

# PULA IMVULA

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IMAGAZINI YAKWAGRAIN SA YOPUHLISO LWABAVELISI

## Yithintele iminqa yemali ENGACWANGCISELWANGA

*Ifoto: Tersia Drotsky.*

**K**UBALULEKILE UKUQONDA IINDLEKO EZAHLUKILEYO ZESHISHINI – AKUKHATHALISEKI NOKUBA LISHISHINI LOMNTU OMNYE OKANYE LIQUMRHU. NOKUBA KUKWELIPHI ISHISHINI, KUQUKA ISHISHINI LOKUFAMA, ZIMBINI IINTLOBO EZISENTLOKO ZEENKCITHO – IINDLEKO EZINGESOSIGXINA NEZISISIGXINA.

Ezinye iinkcitho ziya kutshintsha ngokwanda okanye ngokuncipha kwemveliso. Nangona kunjalo, zikhona iindleko eziya kuhlala zinjalo zide zifikelele kwinqanaba elithile kwaye azichatshazelwa kukwanda okanye kukuncipha kwemveliso. Ngoko ke, iindleko zahlulwa ngokweendleko ezingesosigxina ezokwabelwa ngqo nangokweendleko ezisisigxina ezenza iindleko ezipheleleyo zeshishini.

### IINDLEKO EZINGESOSIGXINA NEZISISIGXINA

#### Iindleko ezingesosigxina

Iindleko ezingesosigxina zinxulumene ngqo nesixa esiveliswa lishishini. Ukuba ayikho imveliso, akusayi kubakho zimveliso zamalungiselelo nazindleko zingesosigxina zidingekayo. Iindleko ezingesosigxina ziya kunyuka xa inqanaba lemveliso lisanda – umzekelo, iindleko zembewu, isichumiso, ipetroli okanye idizili kunye nezabasebenzi bamaxesha athile.

Ukuba kulinywe umbona, kulula ukubala isixa sembewu esidingekayo. Xa usandisa okulimayo, uya kudinga imbewu ethe kratya. Wonke umntu uyazi ukuba malunga nokulima umbona kudingeka imbewu, izichumiso, iikhemikhali zokutshabalalisa ukhula nezinambuzane, idizili, imali yokukhanda neyezinye iimveliso zamalungiselelo. Ezi mveliso zamalungiselelo zifanele ukuba khona ngexesha lokutyala.

#### Iindleko ezisisigxina

Kwelinye icala, ezinye iindleko zifanele ukuhlawulwa ngenyanga nganye, ndleko ezo ezifana nezeakhawunti yeseffowuni, imivuzo yabasebenzi basefama, igrosari nezinye iinkcitho. Ezi ndleko zenyanga zikhohlisa ukubizwa ngokuba ziindleko ezisisigxina.

Iindleko ezisisigxina ziyinxalenye yeendleko ezipheleleyo ezingaguqukiyo, akukhathaliseki nokuba bekulinywe okanye bekungalinywanga. Ngamanye amazwi, aziphenjelelwa kukwanda okanye kukuncipha kwemveliso.

Ukunika ingcaciso yoku kungentla, jonga umzekelo wezidingo zomzi wakho. Ukuba ulime iihktare ezithe kratya, izidingo zomzi wakho aziguquki. Kanti naxa kulinywe inani leehktare elinganeno, zikwahlala zingatshintshi. Kodwa xa siqwalasela iihktare ngokwayo, iindleko ziya kutshintsha kakhulu – ukuba kulinywe iihktare ezithe kratya, iindleko ziya kwanda. Akukhathaliseki ukuba kulinywe kangakanani, iindleko ezisisigxina ziba yinxenye yeendleko zizonke zeshishini.

## Yithintele iminqa yemali...

**Kwitheyibhile 1** (kwiphepha lesi2) kuboniswa umzekelo wephepha leendleko ezisisigxina zesiqhelo zeshishini lokufama. Kubalulekile ukuqonda ukuba onke amashishini okufama aya kuba nazo phantse zonke ezi ndleko, kodwa zingabakho iimeko eziphuma ecaleni. Umzekelo, ukuba ishishini alinazo naziphi iitrektara kuba lisebenzisa iikhontraktha ukwenza yonke imisebenzi yokulima, akusayi kubakho zindleko zokwehla kweendleko zeetrektara.

Ezi ndleko zisisigxina zikhohisa ukungahoywa kwinqubo yohlahlo-mali. Kuyenzeka ukuba kufike ixesha lokuphela kwemali ebhankini phakathi konyaka, kusashiyeke iinyanga ezimbalwa phambi kokuvunwa kwezityalo. Ngeli xesha, abalimi baqala bathengise iinkomo ezingathengekiyo kuba befuna ukufumana imali yokuhlulwa abasebenzi kunye neyemali ezihlawulwa ngeakhawunti.

### IXABISO ELIPHANTSI NGETONI EVELISIWEYO

Kwimeko yangoku yokuthengiswa kweenkozo, kubalulekile ukuba umlimi ngamnye makabe nolwazi ngamaxabiso aphantsi ngetoni nganye eveliswayo. Khumbula, amaxabiso ezityalo afumaneka yonke imihla kwiSafex kwaye abalimi banako ukuthengisa izityalo zabo ngokweekhontrakthi ezicwangciselwa kwangaphambili.

Kubalulekile ukwazi ukuba iindleko zokulima itoni yezityalo ziya kuba ngakanani. Umlimi ke ngoko angenza isigqibo sokuba uya kuthengisa nini okanye uya kulima ntoni. Ukuba akuquki zonke iindle-

ko zakho ezisisigxina, akusayi kukwazi ukwenza isigqibo esisesona siphucukileyo malunga neshishini lakho.



*Akukhathaliseki ukuba kulinywe kangakanani, iindleko ezisisigxina ziba yinxenye yeendleko zizonke zeshishini.*



### UKWAHLULA IINDLEKO EZISISIGXINA:

Abalimi mabaqiniseke ukuba iindleko ezisisigxina zahlulwa ngokufanelekileyo phakathi kwamashishini efama ahlukileyo. Okokuqala, iindleko ezisisigxina mazabiwe ngokwamashishini ahlukileyo apho kunokwenzeka khona.

Iindleko ezisisigxina zingahlulwa ngokwamashishini ezityalo nawemfuyo, nangokwenani labasebenzi abasebenza isigxina kwishishini. Umzekelo, ukuba kukho abasebenzi basefama abalishumi ukuze ababini kubo babe ngabelusi bemfuyo, ama20% eendleko ezisisigxina anokwabelwa imfuyo ukuze ama80% angene ekulinyweni kwezityalo.

Xa utyala umbona nojongilanga, iindleko ezisisigxina ezabelwe izityalo zingahlulwa phakathi kombona nojongilanga ngokwedizili

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**Umzekelo wephepha leendleko ezisisigxina zesiqhelo zeshishini lokufama.**

Isihloko seendleko ezisisigxina	Zizonke nkonyaka	Iindleko ezisisigxina zezityalo	Iindleko ezisisigxina zemfuyo
Abasebenzi: lintlawulo nemivuzo			
Umbane			
Ukukhanda ukuze okuphuculiweyo kube sisigxina			
Ulawulo, izithuthi, ipetroli/idizili nokukhanda			
Ulawulo lweofisi neenkitho zalo			
Iintlawuliso zebhanki			
Irhafu			
Umphicothizincwadi			
Iinkitho ezahluahlukileyo			
Irenti yomhlaba nokwabelana ngezityalo ezilinywayo			
Iilayisensi			
Imbalelwano nefowuni			
Iintlawulo zasemthethweni			
I-inshorensi: Ngokubanzi			
Iindleko zokugcina ukuphila			
I-inshorensi yobuqu bomntu			
Iindleko zentsimi ezihlawulwa kanye			
Ukwehla kwamaxabiso			
Inzala yemali esetyenziswa njengetyala			
Izavanga zethuba elide neliphakathi			
Ulwabiwo lweendleko zomhlaba olifusi			

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***Xa ulima kakhulu, ziya kuba phezulu neendleko ezingesosigxina.***

engangelitha esetyenziswa ngehektare nganye. Ngokwenza ngolu hlobo, isityalo esisebenzisa idizili ethe chatha siya kunxulunyaniswa neendleko ezisisigxina ezithe chatha.

## ISIPHELO

Abalimi banako ukubuza ukuba kutheni iindleko ezisisigxina zibalulekile kwaye kutheni kufanele kuqukwe ukwehla kwamaxabiso (nje ngakumzekelo omalunga neektara). Isizathu esiphambili kukuba iitrektara ziya kulahlekelwa lixabiso lazo ethubeni kwaye kufuneka imali yokuthenga itrektara entsha eya kungena endaweni yendala. Ngoko ke, ukwehla kwamaxabiso yindlela yokunceda ngokuthenga oomatshini abatsha endaweni yabadala. Wonke umntu uyazi ukuba itrektara endala ifanele ukuyekwa ukuze kusetyenziswe entsha endaweni yayo emva kwexesha elithile kuze kongezwe ixabiso elehli-leyo njengeendleko, oko kuya kuqinisekisa ukuba ikhona imali yokuphumza itrektara endala ngokuthenga entsha.

Ungaze uzilibale iindleko ezisisigxina, njengoko iindleko ezincinane zisenza isixa esikhulu esifanele ukuhlawulwa xa zidibene. Umzekelo, uhlawula amaR500 ngenyanga ngeselfowuni yakho ekupheleni konyaka kodwa isixa esipheleleyo ngamaR6 000 ngonyaka. Xa ixabiso lanamhla lombona wangoJulayi lingamaR3 000 ekwiakhawunti yebhanki yomlimi, oku kuthetha ukuba iitoni ezi2 zombona ziphelile. Xa iindleko zokuziphilisa ziliR120 000 ngonyaka, iitoni ezingama40 zombona zimkile. Qala udibanise iindleko, ekugqibeleni uya kudinga umbona omninzi ukuze ube nemali yeendleko ezisisigxina.

Kwinqaku elilandelayo siya kujolisa kwiindleko ezingqalileyo nakiindleko zizonke zokuvelisa iinkozo kunye nembewu yeoyile. ■

**PIETMAN BOTHA,  
MOITSEANAPE WA  
BOLEMRUI KA BOENE**



## AMAZWI AVELA... kuDudu Toit van der Westhuizen



**U**KUFAMA LUBIZO ASINGOMSEBENZI KUBA ABALIMI SUKUBA BENGAKWAZI ABANO-KUKULINDELA KWIXESHA ELIZAYO LOKULIMA. NGOKO KE, KUFUNEKA BAZIQHELANISE NEEMEKO EZINGAPHEZU KWAMANDLA ABO.

Lo nyaka usaqhuba kakuhle futhi kwezinye iingingqi konke kusancomeka kwezo fama, nangona abalimi bezinye iingingqi bebefanele ukusombulula iingxaki zezikhukula ekuqaleni kwexesha lokulima kodwa ekugqibeleni ezo ngingqi zathwaxwa yimbalela.

Kwiindawo ezininzi konke bekunika ithemba kwada kwaba yinyanga kaJanyuware apho kubonakele ithuba lembalela yaphakathi ehlotyeni, xa ezinye izityalo bezifikelela kwibanga elibalulekileyo lokuhlohleka kweenkoko. Lo ngumfanekiso oqhelekileyo wento okuyiyo ukufama – akunakuzi uyazi into eza kwenzeka.

Kweli xesha lonyaka, kukho abalimi asebeyiqoshelisile inkqubo yokuvuna lo gama basasebenza nzima abanye. Ngoku lixesha lokudwelisa zonke iintsilelo zexesha elidlulileyo lokulima ukuqinisekisa ukuba aziphindi zenzeke kwakhona kwixesha elizayo lokulima.

Omnye wemisebenzi ebalulekileyo kulimo kukulutshabalalisa ngocoselelo ukhula lwasebusika ukuze kulondolozeke ukufuma komhlaba. Inqanaba lokufuma olima ngako, liya kwalatha impumelelo yakho kwixesha elizayo lokulima. Qinisekisa ukuba ufumana iingcebiso ezilungileyo kwiingcaphephe ukuze ukwazi ukulondoloza ukufuma – ngokutshabalalisa ukhula lwasebusika ngeekhemikhali okanye ngoomatshini.

Ukhula lwasebusika lolunye lweentshaba ezizezona zinkulu zomlimi wezityalo. Xa ululawula ngokufanelekileyo, uya kusebenza phucukileyo kwixesha elizayo lokulima kwaye uya kuba sowumi kakuhle xa iEl Niño ecingeleka kwangaphambili ifika kuthi.

Yiba sisilumko somlimi futhi ube sisilumko samanzi. Qiniseka ukuba ulukhucule lonke ukhula lwasebusika, njengoko ukufuma komhlaba kungumhlobo womlimi.

– ***UDudu Toit van der Westhuizen ngumphathi wophuhliso lwengingqi eMntla Ntshona.*** ■

***Malunga nohlelo lwesiNgesi lwePula yale nyanga, skena le khowudi yeQR.***





# UGCINOZINCWADI Iubalulekile kubalimi

**E**ZOBALOMALI KUSHISHINO NGUMBA OBALULEKI-LEYO KULO NALIPHI ISHISHINI, ELINCINANE - NELIPHAKATHI NGOKOBUKHULU. ABALIMI ABANYE ABALIMI BAZILAWULELA IIMALI ZABO, LO GAMA ABANYE BEQESHA UMGGINIZINCWADI BAZE BAYENZELWE NGEKONTRAKTHI IMISEBENZI YOBALOMALI. KUSOLOKO KULUXANDUVA LOMLIMI UKUBEKA ILISO UKWENZELA IMEKO ENTLE YEMALI YESHISHINI.

Kuquka umsebenzi obalulekileyo wokulawula imisebenzi yemali yefama yemihla ngemihla – ukwenza ii-invoyisi ezichanekileyo, ukugcina ii-invoyisi zerhafu kunye ngeziteyithimenti zeeakhawunti ezibonisa iintlawulo. Ukulandela umkhondo wemali, uhlahluty, ugcinozincwadi, uhlahlomali kunye neminye imisebenzi emininzi yimibandela efuna ingqalelo yomlimi ukwenzela inkqubo yeshishini – ngokunjalo neSouth African Revenue Service (SARS), kuze kunikwe ingqalelo yeshishini ngalinye kwixesha elithile.

Abanini beshishini abangabaphathi abalungileyo baya kusebenzisa inkqubo zobalomali ukulandela umkhondo wempahla yexabiso yeshishini, agcine iingxelo, ahlalutye iziganeko zenzuzo nezelahleko, aze aqwalasele ukusetyenziswa kwemali eyikheshi, kuquka imiba apho inkcitho iphezulu kakhulu kuyo okanye amanani abonakala engachanekanga. Oku kuthetha ukuba iingxaki ziyafunyaniswa kuze kwenziwe iingquko eziyimfuneko.

## IGAMA LAKHO MALIHLALE LILIHLE KUMRHAFISI NAKUMPHATHI WEBHANKI

### Bhala iingxelo zalo lonke usetyenzisomali

Urhulumente unemithetho emiselweyo elawula indlela iqumrhu elifanele ukubhala ngayo iziganeko zosetyenzisomali. Ezinye iimfuno ziquka amaxwebhu ezinika inkxaso afana neerisithi, ii-invoyisi okanye ezinye iziqinisekiso zeentengo. I-SARS ifuna ukuba umntu alungise amaxwebhu enxaso ngokonyaka nohlobo losetyenzisomali.

Yiba nenkqubo ekusebenzela kakuhle. Inkqubo elungileyo yocinozincwadi lweziganeko zosetyenzisomali lweshishini ifanele ukuquka izinto ezifana nezi:

- Ingxelo yenyanga (ijenali) yokusetyenziswa kwekheshi.
- Ukulandela umkhondo weencitho: Ingxelo yokubhanka kwenyanga nganye, kuquka izavanga ezixhuzulwayo, usetyenzisomali olwenziwa ngekompuyutha kunye neentlawulo ezenziwa ngekhadhi yebhanki.
- Zonke ii-invoyisi zerhafu ezinikwe ishishini mazibhalwe zize zigcinwe ngokhuselo, njengoko zifuneka xa iSARS isenza uphicothozincwadi.
- Ukulandela umkhondo wengeniso: Bhala ingxelo malunga necandelo leshishini lokufama ebelifaka ingeniso.
- Iingxelo zemivuzo yabasebenzi (ezisisigxina nezamaxesha athile) kunye nenkqubo yenyanga nganye malunga nabasebenzi beshishini.
- Isishwankathelo seemali eziyikheshi ezifunyenweyo (ezemihla ngemihla nezenyanga).
- Uludwe lwayo yonke impahla ebalwayo yeshishini.
- Ingcaciso yokwehla kwamaxabiso: Ukwehla kwamaxabiso kubonwa njengenkcitho malunga ngokobalomali, njengoko kukhokelela kwiindleko zokuqhuba ishishini. Xa kusetyenziswa impahla yexabiso efana noomatshini kunye nezixhobo zokusebenza, ziyonakala futhi

nexabiso lazo liyetha ethubeni lobomi bazo lokusebenziseka. Ukwehla kwamaxabiso kubhalwa njengenkcitho kwingcaciso yengeniso.

- Gcina amaxwebhu ngokuqaphela malunga nazo zonke izithuthi nezinye iikhawunti zeentlawulo zethuba elide. Ingcaciso yobalomali iyawadinga ukuze ihlanganisele ingxelo yemali yokuphela konyaka.

### Yenza amaxwebhu eerisithi naweeinvoyisi zakho

Kubalulekile ukuwagcina kakuhle amaxwebhu osetyenzisomali nje ngaweentengo ukwenzela iingcaciso zemali ezifana nezeengeniso neenkitho, ezamalungiselelo eefomu zerhafu nokulandela imeko yokuphila kwequmrhu ngokwemali. Xa kuhlanganiselwa amaxwebhu eerisithi neeinvoyisi, sebenzisa inkqubo yequmrhu elandela umzila weVAT, iziganeko zosetyenzisomali ezingaquki VAT nezingahlawulelwa VAT kunye nentsusa yentengo.

### Kulawule ukusetyenziswa kwekheshi

Ukusetyenziswa kwekheshi kuthetha isixa sisonke semali eyikheshi esingenayo (ingeniso) nesiphumayo (iinkcitho) kwequmrhu. Kubalulekile ukugcina ukusetyenziswa kwekheshi kufanelekile ngokuthi kubekho inkqubo yokuyilawula. Oku kuthetha ukuba iqumrhu lifanele ukulawula nokulandela umzila wekheshi echithiweyo ngawo onke amaxesha. Iqumrhu lingayilawula kakubi imali eyikheshi yalo xa linetyala elikhulu kakhulu okanye ingeniso eninzi emalunga neemali ezingabuyiselwanga kuwe.

Yiba nesicwangcisocebo sokuhlawula imali yeenkonzo. Ukuhlawula iimali zeenkonzo ozifumanayo ngumba obalulekileyo wokubulawula kakuhle ubomi bakho bemali. Hlala unolwazi ngamaxesha ofanele ukuzihlawula ngazo iinkonzo ozifumanayo uze ukwenze isiqhelo sakho ukuzihlawula lingekadluli ixesha lokwenza njalo ukuze ungaziboni sowunengcindezeleko engqondweni, londoloza imali, nyusa umgangatho wakho wemfanelo yokufumana ityala, ngokwenza njalo uya kukwazi ukufumana inzala ephantsi kwixesha elizayo.

### Yongamela uze ugcine umzila weentlawulo zemivuzo

Isishwankathelo semivuzo yabasebenzi siqulethe zonke iintlawulo zabasebenzi beshishini, kuquka iinzuzo, imivuzo, iirhafu kunye neemali ezixhuzulwayo. Kubalulekile ukwazi iindleko ezimalunga nabasebenzi beshishini – oku kubhekiselele kubo bonke abasebenzi besigxina abamathuba athile onyaka okanye abangena ngamaxesha athile.

- ISebe labaSebenzi lifuna ukuba nawuphi umqeshi onomsebenzi omnye okanye ngaphezulu abhalisele iMbuyekezo yoMsebenzi (Workman's Compensation.)
- Luxanduva lwabaqeshi ukuqinisekisa ukuba bonke abasebenzi babhaliswe iNgxowamali yelnshorensi yokungaphangeli (Unemployment Insurance Fund - UIF), futhi mabaqiniseke ukuba umrhumo womsebenzi uxhuzulwa emvuzweni ngenyanga nganye.

### Yiba nemigqaliselo

Ukuze ziphunyezwe iinjongo zemali zethuba elide, amashishini amancinane enza imigqaliselo ukuze alungiselele ikamva. Ubalomali lwamashishini lunika amaqumrhu ingqiqo ngemali nangeengxelo ezinxulumene nayo ukuze kwenziwe imigqaliselo nohlahlomali ngokwezicwangcisocebo eziphucukileyo.

### Yiqonde imicimbi yerhafu

Iirhafu ezihlawulwa liqumrhu, zixhomekeke kuhlobo lweshishini. Kubalulekile ukuba umnini weshishini elincinane akhe ubudlelwane obulungileyo nombalimali, ukuze amkhokele kubume obuxananazileyo obungqonge ishishini.

### Ngenisa iifomu zerhafu neengxelo zemali

Obu bubume obuxananazileyo obungqonge ishishini, kwaye umbalimali olungileyo angalondolozela umlimi imali eninzi. Ukuba lo mbandela awuhoywa, iSARS iya kuleqa futhi ayisayi kuthandabuza ukukhupha izohlwayo eziqatha ngenxa yeefomu ezingeniswe emva kwexesha okanye ezineenkukacha ezingachanekanga.

### Lawula iinzuzo neelahleko

Iinzuzo ziingeniso okanye yimali eyikheshi engenayo, kanti iilahleko zibhekiselele kuyo nayiphi into efanele ukuhlawulwa liqumrhu okanye imali ephumayo. Bhala iingxelo ngeenzuzo nangeelahleko ukuze uqinisekise impilo yemali kunye nokomelela kweshishini.

### Zahlukanise iikhawunti zakho

Zahlukanise iingxelo zosetyenzisomali zobuqu bakho kwezafama yakho ukuthintela ukubhidaniseka.

### Imizila eyahlukileyo yetyala

Ukulandela umkhondo weshishini: Kubalulekile ukwazi ukuba yeyiphi imiba kwimisebenzi yakho yokufama engenisa imali ingawaphi amacandelo akunika iindleko eziphezulu.

### Lungelelanisa kwangoko futhi kaninzi

- Qwalasela iikhawunti zakho kaninzi kangangoko kunokwenzeka ukuqinisekisa ukuba isixa semali onaso sihambelana neengxelo zakho.
- Bhala iintlawulo (iinkcitho) ezenziweyo ngexesha ozenza ngalo

kananjalo neemali ezingenayo (iingeniso) ngexesha ozifaka ngalo elugcinweni.

- Qwalasela iikhawunti zakho ngenyanga nganye xa ibhanki ikhupha isisteyithimenti. Yazi ukuba isenti nganye yenze nto okanye ifumanyenwe phi.

### Sithintele isiphango samaphepha

Gcina ucwangco ukuze uphumelele kwidabi lemfunba yeembalelwano nakwiintlawulo ezingena emva kwexesha: Zivule zonke iimbalelwano neemeyile ngexesha ozifumana ngalo. Bhala iingxelo yeemali zamatyala owanike abantu, futhi nawe yenza iintlawulo ngokwemfuneko. Kwakhona gcina umzila wokuba ngoobani abafanele ukukhulawula. Isiseko sesakhono senzuzo sisekuguquleni umsebenzi owenziwa ngezandla ube yi-invoyisi, ejika ibe yimali. Fumana imali eyikheshi, hlawula iinkonzo ozifumanayo, londolozela iinkcitho zenzala ukuze uphefumle ukhululekile.

### KUTHENI KUSENZIWA UGCINOZINCWADI?

Iingxelo yeenkcukacha zesiqhelo kunye neengxelo zeejenali zifumaneka kuphela ukuze ukwazi ukuqhuba ishishini lakho ngendlela encomekayo, kuba uya kucaciseleka xa unolwazi oluphangaleleyo ngeenkukacha ezichanekileyo. Wena njengomlimi ufanele ukuhlala uzibandakanya kule nkqubo. Fumana iingxelo oyidingayo ngemicimbi yemali ukuze uxhase okanye uphengulule izigqibo zakho zolawulo. ■



JENNY MATHEWS,  
INGCALI NOMHLOHI  
WOLAWULO NOPHULISO

## UKHUSELO KUQALA

## Icandelo 10

# Iindawo eziphezulu: *Lumka*

**A**BASEBENZI ABASEBENZA KWIINDAWO EZIPHEZULU MABAZILUMKELE IINGOZI EZINOKWENZEKA NGOKO KE BAFANELE UKUWUQEQE-SHELWALO MSEBENZI.

- Kufuneka kubekho umnxeba wokusindisa abasebenzi abafanele baziqhagamshela kuwo xa besebenza kwiindawo eziphezulu.
- Abasebenzi mabanikwe impahla yokhuselelo efanelekileyo, ngakumbi xa kukho izinto eziyingozi ezifana neasbestos, njengaxa besebenza kuphahla olwenziwe ngeasbestos. Xa kunjalo, umqeshi makaqinisekise ukuba iyahlangatyezwa imithetho emalunga neasbestos.
- Umqeshi makaqinisekise ukuba abasebenzi bakulungele ukwenza umsebenzi ngokwasempilweni.
- Kukhethwa ukuba umsebenzi makangasebenzi yedwa kwiindawo

eziphezulu kwaye ufanele akwazi ukunxibelelana nomphathi ngawo onke amaxesha.

- Kufuneka kubekho umsebenzi oqeqeshelwe ukwenza unyango lokuqala kunye nengxowa yezixhobo zonyango lokuqala kwisiza sokusebenzela.
- Uqeqesho lwale misebenzi lubaluleke kakhulu. 'isicwangciso sonqandokuwa' – iseti yeenkqubo eziyilelwe ukunceda ngokuchonga nokunciphisa iingozi zokuwa – ifanele ukuhlanganiselwa ukulungiselela lo msebenzi. Abasebenzi mabazazi ezi nkqubo.
- Akukho msebenzi ufanele ukwenziwa kwiindawo eziphezulu xa imbi imozulu. ■

CHARL SAAYMAN, UMCEBISI WEMPILO  
NOKHUSELO EMEGA HEALTH AND SAFETY



# Izikhokelo zabalimi abaqala

## UKULIMA IIMBOTYI ZESOYA

**N**JENGOKO ILIQELA IMIBANDELA EFANELE UKUQWALASELWA FUTHI IHLANGATYEZWE PHAMBI KOKUQALISWA KOKULIMA, ISIGQIBO MALUNGA NOKUTYALA IIMBOTYI ZESOYA SIFANELE UKWENZIWA KWIMINYAKA EMIBINI UBUNCINANE PHAMBI KWEXESHA LOKULIMA LOKUQALA (OKO KUKUTHI, UKUHLWAYELA.

Umbandela obaluleke kakhulu kukufumana iisampulu zomhlaba kwindawo ebiphawulwe, zize zihlalutywe ukuze kwenziwe izilungiso eziyimfuneko ezicetyiswa malunga neesampulu. I-pH kunye neemfuneko zekalika zibaluleke ngakumbi, njengoko ukugalelwa kwekalika kufanele ukwenziwa kwisityalo ebesilinywe phambi kweembotyi zesoya. Ukuba zininzi izilungiso zephosphorus (P) nezepotassium (K) ezifanele ukwenziwa, ubukhulu becala bazo bunokwenziwa kwisityalo ebesilinywe ngaphambili.

Umbandela wesibini ofanele ukuqwalaselwa kukugqithela kwisityalo esilandelayo iikhemikhali zokutshabalalisa ukhula ukususela kwixesha elinye (isityalo) ukuya kwelinye ixesha (isityalo). Umzekelo, iikhemikhali zokhula ezisetyenziswe ekulinyweni kombona nengqolowa xa kuthethwa ngokubanzi azinakusetyenziswa kwiimbotyi zesoya. Kukwakho namathuba okulinda phambi kokuba kutyalewe iimbotyi zesoya kwakuwo loo mhlaba apho iikhemikhali zokhula ezithile bezikhe zasetyenziswa ngaphambili. Kucetyiswa ukuzirhoxisa iikhemikhali zokhula ezinethuba lokulinda leenyanga ezilishumi ukuya kwezilishumi elinesibini kwiminyaka emibini ubuncinane phambi kokuhlwayela iimbotyi zesoya kwakuwo loo mhlaba.

Okwesithathu, zonke iimaleko ezindindeneyo maziqhekezwe (zikrazulwe). Kukwabalulekile ukusebenzisa amasimi angenamatye kunye/okanye angalungelelananga kakhulu. Iimbotyi zesoya zivunelwa ezantsi (kuma30 mm ukuya kuma60 mm), ngoko ke ibleyidi kamathshini wokuvuna ingonakala ukuba amasimi awalungelelananga kunye/okanye anamatye.

Xa umlimi esebenzisa ikhontraktha emvunelayo, ufanele uqinisekisa ukuba ikhontraktha yenza amalungiselelo omhla wokuvuna obekiweyo. Inani leentsuku phakathi kokuhlwayela nokuvuna lahluka kakhulu phakathi kwemihlanganisela yembewu. Ngoko ke, kubalulekile ukufumana ezi nkukacha kumaqumrhu embewu.

Amasimi anokuba sisisulu sokugwanyanya kwamanzi kunye nenqoboka elushica emthubi (*uintjies*) ziimeko ezifanele ukuphetshwa.

### UMHLABA

Wuphephe umhlaba owonakele kulwaxhiwo lwawo, nokholisa ukwathatha ubukho bamagade anobukhulu obulingana nobebhola yegalufu nebhola yetenetya (**Ifoto 1**). Izandyondyo zeemvula ezigaleleka emhlabeni owonakeleyo zingakhokelela ekuhlumeni okucekethekileyo kweembotyi zesoya. Umhlaba ondindana ngenxa yeengxaki zendlela ovakala ngayo esandleni (ipesenti yodongwe), nawo mawuthintelwe.

Nangona kunjalo, ukuba umlimi ukhetha ukulima loo mhlaba, imigaqo yokulima mayihlengahlengiswe ukuze kuphuculwe isiqulatho sawo sezinto eziphilayo ezikuwo. Iimbotyi zesoya zingalinywa emhlabeni onesiqulatho sodongwe esibanzi kakhulu (i10% ukuya kuma45%).

Nangona iimbotyi zesoya ziqhuba kakuhle noko emihlabeni onezakhi ezingezizo ezincomekayo, kubalulekile ukuwazi amanqanaba angawona afanelekileyo ezi zakhi kwiintlobo zemihlaba ezahlukileyo (jonga **iTheyibhile 2** kwiphepha lesi 9). Ixabiso lepH yomhlaba elifanele ukulinywa kweembotyi zesoya, malibe phakathi kwe pH yamanzi esisi5,8 nesi6,5.

Ukuba ukufakwa kwekalika kuyimfuneko, isiqulatho semagnesium (isiqulatho seMg) sikhohisa ukusetyenziswa njengesalathisi sohlobo lwekalika olufanele ukusetyenziswa. Ukuba ingaphantsi kwe100 mg/kg, kufuneka kusetyenziswe ikalika esabudolomite. Ukuba ingaphezulu kwi100 mg/kg okanye 0,6 x icalcium-esemhlabeni (Ca), makusetyenziswe ikalika yecalitic. Naxa iimbotyi zesoya zingenabuntununtunu bungako malunga nomhlaba onetyuwa eninzi, kukhethwa ukuba inqanaba lesodium malibe ngaphantsi kuma50 mg/kg, noku nymezela (resistance – R) okuphakathi kwama2 000 nama3 500 ohm, nokusasazeka (EC) okunganeno kuma75 mS/m.

### IMISEBENZI YOLIMO

Kumacandelo alandelayo, umhlaba kunye nemisebenzi yolimo kuyaxoxwa ngaloo mibandela njengoko izizinto eziqwalaselwa ngalo lonke ixesha lokulima.

### Ukufaka isichumiso

Njengakwezinye izityalo ezininzi, ukugalela izichumiso kwiimbotyi

1

**Amxabiso abhalwe kwiindawo eziluhlaza neziblowu alatha ububanzi bemiqolo obufanelekileyo kunye namanani ezityalo ngexesha lokuvuna.**

### ISIGQIBO NGAMANANI EZITYALO NANGOBUBANZI BEMIQOLO

	150 000	200 000	300 000	400 000	500 000	600 000
<b>Iimiqolo</b>	<b>Inani lezityalo ngemitha, umgama phakathi kwezityalo (cm)</b>					
38 cm	6 (16,6)	8 (12,5)	11 (9,1)	16 (6,25)	19 (5,3)	23 (4,38)
45 cm	7 (14,3)	9 (11,1)	14 (7,14)	18 (5,55)	23 (4,35)	27 (3,70)
52,5 cm	8 (12,5)	11 (9,1)	16 (6,25)	22 (4,55)	26 (3,85)	32 (3,13)
60 cm	9 (11,1)	12 (8,33)	18 (5,55)	24 (4,17)	30 (3,33)	36 (2,78)
76 cm	11 (9,1)	15 (6,67)	23 (4,35)	30 (3,33)	38 (2,63)	46 (2,17)
90 cm	14 (7,14)	18 (5,55)	27 (3,70)	36 (2,77)	45 (2,22)	54 (1,85)

Umthombo weenkukacha: Protein Research Foundation

zesoya kuxhomekeke ekurhoxisweni kwezakhi sisityalo esithile. Ukuba izakhi zezondlo zikwinqanaba elilelona lifanelekileyo, izakhi ezifanele ukufakelwa zezo bezisuswe sisityalo sethuba elingaphambili kuphela. **Itheyibhile 3** (kwiphepha lesi 9) yalatha amanqanaba okusiswa kwezakhi emhlabeni ziimboty zesoza.

limbotyi zesoya ziyakwazi ukuzilungiselela malunga neemfuneko zazo zenitrogen ngokusebenzisana neebhaktiriya zeengcambu (Rhizobium).

Njengoko kubonakala kwiTheyibhile 3, kukho isidingo, ngakumbi iK ekulinyweni kweemboty zesoza. Izikhokelo zokufakwa kwezichumiso ukwenzela iP neK kwiimboty zesoza ziboniswa **kwiTheyibhile 4 neTheyibhile 5** (kwiphepha lesi 9).

Inkoliso yabalimi ifaka isichumiso ize isidibanise nomhlaba – okanye malunga nomgaqo wokungahlakuli, isichumiso sifakwa emihlabeni yimvula nayimisundululu.

Apho umoya nemihlabha eyisanti iyinxaki khona (njengokuba kuqhele ukwenzeka entshona), ukutyala kungenzeka ngomxube opholeleyo weNPK, kuze kubekho isithintelo sokuba makungafakwa ngaphezu kwe15 kg ukuya kuma20 kg N kwimisele yezityalo. Umxube ufanele ukugcinwa kude kwimbewu ukuthintela ukutsha kwesichumiso. **Ifoto eyesi2 neyesi3** (kwiphepha lesi 9) zalatha unqongophalo lweempawu zeP neK.

### Imihlanganisela namaqela ophuhliso

Yonke imihlanganisela inokuhlelwa ngokwamaqela okuphuhla, alatha inani leentsuku eliyithathayo ukususela ngomhla wokuhlwayelwa ide ifikelele ekuphuhleni ilungele ukuvunwa. Amaqela ophuhliso ahlulwa ngokwamaqela athe kratya, phakathi kwe000 ne10 – kuhlwayelwa iqela lophuhliso elingange 000 lihlwayelwa kwiindawo ezipholileyo, ngelixa iqela lophuhliso le10 lihlwayelwa kwiindawo ezifudumeleyo.

Amaqela ophuhliso aphinda ahlulwe ngokwezahlu ezilinganayo zeshumi kumaqela, umzekelo isi4,4 okanye isi6,2. EMzantsi Afrika, kuhlwayelwa ubukhulu becala amaqela ezi4, ezi5 nawezi6 kodwa ngamanye amaxesha kube ngamaqela ezi7. Iqela lesi4 nelesi5 alinywa kwiindawo ezipholileyo, iqela lesi5 nelesi6 alinywa kwiindawo zemozulu ephakathi, lize iqela lesi6 nelesi7 libe kwiindawo ezifudumeleyo.

Kucetyiswa ukuba makuhlwayelwe ngaphezu kweqela elinye lophuhliso ukuze kuncitshiswe imingcipheko yembalela, isiphango kunye nezifo. Oku kolula ithuba lokuvuna. Imihlanganisela yeemboty



1

*Ulwakhiwo lomhlaba olonakaleyo.*



2

*Iimpawu ezilambatha ngeP zibonakala kwimiqolo emibini phakathi.*

zesoya inohlobo olunye okanye ezimbini zokukhula. Uhlobo lophuhliso lwenzondelelo luthetha ukuba luqala ukudubula luze luggqibe kwiiveki ezine ukuya kwezintandathu luze luqoshelise ngemidumba.

Olunye uhlobo lwepateni yophuhliso alunanzondelelo. Lukuvela kakhulu ukukhanya kwelanga kanti ukudubula kuya kuqalisa kuphela xa ixesha lasebusuku linobude obuthile. Ukuba olu hlobo lweemboty zesoza luyakuvela ukukhanya kwelanga, ukudubula kuya kuqalisa kuphela xa ixesha lasebusuku linobude obuthile. Ukuba olu hlobo lweemboty zesoza lufunyanwa ziimeko zembalela, luya kuyeka ukuphuhla luze luqalise ukuvelisa imidumba. Nangona kunjalo, xa kuphinde kwakho ukufuma kwakhona, luya kuqhuba ngokuphuhla nokudubula lude lufikelele kwiintsuku ezithile emva kokuhlwayelwa.

Ezinye iimpawu ezifanele ukuqwalaselwa xa kukhethwa umhlanganisela, bubunzima nolwakhiwo lwembewu (ofukufuku okanye othe nkqo). Umzekelo, ulwakhiwo olufukufuku lunesakhono esinamandla athe kratya ngenxa yezikhondo ezininzi ezisemacaleni. Kwakhona qwalasela ukunyamezela ukutyumzeka xa selihambile ixesha lokulima nobude belokuhlwayela – izityalo eziphakame kangama76 cm ukuya kwezingama80 cm zikhulu ngokwameleyo kwaye aziyi kuba zizisulu kangako zokuya phezu kwezityalo ezithande ukuba zide.

Ngoku imihlanganisela engaphezu kwengama40 eyahlukileyo ithengiswa ngamaqumrhu aliqela embewu. Kubalulekile ukuba imbewu idolwe phambi kokuqalisa kwexesha lokulima (kwangoko nje ngakuMeyi), ukuqinisekisa ukuba abalimi bafumana umhlanganisela othile abawufunayo.

### Ugonyo lwembewu ngamaquhquhvana eebhaktiriya (Rhizobium)

Isityalo seemboty zesoza sixhomekeke ngokupheleleyo kwinitrogen (N), esiyifumana kumaquhquhva eRhizobium ezingcanjini. Isityalo sinika amaquhquhvana eRhizobium isitatshi neeswekile kwiRhizobium ukuze sifumane iN. Njengohlobo oluthile lweRhizobium oluse-tyenziswa eMzantsi Afrika alungobhubhane welizwe, kubalulekile ukuba imbewu igonywe kakuhle kwixesha ngalinye lokulima.

Kubalulekile ukuba xa kuhlwayelwa iimboty zesoza okokuqala, imbewu igonywe kwimisele phambi nangexesha lokuhlwayela. Khumbula ukuba iRhizobium zizidalwa eziphilayo ezinokubulawa kukukhanya okuthe ngqo futhi nalapho kungekho mongomoya emhlabeni zize zirhaxwe.

Xa kwenzeka iimpazamo ngexesha lokugonya, oko kuya kuba zindleko eziphezulu kumlimi kanti belunokufunyanwa ngeR60 ngehektare ukuya kumaR90 ngehektare. Ngoku kukho amaqumrhu embewu azigonyela iimboty zesoza ngokwawo aze ayithengise seyinjalo. Qinisekisa ukuba utyala imbewu phambi komhla wokuphelelwa lixesha kogonyo.

### Ububanzi bemiqolo namanani ezityalo

limbotyi zesoya zihlwayelwa ngokwemiqolo ekububanzi bama25 cm ukuya kwi150 cm. Nangona kunjalo, ububanzi bemiqolo obuthandwa kakhulu buphakathi kwama38 cm nama90 cm. Ukuba kusetyenziswe amanani ezityalo achanekileyo, iimboty zesoza zinokuhlwayelwa nangobuphi ububanzi bemiqolo obukhankanywe ngasentla – qinisekisa nje ukuba ukukwila izithuba phakathi kwezityalo kumqolo ngamnye akukho ngaphantsi kwi4 cm kodwa akukho ngaphezulu kwi8 cm. Uluvo oluxhasa esi senzo kukuba umlimi unako ukusebenzisa kwasona eso sixhobo ahlwayela ngaso umbona.

Kubalulekile ukukhumbula ukuba amanani ezityalo afanele ukulingana nalawo asemasimini ngexesha lokuvuna. Iliqela imibandela enokuba negalelo 'ekunyamalaleni' kwezityalo kulo lonke ixesha lokulima, efana neqanaba eliphantsi lokuntshula, izinambuzane, izifo kunye nokucinezeleka kwezityalo zezinye. Ngoko ke, makuhlwayelwe i15% ukuya kuma20% ngaphezulu kunenani lezityalo elilindeleke ngexesha lokuvuna.

### Umhla wokutyala nenkqubo yokutyala

Umhla wokutyala uxhomekeke kubushushu bencingqi (obupholileyo, obuphakathi okanye obufudumeleyo). Kwiingingqi ezipholileyo, iim-





**limpawu ezilambatha ngeK zibonakala ngokucacileyo kwimiqolo emibini esizikithini kule ntsimi.**



**Ukuvulwa kwemisele yezityalo: Ekhohlo (intsimbi ephambi kwekhuba) ekunene (izinyo).**

botyi zesoya maxa wambi zityalwa kwangoko kangange10 kuOkthobha, kodwa umhla wokuhlwayela ofanelekileyo uphakathi komhla wama-20 kuOkthobha ukuya kuma20 kuNovemba. Kwiingingqi ezinobushushu obuphakathi, ukuhlwayela kwenziwa ukususela kumhla woku1 kuNovemba ukuya kowama30 kwakuNovemba, ukuze kwiingingqi ezifudumeleyo ube phakathi komhla we15 kuNovemba ukuya kowe15 Disemba.

Ubude bethuba lokukhula komhlanganisela nako kunefuthe kumhla wokuhlwayela. Ukuba imihlanganisela ekhula kwithuba elifutshane ihlwayelwa phambi kwexesha kakhulu, inako ukulungela ukuvunwa ekuqaleni kukaMatshi, xa imvula isana kakhulu kuze oko kubambezele ukuvuna. Nangona kunjalo, uze ungawuhlwayeli seligqithe kakhulu ixesha elifanelekileyo, njengoko isenokuvuthwa ngexesha elinye naleyo yethuba elide lokukhula.

Okona kulungileyo kukuqala ukuhlwayela ngemihlanganisela yethuba elide ukuze iyifumane ngokwaneleyo imilinganiselo yobushushu bexesha lokulima, kuze kulandele eyelona thuba lifutshane emva koko kulandele eyamathuba aphakathi ngokokushiyashiyana kwamathuba okukhula ayo. Qaphela ukuba xa kuthethwa ngemihlanganisela ekwiqela elilelona lide nekwiqela elilelona lethuba elifutshane, oko kuthetha ithuba lokukhula.

Ngamanye amazwi, kwiingingqi ezipholileyo, elona qela lethuba elide liya kuba yinto efana nesi5, isi8 okanye isi6, ngelixa elona qela lifutshane liya kuba yinto efana nesi4,2 okanye isi4,4. Ngokunjalo, kwiingingqi ezifudumeleyo, umhlanganisela wexesha elifutshane uya kuboniswa njengesi5,5 ukuya kwisi5,8 uze owethuba elide lokukhula uboniswe njengesi6,8 ukuya kwisi7,0.

Xa kunokuba yimfuneko ukuhlwayela okuphindwayo ngenxa yobuthathaka bokuhluma okanye umonakalo obangelwe sisichotho, kulandelwa umgaqo owahlukileyo. Ukuba ukuhluma bekubuthathaka okanye xa kukhawuleze kwafika isichotho, makuphinde kuhlwayelwe kwangoko, ngokusebenzisa kwalona elo qela lokukhula ebelityalwe kuqala. Ukuba isichotho sifika mva futhi iimbotyi zesoya ziseno-

kuhlwayelwa, sebenzisa umhlanganisela ophakathi kodwa othande ukuba mde phakathi kwesi5 nesi6. Uluvo oluxhasa lo mgaqo kuku-ba ekhula ngokukhawuleza iqala ukudubula kwiiveki ezimbini emva kokuhluma – izityalo zigqibela ngokuba zincinane kakhulu, futhi isivuno sibe phantsi.

Iimbotyi zesoya zilhlwayelwa ubukhulu becala ngezixhobo zokutyala umbona, kodwa iipleyiti zihlengahlengiswe ukuze zikwazi ukusebenza ngezityalo ezishinyene ngokugqithisileyo. Ukwandiswa kwemisele yezityalo – nokuba kungeentsimbi eziphambi kwekhuba okanye ngamazinyo – kwenziwa kwiimeko ezithile. Kwiingingqi apho kunokubakho khona umonakalo obangelwa ngumoya emva kokutyala, kukhethwa umsele wezityalo onzulu ukuze kukhuseleke izithole emoyeni. Ukusetyenziswa kwamazinyo ke ngoko kuko okunokukhethwa, ukuze ethubeni kulungelelaniswe umhlaba ngomatshini oqengqayo.

Xa kusetyenziswa oomatshini abaneentsimbi phambi kwekhuba, kubakho umsikeko omnye kuphela emhlabeni, xa kunjalo umhlaba uyalungelelana ukuze ufanele inkqubo yokuvuna (**Ifoto 4**). Iimbotyi zesoya zifunxa ama50% obunzima bazo ekufumeni phambi kokuba zikwazi ukudubula, ngoko ke, kufuneka kulumkelwe ukuhlwayela emhlabeni owome kakhulu okanye osidibi kakhulu. Ubunzulu bokutyala bungahluka ukususela kwisi3 cm nesi5 cm. Ukuba amathuba mahle apho kungenakufane kune mvula phakathi kokuhlwayela nokuhluma, ukuhlwayela kungenziwa nzulu kancinane ukususela kwisi3,5 cm ukuya kwisi4,5 cm.

### Ukutshatyalaliswa kokhula

Kule mihla, inkoliso yemihlanganisela iyamelana neglyphosate. Oku kukhokelela ekubeni abalimi bangabi sakwazi ukulwa nokhula ngendlela encomekayo ukususela ekuhlumeni, kuba benokukwazi ukululwa emva kwexesha. Nangona kunjalo, esi senzo asilunganga – kwiminyaka embalwa kumaxesha ambalwa okulima adlulileyo abalimi abaninzi bafumaneke bengazilungiselelanga izandyondyo zeemvula zikaDisemba, nasekuthinteleni amanzi ekungeneni emasimini ngezixhobo zokutshiza ukuze kutshabalale ukhula. Iimbotyi zesoya ezihluma kunye nokhula zonanaka kwasekuqaleni, kanti ilahleko yezityalo yinto eyenzekayo.

Mva nje kukho iikhemikhali zokhula zaphambi kokuhluma ezifaneleke kakhulu ezinokusetyenziselwa ukutshabalalisa iintlobo zengca, ukhula lwamagqabi abanzi kunye neenqoboka. Abalimi abafaka iikhemikhali zokhula akukho mfuneko yokubuyela kwiglyphosate, nto leyo esisenzo esihle soqoqosho.

Kukho iintlobo zokhula ezikwaziyo ukumelana neglyphosate, ezifana nehorseweed/ubuhlungu berhamba (*skraalhans*), wandering Jew/uhlotshane (*wandelende Jood*) ngoku nkqu green amarant (*marog*). Ukubulala ukhula ngezinye iikhemikhali kubaluleke kakhulu, ngoko ke ukumelana nazo kuyalawuleka.

### Izinambuzane nezifo

Izinambuzane zinako ukonakalisa iimbotyi zesoya yiloo nto zifanele ukutshatyalaliswa kwangoko. Izonakalisizityalo ezifanele ukutshatyalaliswa yintshulube engqukuva, uvivingane lweembotyi zesoya, zonke iintlobo zezinambuzane ezilumayo, isigcawu esibomvu, iintwala kunye neentethe.

Phakathi kweentlobo ngeentlobo zezifo ezenzeka kwiimbotyi zesoya, ezimbini kuzo zibaluleke ngakumbi malunga noqoqosho: yirusi yeembotyi zesoya neSclerotinia. Zozibini ezi zifo ziyonakalisa, kanti nangona irusi yeembotyi zesoya ilawuleka ngendlela encomekayo ngesitshizi sothintelo, okwangoku akukho mveliso inamandla okulwa iSclerotinia.



## 2 Okulindlekileyo ngokuchuma komhlaba.

Izakhi zezondlo		Umhlaba womhlaba mg/kg	Umhlaba otyheli mg/kg	umhlaba omnyama mg/kg
Phosphor (P) Bray 1	Iphantsi	15	10	5
	Iphakathi	15 - 40	10 - 30	5 - 30
	Iphezulu	>40	>30	>30
Izakhi zezondlo		Isanti mg/kg	Uvunduvundu mg/kg	Udongwe mg/kg
Potassium (K)	Iphantsi	40	60	80
	Iphakathi	40 - 120	60 - 180	80 - 200
	Iphezulu	> 120	> 180	> 200
Calcium (Ca)	Iphantsi	200	400	600
	Iphakathi	200 - 600	400 - 1 100	600 - 1 800
	Iphezulu	>600	> 1 100	> 1 800
Magnesium (Mg)	Iphantsi	35	60	100
	Iphakathi	35 - 100	65 - 150	100 - 250
	Iphezulu	> 100	>150	>250

## 3 Amanqanaba okususwa kwezakhi emhlabeni ziimbotyi zesoya.

	N	P	K
Kususwe isityalo esiyitoni e1 yembewu/ngehektare	60 kg	5 kg	18 kg
Kususwe inxalenye yembewu ngetoni	42 kg	3,5 kg	9,9 kg
Kususwe inxalenye yesityalo	15 kg	1,2 kg	7,2 kg

## 4 Izikhokelo zephosphorus zeembotyi zesoya.

I-phospho yomhlaba	Ukugalelwa kwe-kg ye-p ukwenzela isivuno (seetoni ngehektare)				
	1	2	3	4	5
<b>Bray 1 (mg/kg)</b>					
5	10	20	30	40	50
10	9	18	27	36	45
15	8	16	24	32	40
20	7	14	21	28	35
25	6	12	18	24	30
30	5	10	15	20	20
50+	0	0	0	0	0

## 5 Izikhokelo ze-potassium ngeembotyi zesoya.

I-k yomhlaba (mg/kg)	Ukugalelwa kwe-kg ye-k ukwenzela isivuno seetoni ngehektare				
	1	2	3	4	5
40	20	40	60	80	100
Isanti 40 - 120	15	30	40	50	60
> 120	0	0	0	0	0
60	25	45	65	85	125
Uvunduvundu 60 - 150	20	40	60	70	80
> 150	0	0	0	0	0
80	60	80	100	120	140
Udongwe 80 - 180	30	50	70	90	110
> 180	0	0	0	0	0

Kwenziwa amalinge okukhuphela ngaphandle iSclerotinia ngokusebenzisa ezikhula ngokukhawuleza, njengoko izityalo zisuleleka ngayo kuphela xa kukho imisikeko apho iintyatyambo ziwe khona. Kweli banga, imozulu ebangela ukuba isifo siqale ngomjikelo waso wobomi asiyo efanelekileyo ngokunjalo izityalo azisuleleki. Phantsi kokncenkesho, ukubola kwetshakhawuli kukholisa ukubangela iingxaki.

### Isivuno

Iimbotyi zesoya zivunwa ngetafile yokuvuna ingqolowa ekumatshini wokuvuna ubhula. Iliqela imibandela efanele ukuqwalasela. Kubalulekile ukumisela isantya sevili lokuhloha ukuze kucutheke ukutyumka kweembewu. Isantya somgqomo negobongqo mazihlengahlengiswe ukuze kunciphe ukuqhekeka kwembewu, ngelixa kuhlengahlengiswa umthamo womoya osetyenziselwa ukwela umququ kwisityalo.

Xa uvuna, yima uze uhlole iimbotyi ezichithekayo phambi kokuba ziye kumatshini wokuvuna kunye nokuvuza okwenzeka ngasemva kwisixhobo sokuvuna. Yenza izilungalingiso eziyimfuneko uze uqhube. Kwiziganeko ezithile, ukuvuza kungade kufikelele kwi150 kg ngehektare. Khumbula ukuba izisele ezamkela iimbotyi zesoya ezinokufuma kwe12,5% – ngoko ke zama ukugqiba ukuvuna msinyane kangangoko, njengoko isiqulatho sokufuma sinokwehla ngokukhawuleza ukufikelela kwisi8%. ■

WESSEL VAN WYK,  
INGCALI YEEMBOTYI ZESOYA  
NEEKHONTRAKTHA, EPROTEIN  
RESEARCH FOUNDATION.  
LIQALE UKUPAPASHWA  
ESA GRAAN/GRAIN,  
KUSEPTEMBER WAMA2021.



# Izinto eziluncedo

## ngokulinywa kweembotyi zesoya

**I**MBOTYI ZESOYA, NJENGESITYALO, ZILUNCEDO OLUKHULU. OKU KUQUKA UKUBA SISITYALO EKUNO-KUTSHINTSWA NGASO EKULINYWENI KOMBONA, KANTI FUTHI ZINGUMTHOMBO OMKHULU WEEPRO-THEYINI NASEKONDLINI IZILWANYANA ZIPHINDE ZIBE YIMBEWU YEOYILE ESETYENZISELWA UKUVELISA IOYILE YEZITYALO.

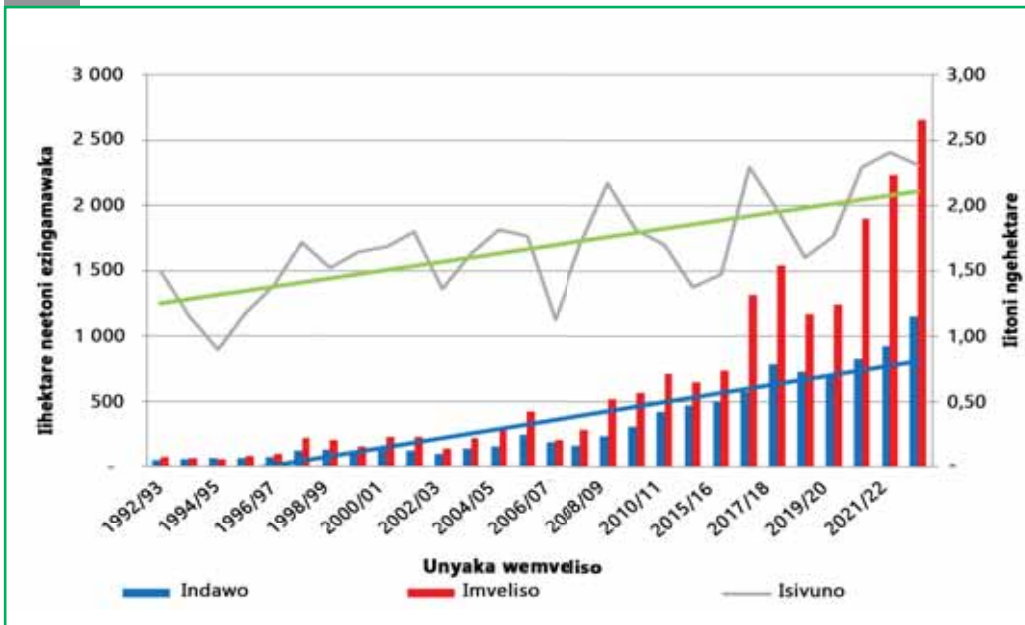
Asiyomfihlo ukuthi ukulinywa kweembotyi zesoya kwande kakhulu kwiminyaka emithathu edlulileyo. Xa sijonga **iGrafu 1**, kuyacaca ukuba

iihektare ezilinyiweyo kunye nokulinywa kweembotyi zesoya kwande ngezixa ezikhulu ukususela kwixesha lokulima lama 2020/2021.

Ukwanda kwemveliso kungaxulunyaniwa nemiba eliqela, efana neentlobo ezintsha zobuchwepheshe eziphucula izivuno kukwabangelwa nakukufuma komhlaba okwandileyo okuncedise ekulinyweni kweembotyi zesoya kwimimandla esentshona. Nangona ukulinywa kwazo kwande ngendlela encomekayo, intengo yeli lizwe iyonke ayilandelanga ekhondweni – njengoko kubonakala **kwiGrafu 2** ekwabonisa imveliso, isixa esisetyenziswayo siphela kunye neentengiso zeembotyi zesoya emazweni angaphandle.

1

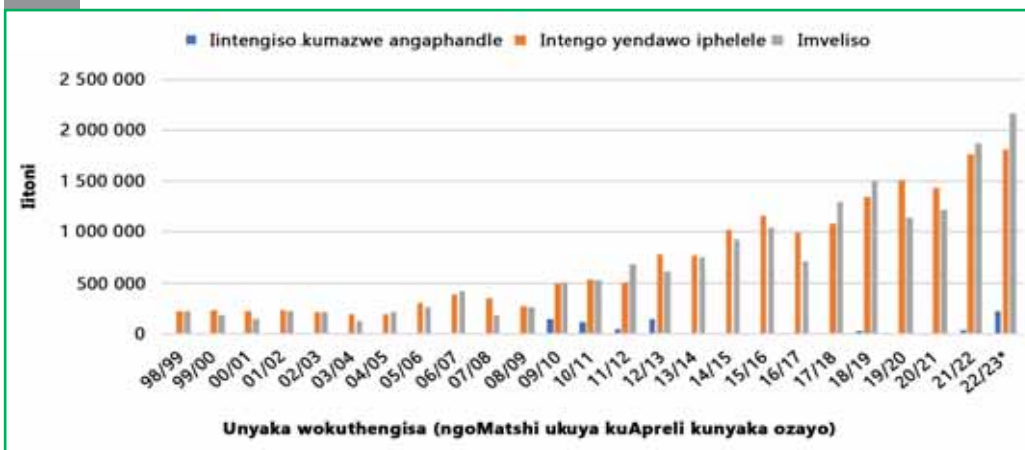
*Indawo elinywe iimbotyi zesoya, imveliso nesivuno.*



Umthombo weenkukacha: yiGrain SA

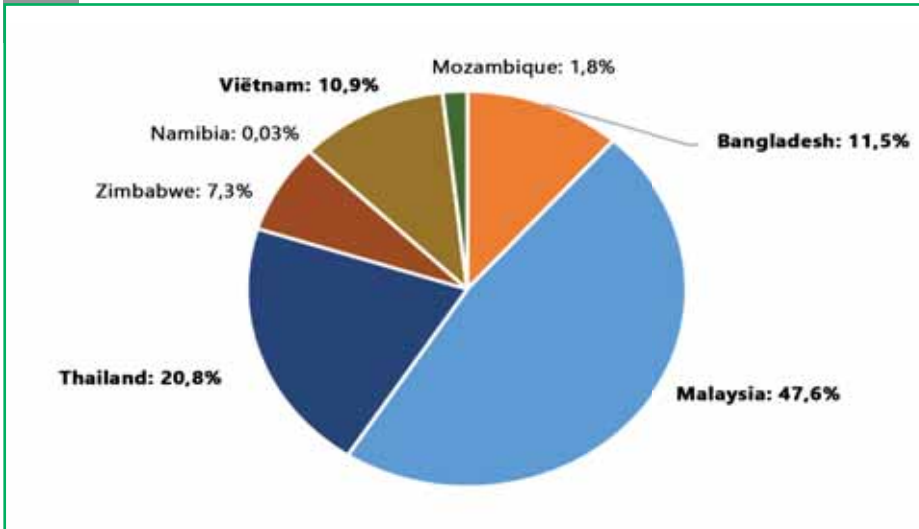
2

*Ukuthengwa kweembotyi zesoya kuthelekiswa nemveliso.*



Umthombo weenkukacha: yiGrain SA





Umthombo weenkukacha: yiGrain SA

Iziqhelu zexesha elidlulileyo zalatha ukuba okuqheleke kwintengiso yeembotyi zesoya eMzantsi Afrika, phambi kwexesha lentengiso lama2020/2021, kukuba imveliso yeli lizwe yeembotyi zesoya ayiyaneli intengo yalapha iphelele. Nangona kunjalo, emva kwexesha lentengiso lama2020/2021, imveliso ibingaphezu kwentengo iphelele kangokuba ukuthengisa emazweni angaphandle kwaba yimfuneko. Ukuba uMzantsi Afrika akakwazanga ukuthengisa iimbotyi zesoya emazweni angaphandle, amaxabiso eli lizwe ebeya kuba sengxakini yokuguqulwa.

**Igrafu 3** ibonisa amazwe athengiselwe iimbotyi zesoya ngonyaka wentengiso wama2022/2023. Intengiso yeembotyi zesoya emazweni angaphandle singathi sisenzo esisandul' ukuqala, kanti kusafunyaniswa namanye amazwe anokuthengiselwa. Kwixesha lokulima elidlulileyo, eyona nxalenye inkulu (91%) yeembotyi zesoya zaseMzantsi Afrika ithengiswe kwimimandla yentengiso yeAsia eseMpuma. Malunga neetoni ezingama230 000 zeembotyi zesoya ezithunyelwe kula mazwe, sixa eso esinyuke kakhulu xa kuthelekiswa namaxesha okulima angaphambili.

Kubalulekile ukuba kubekho eminye imimandla yentengiso ephuhliswayo ukuze intengiso yeembotyi zesoya kumazwe angaphandle isoloko iqhuba ize nempahla egciniweyo ihlale inozinzo. Xa siqwalasela ixesha lokulima elitsha, imimandla yentengiso emitsha iquka iEgypt, iChina, iTurkey neIndonesia. Iintshiyekela zeembotyi zesoya ezinokuthengiswa emazweni angaphandle kulindeleke ukuba ziphinde kwakhona zibonise ukwanda okubalulekileyo kweli xesha lokulima, yiloo nto uphuhliso lwentengiso kumazwe angaphandle lubalulekile.

## ISISHWANKATHELO

Ushishino lweembotyi zesoya lukhula ngokukhawuleza kunezixa ezisetyenziswa kweli lizwe, kuze oko kukhokelele kwizixa ezikhulu ezigciniweyo zeembotyi zesoya. Ukuze kugcineke ulungelelwano olunozinzo phakathi kwentengiso nentengo yalapha, ukuthengisa iimbotyi zesoya emazweni angaphandle kubalulekile. Ukuba uMzantsi Afrika akakwazi ukuthengisa amazwe angaphandle kuya kubakho izixa ezikhulu zeentshiyekela zeembotyi zesoya, amaxabiso eli lizwe eekhontrakthi ngokuqinisekileyo ebeya kucinezeleleka ezantsi.

Xa siqwalasela ixesha elitsha lokulima, iintengiso zamazwe angaphandle zisoloko zilandelwa kwaye ziphuhliswa. Malunga nexesha lokuthengisa lama2023/2024, eliqalise ngoMatshi, kulindeleke intshiyekela ebinokuthengiswa emazweni angaphandle emalunga neetoni ezingama600 000. Le ntshiyekela enokuthengiswa emazweni angaphandle iya kunceda ekugcineni isantya soshishino lweembotyi olukhula ngokukhawuleza ngoku. ■



**HELEEN VILJOEN,**  
INGCALI YASEGRAIN SA  
YOQOQOSHO KWEZOLIMO

# PULA IMVULA

## Iqela labahleli

### GRAIN SA: PRETORIA

PO Box 74087  
Lynnwood Ridge  
0040  
■ 086 004 7246  
■ www.grainsa.co.za

### UMHLELI OLAWULAYO

**Dr Sandile Ngcamphalala**  
■ 082 862 1991 ■ Iofisi: 012 943 8296  
■ sandile@grainsa.co.za

### UKUMISELWA KWABAHLELI

**Liana Stroebel**  
■ 084 264 1422 ■ Iofisi: 012 943 8285  
liana@grainsa.co.za

### UMAHLULELANE KUPAPASHO

**INFOWORKS MEDIA PUBLISHING**  
**Umhleli ongumncedisi – Louise Kunz**  
■ louise@infoworks.biz

### Inkokeli yeqela lomsebenzi – Johan Smit

■ 082 553 7806 ■ Iofisi: 018 468 2716  
■ johan@infoworks.biz

### Abapapashi – Elizma Myburgh, Jesse Ross



## Inkqubo yeGrain SA yoPhuhliso lwabaLimi

### ABAQUQUZELELI BOPHULISO

**Jacques Roux**  
IFree State eseNtshona (Bethlehem)  
■ 082 377 9529 ■ jacques.rouxjr11@gmail.com

### Johan Kriel

IFree State eseMpuma (Bloemfontein)  
■ 079 497 4294 ■ johank@grainsa.co.za

### Jerry Mthomboti

Mpumalanga (Mbombela)  
■ 084 604 0549 ■ jerry@grainsa.co.za  
■ e-Ofisini: 012 943 8289 ■ Smangaliso Zimbili

### Jurie Mentz

Mpumalanga/KwaZulu-Natal (Louwsburg)  
■ 082 354 5749 ■ jurie@grainsa.co.za  
■ e-Ofisini: 012 943 8218

### Graeme Engelbrecht

KwaZulu-Natal (Dundee)  
■ 082 650 9315 ■ graeme@grainsa.co.za  
■ e-Ofisini: 012 943 8287 ■ Nkosinathi Mazibuko

### Phumzile Ngcobo (Umncedisi waseOfisini: Dundee)

■ 060 477 7940 ■ phumzile@grainsa.co.za  
■ Office: 012 943 8287 ■ Nkosinathi Mazibuko

### Liana Stroebel

ENtshona-Koloni (Paarl)  
■ 084 264 1422 ■ liana@grainsa.co.za  
■ e-Ofisini: 012 943 8285 ■ Hailey Ehrenreich

### Du Toit van der Westhuizen

North West (Lichtenburg)  
■ 082 877 6749 ■ dutoit@grainsa.co.za  
■ e-Ofisini: 012 943 8290 ■ Lebo Mogatlanyane

### Luke Collier

EMpuma-Koloni (Kokstad & Mthatha)  
■ 083 730 9408 ■ luke@grainsa.co.za  
■ e-Ofisini: 012 943 8280 ■ Luthando Diko

### UCwayita Mpotyi (Umncedisi waseOfisini: Mthatha)

■ 078 187 2752 ■ umthata@grainsa.co.za  
■ e-Ofisini: 012 943 8277

### IPULA IMVULA IFUMANEKA

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isiXhosa, isiNgesi, iSeTswana, iSesotho nesi IsiZulu.

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## Ukukhuthaza abalimi ngokubanika ulwazi

**IINTSUKU** zabalimi zinika abalimi ithuba lokuba kunye – ezihambelana nothungelwano lwabathengisi beemveliso zamalungiselelo, ababoneleli beenkonzo kunye namaqela enxaso, kuquka neenkokeli zamasebe ahlu-kahlukileyo karhulumente. Iziza zemiboniso yeemvavanyo zikhohisa ukutyelelwa, apho kunokwabelwana ngolwazi nabanye abalimi, amaqumru athengisa iimveliso zamalungiselelo, amagosa eemfundiso zendawo kunye nabathabathinxaxheba bamanye amacandelo abamenywa ngezo ntsuku ngokwezicwangcisocebo.

Ngenyanga ka-Apreli bekubanjwe iintsuku zabalimi abalandelayo:

- Kwisithili saseSenekal, abalimi abangama62 batyelele ifama iAstoria kufuphi eSenekal kwiFree State eseMpuma ngomhla we14 kuApreli. Eli theko belixhaswe nguBayer noFarmsol. Abalimi bebenomdla ngakumbi kwisifundo ngasemngxunyeni womhlaba, nangokuphuhla kweengcambu, ukundindana kweemaleko zomhlaba nempilo yawo yimiba ebonakele ibaluleke kakhulu namhlanje.
- UBayer uphinde wanika inkxaso kusuku lwabalimi kwiFama iGibsons kwisiphaluka saseNormandien KwaZulu-Natal. Eli theko, ebelibanjwe ngomhla we18 April, beliququzelelwe yiofisi yaseDundee. Iinkcukacha malunga nokufama ngaphandle kokuhlakula nangokulinywa kwezityalo zamkeleke kakuhle kubalimi abangama42 abebezimase elo theko.
- Ngomhla we19 kuApreli, abalimi abangama53 baye kusuku lwabalimi eMilnedale ngaseDannhauser KwaZulu-Natal. UBayer ebengumxhasi walo mcimbi aze amalungiselelo aququzelelwa yiofisi yaseDundee. Ngaphandle kwemisebenzi yolimo, izifundo ziphinde zajoliswa ekubalulekeni kolawulo lweofisi olulungileyo nasekuqhutyweni kweofisi yefama ngendlela encomekayo.
- UJohn Deere neGrain SA bebesebenzisana ekunxulumaniseni imisebenzi yosuku lwabalimi eStoneybrook kwisiphaluka saseKokstad KwaZulu-Natal ngomhla wama20 kuApreli. Injongo ephambili yalo mcimbi ibikukwazisa abalimi ngeJohn Deere Financing. Abalimi ababekhona bebhakazelela ukufunda banzi ngeetrekara zeJohn Deere nangoomatshini.
- Usuku lwabalimi lwesihlanu obelukuApreli belungomhla wama21 kuApreli eZaaiplaas ngaseSehlokoane eLimpopo. Abameli abasuka eBayer, eKynoch, kwiForestry and Agricultural Biotechnology Institute (FABI) nakwiSebe lezoLimo babelane ngolwazi lwabo nabantu ababeyile abangama61.



*Ummeli weBayer uShadrack Mabuza uthetha nabalimi baseZaaiplaas ngokukhethwa komhlanganisela.*



*Abalimi bamamele ngomdla kwingxoxo emalunga neetrekara kunye noomatshini eStoneybrook.*

## Inkqubo ikhuthaza UKUKHULA

**INKQUBO** yeGrain SA yoPhuhliso lwabaLimi, esebenza phantsi kwegama iPhahama Grain Phakama (PGP), iyiarhente yophuhliso lolimo ebeka phambili futhi ixhase abantu abanqwenela ukuphucula imisebenzi yabo yokufama ngokunjalo inyuse umgangatho wezakhono zabo ukuze babe ngabalimi abaphuculiweyo.

Iqela lisebenzisa izicwangcisocebo eziliqela zokuzidibanisa nabalimi beenkonzo kulo lonke eli lizwe ukuze kufunyaniswe iindlela ezincomekayo zokuququzelela ukugqithiselwa kolwazi ebantwini kananjalo nophuhliso lwezakhono.

Isithako esiphambili senkqubo kukwakha imigaqo yothungelwano neyolwahlulelane nabanye abathabathinxaxheba. Injongo yePGP yile:

- Ukudibana nabalimi nokuthenjwa ngabo ngokubonisa uthakazelelo lokuziduba kangangoko ngokubanika inkxaso.
- Ukomeleza ubudlelwane phakathi kwabalimi namaqela othungelwano akufuphi kubo kushishino lolimo.
- Ukuhlala unolwazi ngezinto ezintsha kwezopolitiko nakwimigaqonkubo echaphazela ubume obubangqongileyo, ukuze abalimi basebenze ngempumelelo.
- Ukusebenza njengomlindi ukuqinisekisa ukuba umlimi uphethwe kakuhle kwaye unethuba elibalaseleyo lokuphumelela kangangoko kuba efumana imithombo yoncedo efumanekayo.



*I-PGP isebenzisa intlaninge yemigaqo yentsebenziswano yokuncedisa abalimi ekubeni basebenze phucukileyo. ■*