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TSHAZIMPUNZI
2017

Yiba soloko UPHAPHILE!

Imazini yakwa Grain SA
yophuhliso lwabavelisi

Bala Moteng:



UMnu Mzwayi Zuma nombona kaMnu Musa Khumalo.

Ndinethamsanqa lokusebenza kufutshane nabalimi abarhweba kancinanane kune nabalmela ukuziphilisa kwiindawo ezisemaphandleni KwaZulu-Natal. Aba balimi abayeki ukundimangalisa nge-pumelelo yabo emhlabeni omncinane, bekwenza oko naxa bejongene nemicelimengen ieminzi eyingxaki yonke imihla.

Eyona nto esuke yacaca kum kukuba abalimi abachitha ixesha elininzi kangangoko banakho emasimini abo,bekhulisa izityalo zabo begxotha izidalwa nemfuyo engafunekyo ekonakaliseni izityalo ngabona bavuna ngo-kwemisebenzi yabo lakufika ixesha lokuvuna.

Ngokubhala eli nqaku ndinqwenela ukubona bandile abalimi abalimela ukuziphilisa nabanendima yomkhulisi nomkhuseli. Sidinga ukuhlala siphaphile silumkele izityalo zethu side sivune nesokugqibela isikhwebu. Kanye ngale ndlela sikhulisa sikhusele ngayo abantwana bethu bade babe ngabantu abakhulu, ngokunjalo sidinga ukuba nendima yobunozala kwizityalo zethu xa sifuna ukubona izivuno zazo ezihle nempumelelo.

Ngoko ke, yeypipi le miceli-mingeni kwaye abalimi benza ntoni emasimini ukuze baqubisane nayo?

Oonomyayi

Oonomyayi bayingozi ngenene kwaye banokubangela umonakalo omkhulu emboneni

04 | lityhefu ze-mycotoxin
ezibaluleke emboneni

08 | Uvavanyo lvesivuno
nocwangciselokuvuna

11 | lintlobo zezityalo zasemzini
ezihlaselayo (IAP)



03



07



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UMAKHULU UJANE UTHI...

Kutshanje sikhe sahambela kwiindawo ezi-
liqela ekulinywa kuzo ukuty aokuzinkozo
eMzantsi Afrika kwaye sifumanise ukuba
ziyancomeka zonke izityalo. Sizivuyela
kakhulu iimvula esizifumeneyo ukuze onke ama-
khaya abe nokutya okwaneleyo nesizwe sethu
ngokunjalo. Ubukho bokutya sesona sidingo somntu
sisisiseko futhi nathi siyakonwabela ukuncedisa
abalimi abondla isizwe sethu.

Njengakuyo nayiphi into, ikhona imiceli-mingeni. Nje-
ngoko ngoku sinesityalo esihle esisilindeleyo sifanele
ukucinga ngokuvuna nangokugcina oko kutya. Ngoku-
phathelele kwimingcipheko yempilo malunga nokutya,
sifanele ukuqwalasela iindlela esizivuna nesizigcina
ngazo iinkozo. Kubaluleke ngenene ukuba sincedise
iinkozo zethu ukuba zome khonkqo xa zisabekwe
endaweni enomoya – ukugcina iinkozo ezifumileyo
kuya kwandisa imingcipheko enxulumene nokupuhuла
kwentsholongwane yomngundo nekhokelela eku-
phuhleni kweetyhefu ii-mycotoxin. Mlimi othandekayo –
khumbula ukuba isityalo sakho kukutya kwabantu
nezilwanyana ngoko ke umsebenzi wakho awukapheli
side some isityalo sakho futhi sigcineke ngokhuselo.

Wakuba uneenkozo ongazidinyo, unakho uku-
zithengisa (ukuze uzuze imali) kanti ukwanakho noko-
ndla ikhaya lakho. Eli khaya lakho kuthethwa ngalo
liqua iinkukhu zakho nemfuyo yakho enkulu nencinane.
Kutyelelo lakutshanje ebensinalo kubalimi abarhwebela
ukuziphilisa kwindawo yaseMthatha, ndikhumbule ix-
abiso lokuba neenkozo eziphe kraty kwezidingwa likhaya –
omnye umlimi uthethe ngendlela akwaziyo ngayo
ukondla iinkukhu, amadada ohlobo IweMuscovy, ii-
bhokhwe, iigusha neenkom. Kaloku xa unokutya okwa-
neleyo nemfuyo yakho iphelele iyakwazi ukwanda.

Ngenyanga kaMeyi, kuya kubakho uSuku IwesiVu-
no iNAMPO eBothaville kwakhona (eFree State). Kulo
nyaka siya kuba nemiboniso yohlobo olulodwa yezi-
xibbo zokusebenza ezelungiselelw abalimi abalim uku-
ziphilisa. Eli lithuba elihle kakhulu lokufumana amava
ngeshishini elibanzi leenkozo – abathengisi beemveliso
zamalungiselelo, abathengisi boomatshini ngokunjalo
nezinye iziza zemiboniso ezinanzi ezitsala umda. Si-
nethemba lokukubona nawe kwiNAMPO ka-2017.

Masilonwabele lonke ixesa loKwindla elisashiye-
leyo – kungekudala uza kube usebenza nzima ukuzis-
isivuno. Sisikelele kakhulu kwaye sifanele ukuzibala
iintsikelelo zethu sibulele nezityalo ezihi esinazo.

Yiba soloko uphaphile!

osandul' ukuntshula. Zithi zisahluma
izithole ezincinane emhlaben, oono-
myayi bazixhole nganye nganye, umqolo
ngomqolo. Ukuba siyabayeka bazondle
ngezithole, akukho nto iya kushiyeka.

Isisombululo

Yiba soloko ukhona entsimini yakho
yombona ukususela ngoms' obomvu
kude kube ngorhatya. Nikela ngeeyure
zemizamo emsebenzini wakho ukuze
ube nento oyivunayo. Ndinqwenela uku-
sebenzisa umzekelo wabalimi ababini
kwindawo yaseHlathikhulu KwaZulu-
Natal, uMnu Mzwayi Zuma noMnu Musa
Khumalo. Aba balimi bazinikeleyo balima
emhlabeni okufutshane kubo mhlawumbi
ungaba ziihektare ezisixhenxe. Babole-
kisana ngokugada izityalo zabo ngoku-
sebenzisa izabhokhwe nokudubula
ngezilingi ukothusa amasela abhabhayo
ukuze ahambe. Ngumsebenzi onzima
oqhuba lude ukhoso lombona luqhekeke
phantsi komhlaba (kukholisa ukuba kwi-
iveki ezimbini emva kokuhluma), kodwa
imizamo yabo ibanika impumelelo.

Limpukwana

limpukwana zezincinane kwizikrekrethi
ezingazishiyo iinkozo nokuba sekutheni
kwaye seziyingxaki enkulu eMzantsi
Afrika. Amanani azo abonakala ekhula
ngonyaka ngamnye, ubukhulu becala
ngenxa yokunqongophala kwamarha-
mncwa azondla ngazo. Zikhola uku-
hlala entsimini yombona ngezicuku
kwaye ubukho bazo bubonakala ngemi-
ngxunyana emininzi esondeleleneyo ne-



*UMnu Mzwayi Zuma walatha umgca
wombona otyiwe ngoonomyayi.*

nobukhulu obuphantse bangangeebhola
zetenetya. Ziyakwazi ukuty aokwintawo
ezinkulu zeenkozo ezilinywe entsimini
yakho ukuze kunciphe isivuno sakho



Ezandleni zizabhokhwe zokothusa nokugxotha oonomyayi.

kanti zikwangumbono ombi njengoko ukhula luchuma xa utyhilekile umhlaba. Abalimi abanini banengxaki yokufumana izisombululo zokutshabalala ezi zikrekrethi.

Isisombululo

Kunokusetyenziswa imigaqo yokuzitshabalala ngeekhemikhali nezinokusetyenziselwa ukukhusela mhlawumbi imbewu yakho xa uiytyala okanye ugalela emingxunyeni yazo. Andizi kuxoxa ngala manyathelo kweli nqaku. Ngolwazi oluthe kratya, ungaqhagamshelana nommeli wendawo yakho weekhemikhali ukuze akuncedise.

Kodwa nangaphandle kokusebenzisa iikhemikhali umntu usenako ukwenza umahluko omkhulu ngokusebenzisa izicwangciso-cebo ezimbala ezisisiseko sokuzitshabalala. Khumbula ukuba indalo iyamangalisa malunga nokunkela ngolungelelwaniso. Kuthi xa umntu egxuphuleka luphazamiseke olu ‘lungelelwaniso’. Ngoko ke khawukhangale indlela ezisebenza ngayo izinto kwiindawo zobume obusingqongileyo uze uzame ukukulinganisa oku. Gxumeka iipali ezijikeleza intsimi yakho ukucedisa izikhova kuzingelo Iwazo Iweempukwana. Ungazibulali iinyoka! lnyoka ngamarhamncwa endalo ezikrekrethi. Xa sizibulala iinyoka siya kubangela ukunyuka kwamanani ezi zikrekrethi ngendlela emangalisayo njengoko kunjalo ngoku. Ukuba ubona inyoka usasebenza emasimini, yiyeke yenze umsebenzi wayo.

Okokugqibela, umntu makabe lichule lokuyila izinto ezintsha. Ndithanda ukwenza umze-

kelo ngoNksz Sindisiwe Gama kwisiphaluka saseLoskop kufuphi neEstcourt. Ngokuncedisa ngunnyana wakhe, wenze amakhulu ezithiyiseli ezincinane ngokusebenzisa ucingo nenethi waze wazibeka kuyo yonke indawo entsimini ecaleni kwemingxuma yeeMpukwana wafaka iinkozo ezimbalwa phakathi ukuze azirhwebeshe. Baba nempumelelo enkulu kwinyanga zasebusika xa bekusanqabile ukuty. Ukuba unawo umonde kwaye uzinikele emsebenzini uya kufumanisa ukuphucuka okukhulu xa ulima kwakhona.

linkomo

Cattle in the rural areas are the number one linkomo ezikwiziphaluka ezesemaphandleni ziyintlungu yokuqala kuye nawuphi umlimi wombona olima emhlabeni odityanelweyo. Ingxaki ikhola ukubakho ngakumbi kwinyanga ezikhokelela ebusika xa amadlelo eqala ukungabi nakutya. Abanini bempfyo baziqhubela emasimini ezityalo apho kusekninzi khona ukutya ukuze kubekho umonakalo omkhulu emboneni emasimini. Ngoko ke, abalimi abanini bavuna izikhwebu zabo phambi kokuba kome bazithuthele emakhaya ukuba zigcinwe khona. Oku kubangela ukuncipha kubunzima bezikhwebu ngokunjalo nokubola kwezikhwebu.

Isisombululo

Isisombululo esicacileyo sesokuyibiyela intsimi yakho: Nangona kunjalo, izibiyeli ziyebiwa yiloo

nto abalimi bengakukhuthalelanga ukubiyla. Esinye isisombululo kukuthetha-thethana nabanni beemfuyo ukuze kuvunyelwane ngokuzigcina ngaphandle iinkomo kude kuvunwe ukuze emva koko zikwazi ukusebenzisa izikhondwana ezisele emasimini. Umntu angade afumane nokuba nguceba wendawo okanye iNkosi ebandakanyeka kwezi ngxoxo. Ukuba konke oku akuphumeleli, inye enye into onokuyikhetha, kukwenza imizamo kangangoko kwakhona futhi uhlale uphaphile ngokugada intsimi yakho. Ukuba ke akukwazi kucela umtakwenu, ukuba umtakwenu aka-kwazi kucela utata wakho. Uze ungavumi ukuba isityalo sakho esixabisekileyo sitshabalale.

Khulisa kwaye ukhusele, hlala uphaphile! Lisebenzise eli cebiso kwishishini lakho lokufama, xa usenza njalo uya kuwubona umvuzo kwakufika ixesha lokuvuna. Ndinethemba ngenene lokubona nabanye abalimi abalimela ukuziphilisa bezimisela ngokuthatha eli cebo. Oku kuya kukhokelela kuphela kwingeniso ethe kratya yekhaya lakho neyosapho Iwaho ngokunjalo kube negalelo oko kubukho bokuya okwaneleyo elizwени lethu. ♣

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Indawo yombona eyonakaliswe ziimpukwana.



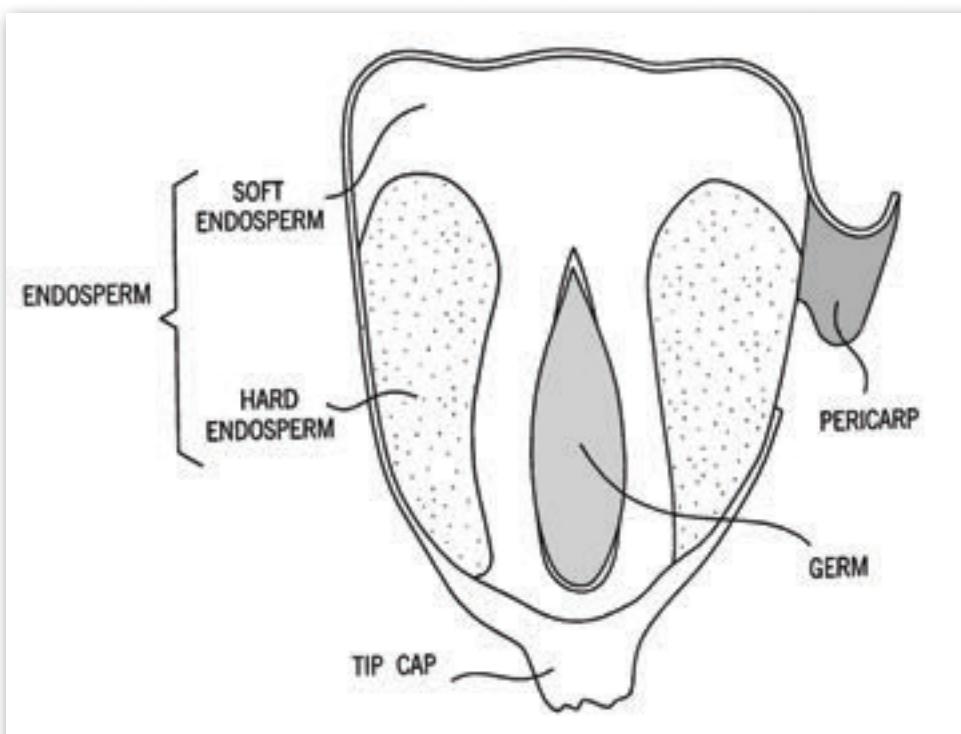
Iityhefu ze-mycotoxin ezibaluleke emboneni

Umantsi Afrika udume ngodidi oluphezulu lombona walo kwaye esi sityalo sibalule-kile kumaqela oluntu lwabalimi abarhew-bayo nabalimela ukuziphilisa. Nangona umbona usetyenziswa kwizinto ezininzi, eyona nto iba-luleke kakhulu kukufumaneka kokutya nesonndo.

Umbona neemveliso ezenziwa ngombona usetyenziswa luninzi lwabantu baseMzantsi Afrika (phakathi kwe 67% ne 83% yabemi), kanti umyinge wombona ophekiwego otyiwayo ngosuku ujikele-lwa phakathi kwe 476 g - 690 g ngomntu. Ngenxa yesi sizathu, ungciliseko lombona ngenxa yomngundo obangela iintsholongwane eziyityhefu ii-mycotoxin, nalo luseyinkxalabo ebaluleke kakhulu.

Kwinqaku elidlulileyo (ngomatshi 2017) si-chaze ukuba iityhefu ze-mycotoxin ziziikhemikhali eziyityhefu ezikhutshwa ngumngundo nezhkhula ngendalo kwizityalo ezilinywayo ezalhukahlukileyo. Nangona kusenokubonakala ngeliso ukukhula komngundo kwizityalo, ubukho bee-myctoxin namazinga azo abubonakali. La mazina asenokwahluka kakhulu kwisikhwebu esinye sombona, naphakathi kwezityalo ezisondeleyo.

Isazobe 1: Isimo sokhozo lombona.



Itheyibhile 1: Inkcazo nenjongo yamaqhezu ahluka-hlukaneyo ekusilweni kombona.

Iqhezu elisiliweyo	Inkcazo	Impawu	Imveliso ezenziwa ngombona
Aweliwego	Imveliso engenamakhatshu eneengqakumbana ezinkulu zombona oqhekeke nombindi wawo ongenamakhasi nasithombo	Ukuxobuka	Zilungele ukutyiwa njengesiriyeli zakusasa (ii-cornflakes) nomngquusho
		Uburhabaxa	Isiriyeli nokutya okungamashwamshwam Imilirayisi
		(I-Semolina) esesiphakathini	Isiriyeli nokutya okungamashwamshwam
		I-semolina ecoliweyo	Ukubilisa okotywala Ipapa yomgubo wombona
Umgubo wombona	Ukusilwa kombona kwindawo elukhuni negumbindi osabumgubo	Ikakhulu urhabaxa (umgubo wombona weSUPER)	Ipapa yomgubo wombona Imixube kwiipankeyiki neemafini, amashwamshwam ombona, iisiriyeli nokutya okubhakwayo
Umgubo ocoliweyo wombona		Ngamahlalutyana	Imixube yeepankeyiki neemafini, amashwamshwam ombona, iisiriyeli neemveliso ezibhakwayo
Amakhatshu/i-bran	Umxube womaleko ongaphezulu wokhoso lombona, umphandle nombindi osabumgubo	Amaqhekeza angumxube	Isonka sombona neemveliso ezibhakwayo, ukuya kweentsana, iibhisikithi, izonka ezingamacwecwe, izihluzi nezhkhongozelo kwiimveliso zenyama nakwiisiriyeli zesidlo sakusasa
			Amashwamshwam nomqa wepapa njengepolenta
Isithombo sombona	Uhenxenyе yesiqalelo sembewu ephilayo	loyile ininzi	Isondo sezilwanyana esineoyile

UKULAWULWA KWEZIFO

li-mycotoxin ezibaluleke emboneni worhwebo nezivela eMzantsi Afrika zezi: iFumonisin (FB) enxulunyaniswa nokuBola kwesiKhwebu kweFusarium; ideoxynivalenol (DON) nezeeralenone (ZEA) enxulunyaniswa nokuBola kwesiKhwebu kweGiberella, zonke zibangelwa ziintlobo zomngundo zeFusarium.

Kwiindawo ezesemaphandleni eMzantsi Afrika apho abantu balima khona umbona njengokutya kwabo kwemihla ngemihla (ukulimela ukuziphilisa), iFB iyi-mycotoxin ebaluleke kakhulu futhi ubukhulu becalalikholisa ukubakho kwiindawo ezithande ukuphakama. Bekusenzeka ngolo hlobo emaphandleni aseMpuma Koloni (EC), eLimpopo (LP), na-KwaZulu-Natal (KZN). I-DON nayo ichongiwe emboneni olinyelwa ukuziphilisa kumaphandle ase-EC. I-mycotoxin aflatoxin (AFLA), ekhutshwa yi*Aspergillus flavus*, seyiboniwe emaphandleni aseLP nawaseKZN. Izizathu zezi yantlukwano kwezi ndawo zahluka-hlukileyo ziquka imozulu, izidalwa zezinambuzane, udidi lomhlaba nemigaqo yokusebenza kwezolimo.

Ukhozo lombona

Abo benu balima umbona bayazi ukuba ukhozo ngalunye lombona lwenziwe ngeenxenyezahluka-hlukileyo (**Isazobe 1**) kwaye iyileyo kuzo ixabisekile kurhwebo. **Itheyibile 1** inika inkcazelo nesishwankathelo seenxenyezohozo (ngokunjalo ezaziwa ngokuba ngamqhezu okusilwa).

Ubukho bomngundo

nee-mycotoxin kukhozo lombona

lintlobo zomngundo ze-Fusarium ne-*Aspergillus* zizidalwanana ezivela emhlabeni nezikholisa ukuphila kwintsalela yezityalo (kwizikhondwana) phakathi kwamaxesha onyaka. Le mingundo inakho ukusulela izityalo phambi kokuvunwa ngeendlela ezahluka-hlukeneoyo: Ngokuhamba ngeengcambu okanye ngokuthuthwa kwimbewu enongcoliseko (iFusarium); ngokuthuthwa ngumoya nangananzi, ngokunjalo ngezinambuzane nangeminiye imisikeko, (iFusarium neAspergillus). I-Aspergillus nayo yaziwa njengengxaki enkuixa iinkozo zingagcinwanga ngendlela efanelekileyo. lintsholongwane zomngundo zingena kwinkozo zombona zisuka kumakhasi angaphandle ziye kulawo angaphakathi agqume iinkozo, ngoko ke ii-mycotoxin zaziwa ngokucanau ubukhulu becalalikholisa, kwiimaleko ezingaphezulu zokhozo lombona. Ngaphaya koko, udonga lokhozo lunokusebenza njengesithintelo esinqanda ukungena komngundo kumbindi osisondlo sokhozo.

Isipheo see-mycotoxin xa kuguqu-guqulwa ukuty; ukusila ngokomisa njengomzekelo

Ukwakheka kwee-mycotoxin ngokweekhemikhali kwenza ukuba kungabi nakwenzeka ukuzikhcula ngokupheleleyo kwizityalo ngoko ke, kunokususwa iinxenyexazo kuphela xa ukuta kusetyenzwa



linkozo zombona 'ezisempilweni' entle.



linkozo zombona ezonakeleyo nezinosulelo.

ngokuguqu-guqulwa kune/okanye eminye imigao yokucoca (ukukhcula ungciliseko). Ukguguqu-guqula ukutya okunokunciphisa ungciliseko lwee-mycotoxin kuquka ukukuhlela, ukukuhlamba, ukukwela, ukukusila, ukukubilisa okotywala, ukukubhaka, ukukuhqotsa, ukukoja nangokukupheka ngokobualkali.

Ukusila umbona yinkqubo eyenziwa kuwo ngqo njengenyathelo lokuqala lokuvelisa iimveliso eziphuma emboneni ngokususa umphandle wawo (*pericarp*) ukuze kuvela umbindi (*endosperm*), wona ejikwa ibe ngamqhezu ahluka-hlukeneoyo afana neenkozo ezbihuliweyo; umgubo wesithombo; umgubo wombona kune nomgubo ocoliweyo wengqolowa. Amaqhezu akholisa ukusetyenzisewa ukwenza iintlobo zokutya kwabantu ziinkozo ezbihuliweyo nomgubo ocoliweyo wengqolowa ngokobukhulu beengqakumbana zako nangokukuhlewa, kanti amaqhezu amahatshu, awesithombo esisiliweyo wona akholisa ukusetyenzisewa ukondla izilwanyana nokufumana ioyle, ngokokulandelelana kwezi ntlobo (Itheyibile 1).

EMzantsi Afrika ukusila okomisiweyo, ubukhulu becalalikholisa, kusetyenzisewa ukuvelisa iimveliso zokutya ezifana nomngquhu, imilirayisi,

umgubo wombona ongahluzwanga, ohluziweyo, orhabaxa, oSUPER noSPECIAL. Amazinga ee-mycotoxin kumaqhezu asiliweyo ahluka-hlukileyo aya kuxhomekeka kwimibandela eliqela efana nokuba umngundo ungene kangakanani kukhozo (iimaleko ezingaphezulu okanye kwezingaphakathi) nokuqhekeka kokhozo ngalunye ngokwamqhezu alo asiliweyo. Ngenxa yobugocigoci benkqubo yokusila apho umbona ongaguqu-guqulwanga uba namaqhezu ahluka-hlukeneoyo, amazinga e-mycotoxin asenosakusasazeka ngenye indlela okanye abe phezulu.

Kwinqaku elilandelayo siza kuqhube ngokuxoxa ngee-mycotoxin ezibaluleke kwezinye iinkozo ezifana nengqolowa, amazimba nebhali. Umba wamazinga okhuseleko siza kuxoxa ngawo kwelinje inqaku esiya kuthetha kulo ngefuthe lee-mycotoxin kwimpilo yomntu.

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Inzululwazi ixhasa ukulinywa **KUKAJONGILANGA**

Namhla ulimo lufanele ukukuzabalaze-la ngakumbi ukulima ukulima okuthe kratya ngenxa yamanani abantu akhula kubume obungqonge ezoqoqoshobucela umnjeni. Aluseyo ndlela yokuphila elandelwa ngamadoda anxibe iiovaroli needangari – ‘Ulimo ngumsebenzi wobungcali onobumbano olukhulu, nolwenziwa zingcali

ezisebenzisa izixhobo zanamhla zoshishino, ulwazi lobunzululwazi neentsungulo zokusebenzisa oomatshini kwimisebenzi yazo’ – Earl Coke.

Ukulinywa kukajongilanga kunendima ebalule-kileyo kwiimeko zaseMzantsi Afrika zokulinywa kwezityalo. Imveliso yonyaka iphakathi kweetoni eziyi- 500 000 ukuya kweziyi-700 000. Kubeluncedo kwiinkqubo zokujikeleziswa kwezityalo kodwa ukwasisityalo esilungileyo esinokulinywa kwimihlabo engemihle nciam. Ngaphaya koko, uchelaniseka kakuhle kwimihlabo ngemihlabo eyahlukileyo ukususela kwimihlabo enobunzima obuphezulu ukuya kweluvunduvunu olunesanti. Olu-nye uphawu olubarulekileyo kukuba ixesa lokukhula lifutshane noko kunelombona ngoko ke angalinywa mva kancinane aphi zivumayo khona iimeko, kanti kufunyaniswe nokuba uyawkazi ukumelana neeqabaka ezikhawuleze zafika.

Ikomiti yeeNgqikelelo zeziTyalo

Eli qela liqhuba imisebenzi yophando ngenzululwazi yokuqikelela indawo elinywe kuqala. Ziinkcukacha ezeluncedo ezi kuwe mlimi njengoko ziya kukunika isikhokelo seendawo zokuthengisela ezisebenza ngokomgaqo wentengiso nentengo. Oojongilanga abalinywe ngobuninzi kakhulu balatha amaxabiso aphantsi okuthengisa ngexesha lokuvuna. (Kukwanjalo nakwimeko yokulinywa kombona.) Uhlolo lwakuqala lwendawo elinywe ujongilanga ngo-2017 ziihektare eziyi-665 800, olu hlolo lubonisa ukwehla kangange-hektare eziyi-52 700 nganeno kwixesha

lonyaka elingaphambili. Ezi nkukacha zifumaneka simahla apha <http://www.sagis.org.za>.

UGq A Nel wasePotchefstroom ARC-GCI ukholelwakuphela ekubeni ngamazinga aphezulu esa-khono esincomekayo kwinkqubo yakho yokulima kuphela esiya kuqinisekisa impumelelo ngokwasemalini. Enyanisweni oku kusisiseko soku-fama okulondolozekayo – kungenjalo abalimi bayakukhawuleza baphume kwishishini bagqibele ngokungakwazi ukondla isizwe esilambileyo! Isitshixo seli zinga lisebenza ngokuncomekayo kukukhutshwa kweenkcukacha ezininzi kanganoko ngemihlanganisela efumanekayo, ukuze kwenzwiwe iziggibo ezixhaswa ngolwazi malunga nokuthi ngowuphi umhlanganisela ozifanele kakuhle kakhulu iimeko zemozulu yeli lizwe ngokunjalo nakwixesha lokulima elilindelekileyo. Abalimi abatsha mabathethe nabamelia bamaqu-mrhu embewu, nabamelwane abanamava ukuze bafumanise iinkcukacha ezilandelayo ngomhlanganisela ngamnye.

Isakhono sesivuno

Lo ngumthamo olinganiswa ngokweetoni onokulindela ukuwuvuna ngehektare ngexesha lokulima lemeko eqhelekileyo. Fumanisa ukuba siyintoni isakhono sesivuno sethuba elide sezityalo zikajongilanga ezilinywa kwindawoyakho. Oku kuya kukwenza ukuba ukwazi ukumisela ugqaliselo lwestivuno.

Inani leentsuku ukuya ekudubulenikweenatyambo

Naku okubaluleke kakulu. Elona xesha lakho lokutyalaelithe nciam liya kuba nefuthe ekukheteni kwakho imbewu. Umzekelo, ukuba akukwazi kuya emasimini ngenxa yezandyondyo zemvula okanye udakas – okanye mhlawumbi,

Pula Imvula's Quote of the Month

*If everyone is moving forward together,
then success takes care of itself.*

~ Henry Ford

UKULINYWA KUKAJONGILANGA

become kakhulu ungenakukwazi ukutyala – udinga ukuwalasela inani leentsuku eliseleyo kwixesha lokulima phambi kokuqalisa kwexesha leqabaka, ukuze uyikhetha kakuhle imbewu yakho.

Yinyaniso eyaziwayo ngokwezifundo zofuzo ukuba bekukho inkqubela ecothisisayo kupuhhliso lweentloba ezintsha zikajongilanga nakwissakhono sesivuno esihle. Isivuno sikajongilanga singumsebenzi wenene wemigaqo yokusebenza EBALASELEYO njengokukhetha umhlanganisela ngoko ke ezi zinto ziya KUSOLOKO zisebenzisana.

Eminye imibandela echaphazela izivuno zikajongilanga

- Kubalulekile ukulungiswa komhlaba. Ufanele ukufuna iinkcukacha ngemigaqo eqheleki-leyo yokulungisa amasimi kwindawo yakho futhi uhlale unolwazi ngendlela yanamhla yokusinga ngokukhathalelwya kwemihlaba oyikhethileyo. Abalimi abaninzi bakhetha umgaqo wokungawuphethuli umhlabo ngenjongo yokwakha imihlaba sempilweni ngokunjalo nangenxa yeendleko eziphantsi zokulungisa umhlabo. Ukungahlakuli asiyonto izenzekelayo – ifanele ukwenziwa ngo-kwenzululwazi nangenqubo yokuzifundisa yona nangokuqokelela iinkcukacha.
- Ukufakwa kwezichumiso kuya kuhlala kubalulekile kwaye kunendima ebalulekileyo kwizivuno ezifunyanwayo. Inkqubo yakho yokufaka izichumiso mayihlale iseke kuhalutyo lomhlaba ngokwenzululwazi. Isityalo

sikajongilanga saziwa ngokusebeniza izondlo ezisemhlabeni kakuhle kakhulu ngenxa yesixokelelwano seengambu saso esixanana-ze kakuhle nesikwaziyo ukufikelela kwizondlo ezingakwaziyo ukufunyanwa zezinye izityalo.

- Amanani ezityalo anegalelo elibaluleke kakuhlu kwisakhono sezivuno. Ukonga izithole eziselula kulo lonke ibanga lokuhluma elinzima nelinguceli-mngeni ngumsebenzi omkhulu wolawulo kwaye ngokuqinisekileyo uya kufuna ukuba ukrwele umphezulu womhlaba oluqeque kanye phambi kokuhluma, ekuqheleke ukuba kube kubiintsu ezi-3 ukuya kwezi-4 emva kokutyala. Ukuba injongo yakho sisivuno esingangeetoni ezi-2 ngehektare obona bukhulu, indawo yezityalo eziyi-30 000 ukuya kweziyi-45 000 kwihektare sisikhokelo esingumyinge olungleleyo. Wakuba unendawo elungleleyo olime kuyo entsimini uya kuqala uqwalasele eminye imibandela ukuze wandise izivuno.
- Kubalulekile ukutshabalalisa ukhula. Ukhula lukhuphisana ngokungayekeli ngezondlo nokufuma okufanele ukufunyanwa zizityalo zikajongilanga. Izityalo ziba zizisulu ngakumbi kwiiveki zokuqala ezi-3 ukuya kwezi-4, njengoko eli thuba ilelona lokucotha kophuhliso lwazo. Ikwabubulumko ukuhlakula okokugqibela nje phambi kokuba iitrektara ziya kuba sezingasakwazi ukungena emasimini ngaphandle kokonakalisa izityalo zikajongilanga.
- Ukutshabalalisa izinambuzane kubalulekile kwaye oku kudinga uqwalaselolwazi olwenziwa rhoqo lwezityalo zakho apho kukhangelwa

khona iimpawu zobukho bezidalwa ezonakalisa izityalo ukususela kwebanga lokuqala lokubekelwa kwamaqanda nelembingu. Ukuba ufanele ukusebeniza imichiza ukuze ulawule uhlaselolwazi iwezidalwa ezonakalisa izityalo, bubulumko ofanele ukuhlala unaboukusebenzisana nabameli bamaqumrhu ee-khemikhali abaya kutyelela intsimi baze bakucebise ngezixa ekufuneka uzisebenzisile. Qiniseka ukuba abasebenzi bakho basefama bafunde ngokwaneleyo ngokusebenza ngeekhemikhali ngokunjalo banalo lonke ukhuseleko abanokulusebenzisa ukujinisekisa impilontle yabo ngawo onke amaxesha.

Asikuko kuphela ukuba oojongilanga befanele ukuqwalasela ngenxa yokuba bezizityalo ezanelisayo nezinika ulonwabo kakhulu, kodwa banagalelo elixabisekileyo kwinkqubo yakho yokufama yethuba elide ngenxa yeendleko eziphantsi zamalungiselelo ngokunjalo nangenxa yokuba bakhula kakuhle ngokubanzi naphantsi kweemeko zokubalela, abaziqhele kakhulu abalimi baseMzantsi Afrika.

Imibulelo

Amacebiso ngemihlanganisela kajongilanga ngo-2016/2017 – UGq AA Nel, ARC-GCI, Potchefstroom.

Inqaku linikelwe nguJenny Mathews, umbhalikiwiPula Imvula. Ngolwazi oluthe vetshe, thumela i-imeyile apha jenjonmat@gmail.com.





Uvavanyo Iwesivuno nocwangciselokuvuna

Xesha lokulima lasehlotyeni lango-2016/2017 ngoku lisondela kwisigaba sokuvuna nesokuqu-kumbela ukukhangela iindawo zokuthengisela iimbotyi zesoya, oojongilanga nezinye izityalo zasehlotyeni. Lo nyaka uphawuleka ngeemvula ezintle ukuya kwezintle kakhulu phambi kwexesha lokulima ebelimana ukuthwaxwa bubushushu nokubalela okugqithisileyo ngoNovemba nango-Disemba.

Ithuba eliphambi kokuba iimbotyi zesoya zakho zi-fikelele ekvuthweni kwazo kwendalo lelona xesha lifanelekileyo lokuvavanya zonke iziqqibo zolawulo zangaphambili xa uthathela ingqalelo nemvula efumanekileyo nenegalelo kuqikelelo lwangoku Iwesivuno olunokuthelekiswa nolwesivuno sasekugqibeleni sidibene.

Uqikelelo Iwezivuno zembotyi zesoya

Uqikelelo Iwesivuno lweli banga lunokutyhila iinkcu-kacha ezxabisekileyo malunga nocwangciso olunzulu lokoqalisa ngokudibanisa amasimi ahlukahlukeneyo, ukudibanisa isakhono esifumanekayo, ubunzima obupheleleyo besityalo esilindekileyo, ukususela entsimini ukuya kulondolozo, ukuya kwi-sakhono solondolozo, iindleko zokucoca nokomisa ngokunjalo nesicwangciso-cebo sokuthengisa.

Imigaqo yoqikelelo

Isakhono sesivuno enyanisweni luqikelelo Iweenxalenye ezine ezize; inani lezityalo ngehektare, inani lemidumba ngesityalo, inani leengqakumbana zembewu ngomdumba nenani lembewu ngekhilogram.

Umgaqo wokusebenza

Izityalo ngehektare nganye (pl/ha)

Ukusetyenziswa kweteyiphi yokulinganisa ukuze kulinganiswe ubude beemitha ezili-10 bezityalo ezi-linye kumqolo weembotyi zesoya kwiindawo zeesampulu ezimele umyinge wezityalo kwintsimi ethile. Kuthintele ukuhlolokwenziva kwiphondo lomhlaba olungaselwandle okanye iindawo ezilinye ngokunqamleza esiphelweni samasimi.

Bala inani lezityalo ezinemidumba emva kwe-10 ngalinye leemitha emqolweni. Yahlula inani liphe-lele leesampulu ezili-10 nge-10 ukuze ufumanise umyinge wezityalo ngeshumi ngalinye leemitha lomqolo. Phinda-phinda le mpPENDULO nge-10 ukuze ufumanise inani lezityalo ezinemidumba neekwi-imitha ezili-100 zomqolo olinyiweyo kwihektare elinyiweyo enomlinganiselo weemitha ezili-100 xa kuphinda-phindwa isikwre seemitha ezili-100. Malunga nezithuba eziphakathi kwemqolo zeemi-

tha eziyi ,92 phinda-phinda impendulo engasentla ngokuphathelele kwiimitha ezili-100 zomqolo ngemiqolo elinyiweyo eyi-110 ngehektare ukuze ufumane impendulo malunga nezityalo ezinemidumba ngehektare. Sebenzisa umkhomba-ndlela wo-kuphinda-phinda imiqolo eyi-133 yehektare elinyiweyo kwimiqolo yeemitha eziyi-,75.

Imidumba nembewu ngehektare

Khetha izityalo ezili-10 ngokungakhethiyo uze ubale imidumba. Yahlula nge-10 ukuze ufumane umyinge wenani lemidumba ngesityalo. Khumbula ukuba imidumba enganeno kwi-12 cm ukusuka emhlabeni isenokungacholwa yintloko yesixhobo sokuvuna si-bhula. Yivule imidumba uhlole inani leengqakumba-na zembewu ezipuhule ngokupheleleyo ngomdumba ngamnye nezikholisa ukwahluka ukususela kwezi-2 ukuya kwezi-3 ngomdumba. Kunyaka wembalela se-benzisa isi-2, ukuze kunyaka weziqhelo usebenzise u 2,5 kanti ngonyaka omhle sebenzisa ezi-3. Phinda-phinda inani elingumyinge wemidumba ngenani elingumyinge wembewu, liphinda-phindwe ngenani lezityalo ngehektare ukuze likuni ke inani lembewu ngehektare.

Njengoko kubonakala kwiTheyibhile 1 ubunzima bembewu bahluka ngokucacileyo kwaye bunoku-ziphembelela kangako iziphumo zoqikelelo Iwesivuno. Khetha okanye qikelelo okanye ufumanise ubunzima bembewu ngokuyiveyisha ukuze isibalo sichaneke uze uphinda-phinde inani lembewu ngehektare ngobunzima bembewu ngembewu nganye. Yahlula ngo-1 000 ukuze ufumane iikhilogram ngehektare uze uphinda kwakhona ngo-1 000 ukuze ufumanise iitoni ngehektare.

Le mpPENDULO yinciphise nge 10% ukwenzelelela iilahleko zokuvuna nezokuqhekeka.

Umzekelo

Xa sowuwaloholle amasimi njengoko kuchazwe nge-sentla waze wagqala okulandelayo, isibalo sibonisa ngezantsi: Umyinge wenani lezityalo ngokweemvavanyo eziyi-220 zeemitha ezili-10; ubabanzi bemiqolo ,92; imidumba ngesityalo 20; imbewu ngomdumba 2,5; ubunzima beenkozo zembewu 0,15 yeogram.

Isibalo

- 220 yezityalo ngovavanyo olunye x 10 (100 yeemitha zomqolo) x 110 (imiqolo ngehektare) = **242,000 izityalo/ngehektare (pl/ha)**.
- **242,000 pl/ha x 20 (imidumba/ngesityalo) x 2,5 (imbewu ngomdumba) = 12,100,000 imbewu/ngehektare.**
- **12,100,000 x 0,15 (iigram ngembewu)/1 000 (iikhilogram/ngehektare) = 1,815 iitoni/ngehektare.**

Itheyibhile 1: Ubunzima bembewu ngehektare.

Ubunzima bembewu (iigram)	Imbewu/kg	Inkazo ngo-bukhulu bembewu
0,18	5 556	lisampulu zembewu eziqinisekiselwe urhwebo
0,17	5 882	
0,16	6 250	
0,15	6 667	Isampulu yembewu evunwe efama – kunya-ka oqhelekileyo
0,14	7 143	
0,13	7 692	Imbewu evunwe efama – kunya-ka wembalela okanye elinywe emva kxesha
0,12	8 333	
0,11	9 091	

logram/ngehektare)/1 000 (iitoni/ngehektare = **1,815 iitoni/ngehektare**.

• **1,815 iitoni/ngehektare** nganeno nge 10% = **1,815 x ,90% = R1,64 iitoni/ngehektare yesivuno esiqikelelwayo.**

Amacebiso ngokuvuna

Omnye wemibandela ebaluleke kakhulu ekulinyewi kweembotyi zesoya ngempumelelo kukuba nesixhobo sokuvuna sibhula esisesakho esilondolozwayo ukuze sibe kwimeko ebalaseleyo ngokunjalo nemilinganiselo yaso ichaneke ukwenzela isantya sedram nentloko kwaye sifumaneke kwangoko ngentsimi nganye esidingeka kuyo. Ukuba isityalo esesivuthiwe sifumana imvula iilahleko zokuqhekeka kwaso zisenokuba nkulu. Ukuba usebenzisa ikhontraktha qiniseka ukuba iya kufumaneka kwiintsuku ezimbalwa emva kokufumana isaziso sokuba isityalo sesilungile.

Elokuphetha

Sebenzisa uqikelelo Iwesivuno seembotyi zesoya njengesixhobo socwangciselokuvuna isityalo esilinywe ngoku ngokunjalo nokuziqhelanisa nokuhlolka ukuba yeyiphi imigaqo yolawulo eya kuba nesiphumo sokulima ngempumelelo kumaxesha azayo okulima.

Inqaku linikelwe ngumlimi othathe umhala-phantsi.



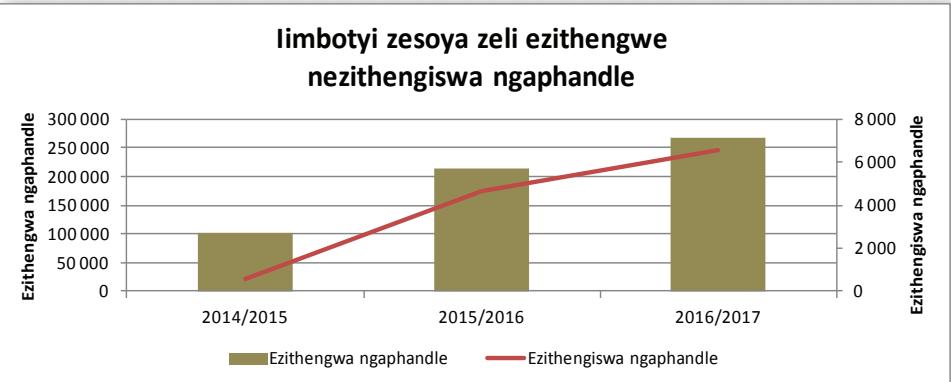
Amathuba okulinywa kweembotyi zesoya okwaneleyo kweli

Ukulinywa kwembewu yeoile ehlabathini kwande ngamandla ukususela ngo-2012, ngakumbi ngenxa yokukhula eMelika, eBrazil naseArgentina. Inxene yesizathu soku kwanda kokulima kukukhula kweemfuneko zehlabathi zesonndo zabanye abathengi abangabona bathenga kakhulu abafana neChina. Kwakulo eli thuba, uMzantsi Afrika ubone ukwanda kwemveliso, nangona isenganeno kwiimfuneko zonyaka.

Nangona kunjalo, ukukhula kwemveliso yeembotyi zesoya kwalapha kuphazanyiswe lixesha lokulima lembalela ka-2015/2016. Phakathi kwexesha lokuthengisa lika-2014/2015 no-2015/2016, ukulinywa kweembotyi zesoya kwehla ngo 30% ukususela kwiitoni ezisisigidi esi-1 070 000 ukuya kweziyi-741 550. Nangona kunjalo, xa sijonga phambili, ikhona imiqondiso yokuphumelela kwakhona okunokwenzeka kweli xesha lokulima.

Ngokusebeniza iingqikelelo zemveliso zasekuqaleni zeKomiti yeeNggikelelo zeziTyalo

Igrafi 1: limbotyi zesoya zeli ezithengwe nezithengiswa ngaphandle. linkcukacha: SAGIS



(Crop Estimates Committee's – CEC) zonyaka wokuthengisa ka-2017/2018, kuqikelewa ukuba imveliso yeembotyi zesoya yoMzantsi Afrika inokufikelela kwiitoni eziyi-946 000. Nxamnye nale ngqikelelo kuhko ukunyuka okulindelekileyo ekusetyenzisweni

kwezondlo, nokunokwenzeka kangange 28% ukususela kwixesha lokulima langoku.

limbotyi zesoya ezisetyenziswa ngabantu nazo zilindeleko ukuba zinyuke ukususela kwiitoni eziyi-23 800 zexesa lonyaka langaphambili ukufikelela kwiitoni eziyi-25 000. Okufanele ukuqtshelwa kubaba ukunyuka kwentengo yeembotyi zesoya kweli lizwe kuvulela isiganeko sokwanda kokuthengwa kweoyile nekeyiki yeoile ngaphandle, oka kuthetha ukuba imveliso yeli, ayikwanelanga ukuhlangabeza intengo ekhulayo yelizwe.

Itheyibile 1 ibonisa iimeko zeNtengiso nezeNtengo. linkcukacha: Grain SA

Intengiso nentengo yeembotyi zesoya emzantsi Afrika				
Ihlaziwe	Uggaliselo IweGrain SA	Ngaphantsi komyinge	Umyinge	Ngaphezu komyinge
		2017/2018**	2017/2018**	2017/2018**
Unyaka weentengiso	2016/2017*	Umzekelo 1	Umzekelo 2	Umzekelo 3
Indawo elinyiweyo (x 1 000 ihektare)	502,80	542,20	542,20	542,2
Isivuno (itoni ngehektare)	1,47	1,50	1,65	1,8
Uqikelelo lwezityalo IweCEC ('000 itoni)	741,55	813,30	894,63	975,96
	('000 ton)	('000 ton)	('000 ton)	('000 ton)
Intengiso yorhwebo				
Impahla egciniweyo yokuqalisa (1 Mar)	89,13	146,83	146,83	146,8
Impahla yokurhweba	711,55	783,30	864,63	945,96
Ethengwa ngaphandle	450,00	230,00	150,00	70
Intengiso yorhwebo epheleleyo	1 250,68	1 160,13	1 161,46	1 162,792
Intengo yorhwebo				
Ukutya	23,81	24,80	24,80	25
Isondlo (Isoya yamafutha apheleleyo)	103,12	132,00	132,00	132
Icolelwe yoile nekeyiki yeoile	960,00	850,00	850,00	850
Iphelele	1 086,92	1 006,80	1 006,80	1 007
Ezithengiswangaphandle	8,00	9,00	9,00	9
Intengo yorhwebo epheleleyo	1 103,85	1 026,80	1 026,80	1 027
Kwensiwe (nge-28 Februwari)	146,83	133,33	134,66	136
limfuneko ezilandelayo	135,87	125,85	125,85	126
Intshihekela engaphezu kwezilandelayo	10,97	7,48	8,81	10

Inqaku linikelwe nguMichelle Mokone,
Ingcali yezoQoqosho kwezoLimo: eGrain SA.
Ngolwazi oluthe vetshe, thumela i-imeyili
apha: Michelle@grainsa.co.za.

Ukubaluleka kwesitethimenti somqukuqelo wekheshi

Kumanqaku athile kuthotho lwethu malunga nolawulo salathe saze saxeoxa ngemiba eyahluka-hlukeneyo yesitethimenti sengcaciso somqukuqelo wekheshi/imali esesandleni. Kweli nqaku siza kuxoxa banzi ngokubaluleka kwesitethimenti somqukuqelo wemali esesandleni.

Imbalela esandul' ukudlula ityhile ukubaluleka okungathandabuzekiyo kokuqwalaselwa kwesitethimenti somqukuqelo wekheshi njengenxene yeolawulo lwemali. Kule miha umqukuqelo wekheshi mhlawumbi ngowona mba ubaluleke kakhulu kulawulo lwemali yeshishini lokufama.

Ulawulo lwemali lubunja ngemisebenzi emine ephambili aphi owokuqala ikukugcina wa kweengxelo zemali nokuhlanganisela kwezitethimenti zemali eziyimfuneko. Injongo yezitethimenti zemali kukufumanisa isiphumo solawulo lwemali (inuzu/ilahleko) ngokusebenza isitethimenti sengeniso, ukuze kufunyaniswe imoko yemali (ulwalamano lwempahla yexabiso xa lunxulunyaniswa namatyala) ngokucacisa kwinkcazo yempahla yexabiso neyamatyala nokufumanisa imoko yomqukuqelo wekheshi ngokusebenza isitethimenti sekhesi. linkukacha ezikwizitethimenti ke ngoko ziakwazi ukunika usomashishini umfanekiso wempumelelo yeshishini lakhe. Ishishini lakho linokuphumelela kangange 100% kuphela xa iziphumo zazo zonke zozithathu izitethimenti zinika ithembu.

Ingozi ekhoyo kwinkqubo yokuhlanganisela izitethimenti zemali kukuba kungenzeka ukuba umntu oyiqonda kakuhle le nkubo ahenga-hlengise amanani ezitethimenti, ngakumbi kwinkcazo yempahla yexabiso neyamatyala mhlawumbi nakancinane kwisitethimenti sengeniso, ukuze alungiselele injongo eyiyenye. Oku kungenziwa ngeenjongo zerhafu okanye xa umntu edinga imali yetyla. Nangona kunjalo, ngenxa yokuba eyona nkazo yesitethimenti somqukuqelo wekheshi ikhanyisa umqukuqelo wokungena nowokuphuma kwekheshi kwishishini, umntu akakwazi kuhlenga-hlengisa iinkukacha ukuze alungiselele enye injongo ethile. Esona sitethimenti somqukuqelo wekheshi sakho sifane ukuhambelana nesitethimenti sakho sebhanki solo suku. Isitethimenti sebhanki singumthombo ongaphandle weenkukacha zemali. Le ngxoxo iphawula ukubaluleka kokuqala kwesona sitethimenti somqukuqelo wemali – ityihila iinkukacha ezichanekileyo zemali malunga nomqukuqelo wekheshi yeshishini.

Okwesibini, isitethimenti sakho somqukuqelo wekheshi siya kuba sisitethimenti sokuqala esalatha ukuba ingaba kukho into

engalunganga na kwishishini lakho okanye akunjalo. Malunga nohlobo lokufama oluxutywe ngokubanzi, umthetho osisikhokelo sokuchanekileyo uthi, ulwalamano lomqukuqelo wekheshi lufanele ukuba yi 120% okanye ngaphezu koko. Ulwalamano luba-lwa ngokubalula ingeniso eyikheshi/ikheshi yomqukuqelo ophumayo njengepesenti. Lo mba ke ngoko uya kuba yinyaniso kuphela xa isitethimenti sakho sekhesi sihlaziwa rhoqo masithi mhlawumbi yonke imihla. Ngobuchwepheshi banambla yinto eyenzekayo leyo.

Okwesithathu, enyanisweni esi sitethimenti sibonisa ukuba ingaba uya kuba nekhesi eyaneleyo na ngexesha elithile, njengasekupheleni kwenyanga, ukuze uhhlangabeze izibophelelo zakho. Umzekelo, ukuhlangwula imivuzo, ityala lombane, iintlawulo zenyanga ezi-kwiakhawunti, njalo njalo. Xa ungakwazanga kuuhlangabeza izibophelelo zakho ngexesha elimiselweyo, oko kuya kuba lumphawu lokuqala lwengxaki ekwishishini lakho, ngaphandle kokuba ungakwazi ukuichaza ngendlela eyanelisayo imoko. Mhlawumbi wenze iinkitho ezzinizi xa ukhupha imveliso (umqukuqelo ophumayo) phambi kokufumana umqukuqelo ongenayo ovela kwisityalo esivuniwego.

Okwesine, omnye umba obalulekileyo wesitethimenti somqukuqelo kukuqwalaselwa isakhono sokuhlawula amatyala eshishini lakho. Oku kukholisa ukuqwalaselwa ngokusebenza iinkukacha njengoko ziboniswa kwisitethimenti somqukuqelo wekheshi ebekujoliswe kuwo. Kule miha lo ngumba obaluleke kakhulu kanti xa ufaka isicelo setyala umniki-tyala uya kusiphegulula ngeliso elibukhali isitethimenti sakho somqukuqelo wemali esesandleni ebekujoliswe kuwo. Umniki-tyala kwakhona uya kubala ulwalamano lomqukuqelo ekujoliswe kuwo wekheshi ngokusebenza iinkukacha ezikwizitethimenti. Njengoko sekuchaziwe kukhethwa ukuba olu lwamano lufanele ukuba yi 120% nangaphezelu kuba oko kwalatha ukuba ufanele ukuba nekhesi elingeneyo yokuhlangwula lonke ityala nazo zonke ezinye iinkitho zomsebenzi wokufama ezikhoyo.

Ngaphandle kwemiba ekuxoxwe ngayo ebalulekileyo malunga nesitethimenti somqukuqelo wekheshi elona xabiso lesi sitethimenti libonakala xa kusetyenziswa ulawulo olufanelekileyo lwemali malunga nesi sitethimenti. Oku kuthetha ukuba phambi kokuqalisu konyaka-mali wakho ufanele ukuhlanganisela isitethimenti sakho somqukuqelo wekheshi ekujoliswe kuso ukuze sithelekiswe nesona sitethimenti sakho qho ngenyanga.

Ngokwenza nje uba nolawulo phezu kweenkitho zakho ukuze xa kunokubakho inkitho egqithisileyo ichazwe kwaye ukuba kukho imfune ko usilungelelanise isitethimenti somqukuqelo wekheshi ngokwemeko. linkitho (umqukuqelo wekheshi ephumayo) zifanele ukuba phantsi kolawulo lwakho.

Ingeniso (umqukuqelo wekheshi engenayo) ikholisa ukuphenjelewa yimibandela eyahluka-hlukeneyo emikhulu aphi umlimi anefuthe elincinane kakhulu, ukuba likhona nelo phofu. Ukuba ingeniso yakho inganeno kwebilindelelele, ufanele ukulungelelanisa isitethimenti sakho somqukuqelo wekheshi ukuhlangabeza ingeniso ephantsi. Enyanisweni, ingeniso ephantsi ithetha ukuba uza kuba nemali enganeno yokuthenga. Ngoko ke, kuza kufuneka ukuba uqwalasele iinkitho ngocoselelo kwaye xa kukho imfuneko, zirhoxisele ixesha elizayo ezinye iinkitho. Ingeniso ephantsi inganakho ukukunyanzela ukuba ufake isicelo sokongezwa kwetyala ukuze ugcine ishishini lakho lisebenza.

Elokuggibela, ukuze uphile phantsi kweemeko ezikhoyo ngoku eziyimiceli-mingeni kwishishini lokufama eMzantsi Afrika, kubaluleke kakhulu ukuba nemfundo yembandela yemali. ●

Athikele e kwadiiwe ke Marius Greyling, mokwadi wa Pula Imvula. Fa o tlhoka kitso gape, o ka romela emeile go mariusg@mcgacc.co.za.



Iintlobo zezityalo zasemzini ezihlaselayo (IAP)

EMzantsi Afrika manzini amanzi asetyenziswa ezityalo ezingezo zalapha. Zibizwa ngokuba ezityalo zasemzini ezihlaselayo. Ezi zityalo ziaylasela kuba ziyanaba futhi zisunduze izityalo nemithi yendalo yethu.

Iintlobo zezityalo zasemzini (ii-IAP) ziintlobo ezithi xa zifikile futhi/okanye zinwenwela ngaphaya kwendawo yazo yendalo zibe nako ukuphazamisa iyantlukwano yendalo ephilayo. Kaloku azionxene yealapha yenqubo yokuphilisana kwendalo, kwaye zinokubangela ingozi kuqosho nakubume obusingqongileyo. Zinefuthe elingafunekyo kwiyantlukwano yendalo ephilayo, kuquka ukwetha okanye ukutshabalala kweentlobo zeli lizwe. – ngokukhuphisana nazo ngamanzi nangokuphazamisa iinkqubo neendlela zokuphilisana kwendalo yeli lizwe. li-IAP ezifikileyo kunye/okanye zanwenwela ngaphaya kwendawo yazo ezihlala kuyo, zichaphazele iyantlukwano yendalo ephilayo phantse kulo lonke uhlobo Iwenqubo yokuphilisana kwendalo ehlabathini kanti zinako ukuba yingozi enkulukazi kwiyantlukwano yendalo ephilayo.

Ngaphandle kweentshaba eziyindalo, ezi zityalo ziwindisa ngokukhawuleza amanani azo zize zinwenwe kamsinya, zifunxe namanzi abalulekileyo zithathe nendawo yezityalo zelizwe lethu. Inkoliso yezityalo zasemzini zisebenzisa amanzi ngaphezu kwezityalo zelizwe lethu, ngo-kwenza njalo zicutha ubonelelo oluxabisekileyo lwamanzi ethu. Uhlaza Iwasemzini olushinyenyo ngokunjalo lunokuba zizibaseli zemililo yasendle, ziyanze ibe shushu ngendlela engathethekiyo, ukuze konakale ubume bomhlaba wendawo etshileyo. li-IAP zidla uMzantsi Afrika amashumi eebihiliyon eerandi ngonyaka ngamnye kwila-hleko yeemveliso zolimo neyemithombo yobutyebi ngenxa yenkcitho yokuzitshabalala okanye yokuzilawula. li-IAP zilitshaba olukhulu kwiantlukwano yendalo ephilayo kwiindawo ezilungiselwe udidi oluphezelu Iweemveliso, ngokwenza njalo zinesakhono sokuphazamisa ulungelelwano oluntununtunu Iwendalo lokuphilisana kwendalo. Njengoko sixomekeke kwiyantlukwano yendalo malunga namanzi, ukuya, iplanga, umoya ocoekileyo, amayeza nezinye izinto ezininzi, kubaluleke kakhulu ukuba siwukhusele lo mthombo wobutyebi.

Imimiselo yowlulo ichonga iintlobo zasemzini eziyi-559 zizonke, kuquka iintlobo zezityalo eziyi-383 kwizintlu ezine ezihlaselayo ezahluka-hlukileyo, ngokunjalo kukwakho neentlobo eziyi-560 ezidweliswe njengezithintelwego futhi ezingenaku-vunyelwa ukungena kweli lizwe. Khawutyelele esi siza <https://www.environment.co.za> ukuze ubone ii-IAP nezintlu zazo.

Izintlu zeeAIP

- **Uluhlu Iwe-1a nolwe-1b:** Malususwe kwaye lutshatyalaliswe kwangoko.
- **Uluhlu Iwesi-2:** Lunokulinwa xa ifumanekile imvume futhi nomnini-mhlaba eqinisekisa ukuba iintlobo ezihlaselayo azinwenweli ngaphaya kwendawo yakhe.
- **Uluhlu Iwesi-3:** Malungalinywa. Kubalulekile ukwazi ukuba ezinye izityalo ezihlaselayo zifakwa phantsi kwezintlu ezithile ngendlela eyahlukileyo kumaphondo ahlukileyo.

Ulawulo lohlaza Iwasemzini

Kukho iindlela eziliqela zokulawula ukukhula noku-nwenwa kwezityalo ezihlaselayo zasemzini. ‘Ulawulo’ luxhomekeka kwiintlobo ezilawulwayo.

Ngokwendalo ephilayo

Ezinye izityalo zasemzini zineentshaba ngokwendalo, ezifana nezinambuzane kunye nezifo ezichaphazela uhlobo oluthile kuphela. Izithinteli (amabhungane, iivayiras) zifumaneka kwelo lizwe zivila kulo ukuze zisasazwe phakathi kweentlobo ezihlaselayo ngenjongo yokuzitshabalala.

Ngezandia

Izihlaseli eziselula okanye ezincinane zinakho ukuncothulwa emhlabeni. Izityalo mazicukaniswe ukuze zilahlwe ngendlela enenkathalo ukuthintela ukuphinda zikhule.

Ngezixhobo

Izityalo ezikhulu nemithi isenokugawulwa okanye icandwe. Imithi inakho nokutshatyalaliswa ngokususa umcu wexolo osisazinge ongange-30 cm ukuya kwi-40 cm ezikhondweni zayo (nobizwa ngokuthi ‘yiringi yexolo’). Oku kuthintela ukuthuthwa kokutya okuya emaggabini ngokwenza njalo uyafa umthi.

Ngeekhemikhali

Kunokusetyenziswa imigaqo emibini okanye ngape-zulu ngaxeshanye umzekelo, ukususwa kweringi yexolo ukuze emva koko kutshizwe ngezitshabalalisi zokhula esikhondweni.

Wena unganceda njani?

- Funda indlela yokuchonga, ukulawula nokutshabalala okanye izityalo zasemzini ezitshabalaliso.
- Fundisa abanye.
- Ngenela okanye yakha iqela elixabelayo ukuze kutshatyalaliswe izityalo zasemzini kwindawo ohlala kuyo.
- Zitshabalalise zisencinane ii-IAP.
- Lima izityalo zeli lizwe endaweni yezasemzini.
- Lima izityalo zalapha, eziwagcinayo amanzi ega-dini yakho.

li-IAP nomthetho

Umsebenzi wokulawula uhlaza Iwasemzini, ubukhulu becalo ngumthwalo wabanini-mhlaba. Ngo-Agasti wango-2014, uMphathiswa weMibandela yoBume obusiNgqongileyo wapapasha ‘iMithetho yoLawulo IweeNtlobo zaseMzini neziHlaselayo’ (Alien and Invasive Species Regulations) ukunciphisa iziphumo ezingafunekyo zee-IAP. Le mithetho ikhuthaza abanini-mhlaba nabathengisi bemihlabu ukuba bandedise iSebe leMibandela yoBume obusiNgqongileyo ukuba ilondoloze impahla ephilayo nohlaza lwemveli yeli lizwe futhi likhuthaze nokusetyenziswa komhlaba wethu ngolondolozo.

Ukungawuthobel uumthetho kungakhokelela kulwaphulo-mthetho olunokuba sisohlwayo sentlawuliso enokude ibe zizigidi ezihlau zeerandi (kube zizigidi ezilishumi xa iluwaphulo-mthetho Iwesibini) kunye okanye ithuba elinokufikelela kwiminyaka elishumi lokuvalelw etrongweni.

li-IAP ezi-5 eziphambili ngephondo

- **eGauteng:** iBalloon vine, iBlack wattle, iBloodberry, iBugweed, iCastor oil plant.
- **KwaZulu-Natal:** iAfrican tulip tree, iAsh leafed maple, iBaloon vine, iBloodberry, iBugweed.
- **eLimpopo:** iBlack locust, iButterfly orchid tree, iCastor oil plant, iKudzu vine.
- **eMpumalanga:** iCoral creeper, iMoth catcher, iYellow flowered Mexican poppy, iButterfly orchid tree, iCamphor tree.
- **eMntla Koloni:** iBlue leaf cactus, iCastor oil plant, iChinese tamarisk, iCommon thorn apple, Giant reed.
- **eMntla Ntshona:** iBird of paradise flower, iBoxing glove cactus, iCanary bird bush, iCommon dodder, iFour o’clock.
- **eNtshona Koloni:** iRooikrants, iBlack wattle, iPort Jackson, iSilky hakea, iLong leafed wattle.

Iiza zekhompyutha ezinonxulumano

- (Ukusebenzela aManzi) Working for Water www.wfw.org.za.
- (Ubume obusiNgqongileyo) Environment www.environment.co.za.
- (Iintlobo ezihlaselayo eMzantsi Afrika) Invasive species South Africa www.invasives.org.za.

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isiXhosa,
IsiNgesi, IsiBhulu, iSeTswana,
iSesotho, iSesotho sa Leboa nesi IsiZulu.

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I-Grain SA kudliwano-ndlebe... noSimo Themba Zwane

USimo Zwane lilungu eliquuzelayo kwiQela loFundonzulu laseLouwsburg KwaZulu-Natal. Uneminyaka eyi-35 ubudala kwaye usebenzisa oko anako ngeyona ndlela incomekayo ngokwesakhono sakhe.

Uwenza phi futhi ngeehektae ezingaphi umsebenzi wokufama? Ufama ngantoni?

Ndifama eLouwsburg kwiLokishi yaseMzamo (kuMasipala waseAbaqulusi, kwiPhondo lakwaZulu-Natal). Ndaqalisa ngokulima umbona kwiihektae eziyi 0,2 kanti ngoku ndifama emhlabeni odityanelweyo aphi ndilima khona umbona neembotyi ezomisiweyo kwiihektae eziyi 1,5 zomhlaba owomileyo. Njengoko ndingekafikeleli kwizixhobo zokusebenza ndisebenzia izandla zam.

Zinto zini ezikukhuthazayo?

Inyaniso yokuba engekho amathuba emisebenzi iyandikhuthaza ukuba ndibe ngumlimi onempumelelo ngakumbi. Ndibona ukufama njengendlela ekuphela kwayo endinokuziphilisa ngayo nendlela yokugxotha indlala ngokubeka ukuya etafileni. Ndifuna ukuphumelela ebomini ndizenzele endikufunayo njengoko engekho onokundenzela. Ndifunde ukuba ukufama bubomi bam, futhi bunika usapho lwam ukuya nengeniso.

Chaza imiba yamandla neyobuthathaka bakho

Imiba yamandla: Ndisemtsha, ndinamandla kwaye ndikholela ekubenzi ndinokwenza nantoni efuneka emasimini ngezandla zam. Ndikhuthazwa kukuziphucula nokuba nesakhono sokwenza endikufundisewyo nendikufundileyo.

Imiba yobuthathaka: Ngokwasemalini akululanga kum futhi andinazixhobo zokusebenza, wonke umsebenzi ndiwenza ngezandla zam.

Sasingakanani isivuno sesityalo sakho ngoko wawuqala ukufama?

Singakanani ngoku kwezo zityalo?

Ukuqalisa kwam, ndandisanelia xa ndikwazile ukuvuna umyinge wetoni e-1 ngehektare ukuya kwiiiton eziimbini ngehektare kwixesha elihle lokulima. Emva koko ngenxa yokufika kobuchwephesh obutsha iGrain SA yafundisa nangeendlela eziphucukileyo zokulima umbona. Ngoku ndivuna itoni eziyi 3,5 ngehektare ukuya kwiiiton ezi-4 ngehektare emhlabeni owomileyo futhi naxa bekukho imbalela eqatseleyo esiyibone kwixesha lokulima elidlulileyo.

Ucinga ukuba yintoni ebinegalelo elingu- ndoqo kwinkqubela nempumelelo yakho?

Kukungena kwiqela lofundonzulu laseGrain SA, ukuya kwiiintlanganiso zeqela lofundonzulu, ukuya kwintsuku zabalimi, ukuxhamla kwizifundo zoqequesho – nazo izinto ezibe nendima ebalulekileyo kwinkqu-



bela Yam. Ndikwanalo nothando olushushu lokufama nomnqweno wokuqhoba ngokufunda izinto ezintsha.

Loluphi uqequesho osowlufumene kude kube ngoku iloluphi osanqwenela ukulwenza?

Ndiyile kwizifundo zeNtshayelelo ngokuLinywa koMbona nakwizifundo zesiSeko sokuLungisa iNjini. Ndisanqwenela ukufunda banzi ngokuLinywa kweeMbotty ezoMileyo, ukuLondozwa kweTrektara nangeZakhono zoBuchule beNdawo yokuSebenzela ngokunjalo naziphi ezinye izifundo zoqequesho eziya kundixhobisa ngezakhono zobuchule zokwenza umsebenzi wokufama phucukileyo.

Uzibona undawoni kwiminyaka emihlanu? Yintoni onqwenela ukuyiphumeza?

Kwiminyaka emihlanu ndinqwelenela ukwandisa umhlaba odityanelweyo ube ziihektare ezi-10 ukuya kweziyi-20. Ndinqwelenela ukuba ngumlimi onempumelelo futhi ndilime nezinye izityalo ingabi ngumbona kuphela, ndibe ngumthengisi ebantwini bendawo Yam kodwa ndifuna ukukhula ndibe semandleni aya ngokundinyusa emsebenzini wokufama. Ndifuna ukuvuna umbona othe kratya ngehektare nganye kodwa ndidinga uqequesho nolwazi olubanzi ngakumbi.

Ngawaphi amacebiso onokuwanika abalimi abanqwenela impumelelo?

Mabakubone ukufama njengeshishini bangakubaleki kuba kule mihla akukho mathuba emisebenzi futhi mabawusebenzise umhlaba abanawo, nokuba mncciane kangakanani. Umntu ufanele ukuba nothando lokufama azithembe kwaye aqhube ngokusebenza nzima.

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