaza kuYehova.’

Umcebisi waseFree State uJohan Roux utyelele elinye lamalungu esigqeba esilawulayo sethu saseGrain SA, uMaseli Lethuka, ofama kwisithili saseQwa Qwa. Unike le ngxelo: ‘Ifama ibinemvula nesichotho esingama  $\pm 90$  mm. Umlimi uxele umonakalo wesichotho kwaye usalinde uhlolo lwavo. Umbona uyavuthwa futhi imozulu ivumela ukuba uvunwe xa isiya ekupheleni inyanga kaJuni’. UJohan naye utyelele umlimi uTshepo Mofokeng oxele ama-95 mm emvula. ‘Amasimi amanzi kakhulu kwaye aneengqimba zodaka kodwa umbona uyaqalisa ngoku ukoma kakuhle’.



Iindlela eziya kwifama kaPaulos Tshabalala eFree State bezisemanzi kakhulu zityibilikisa ngo-Apreli, kwaze oko kwenza ukuba kuge nzima ukufika efama.



Umlimi uTshepo Mofokeng ujongenne nemingeni emininki ngenxa yezandyondyo zemvula kulo nyaka.

Amanzi akuyo yonke indawo! Umlimi waseDundee uJohn Ngwenya uthemamasim ase-manzi kakhulu kanti ukuvuna kuza kuba ngumngeni. ■