

PULA IMVULA

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EYOMQUNGU
2019

Ingaba luncedo ukujonga imozulu?



Buza nawuphi umlimi onethuba elide eqhuba umsebenzi wokufama akuxelele ukuba iingqikelelo zemozulu zikhola ukungathembeki! Ngoko ke, kusinceda ngantoni ukufunda banzi ngemozulu?

Ngokuqinisekileyo wonke umntu uyazi ukuba abalimi bangcakaza minyaka le? Abakwenzayo bafanele ukukwenza ngokuzimisela – baze bathandazele ixesha lokulima elihle! Naxa kunjalo:

- lingcali zemozulu ziyyiqwalaselela kufutshane ngakumbi imozulu kunamaxesa angaphambili kanti nezixhobo zokusebenza zithe kratya kunezo bezifumaneka ngaphambili; ngokunjalo
- Abalimi bayo ngokuzimisela ukufumana iinkcukacha zeentlobo ngeentlobo ezininzi malunga nemozulu ukuze babe nolwazi olwaneleyo xa besenza iziqqibo ngomsebenzi wokulima nokuthengisa.

limeko zemozulu yinto oyilindelayo, kanti imozulu yinto oyifumanayo! (NASA)

Kukho umahluko obalulekileyo phakathi kwamagama athi 'iimeko zemozulu' kanye 'nemozulu'. Umalhuko umalunga nomlinganiselo wexesha.

limeko zemozulu – kuchazwa indlela umoya osingqongileyo ophawuleka ngayo kwinginqi ethile kwithuba elide. **Imozulu** – kuchazwa iimozulu zendawo ethile kwithuba elifutshane.

Imozulu iyakwazi ukuguquka kwiyure neyre nakusuku nosuku, kodwa iimeko zemozulu zingumyinge wemozulu ngokokulinganiswa kwe-mozulu kwithuba elide. Ngoko ke, iimeko zemozulu zinakho ukulindeleka, kanti imozulu iyaguqu-guquka itshintsha-tshintshe. UAnnette Venter, eNCA ngumsasazi wemozulu, kutshanje uthe kubalulekile ukukhumbula ukuba imozulu yinkubo eyingxubakaxaka elula nefumana ifuthe kwiinguquko ezincinane zemihla ngemihla okukwasizathu sokuba kusaziwa ukuba kunzima ukuzicingela kwangaphambili ezi meko.

Inguquko yeemeko zemozulu

Ukuqonda iipateni zemozulu kanye nemikhwa yeemeko zemozulu zethuba elide kubaluleke ngakumbi ukususela oko umba wenguquko yeemeko zemozulu sowuveze intloko yayo embi kwaye iingcali zenzululwazi ziyazama ukuchonga iinguquko ezenzeka kwiipateni zesiqhelo.

Imazini yakwa Grain SA
yophuhliso lwabavelisi

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03



THUMA MNA ngo-2019



AMAZWI AVELA KU...

Jane McPherson

Bendisalungiselela ukunibhalela umyalezo wangoJanyuvari xa ndicinga ngabo bonke abantu abakrelekrele abadlule kuthi. Khawufunde izicatshulwa ezingezantsi – zibaluleke kakhulu kwimizamo yethu...Wanga ungaSikeleleka kuNyaka oMtsha.

M Qalisa aphi ukhoyo. Sebenza into onayo. Yenza onakho ukukwenza.
– Arthur Ashe

M Musa ukulinda; ixesha alinakude "ilunge nciam." Qalisa aphi umi khona, uze usebenze nangeziphi izixhobo onakho ukuzisebenzisa, kanti izixhobo eziphucukileyo ziya kufumaneka sowusembezenzi.
– George Herbert

L Ngxala ubomi bakho ngamanya-thelo. Musa ukulinda ukuba kude kwenzeke. Yenza ukuba kwenzeke. Yakha ikamva lakho. Zakhele elakho ithembra. Fumanisa olwakho uthando. Nokuba zeziphi izinto okholelwa kuzo, mbeke uMdali wakho, kungabi kulkulinda ukiza kwenceba eyehla phezelu kodwa ube ungenzi nto, kodwa xa usenza onakho ukukwenza ukuze kubekho inceba...wena ngokwakho, ngoku ngqo, ezantsi apha em-labenzi ngqo.
– Bradley Whitford

L Ukuba nolwazi akwanelanga; sifanele ukukwenza. Uthakazelelo alwanelanga; sifanele ukwenza.
– Johann Wolfgang von Goethe

L Obona butathaka bethu bukhulu kukuncama. Eyona ndlela iqinise-kisiweyo yokuphumelela kukuba masisoloko sizama siphinde nokuba kukanye.
– Thomas A. Edison

U ncedo olufumaneka kwingxoxo enkulu malunga nomhlaba ngo-2018, lukhanyise iingxaki ezinini abajongene nazo abalimi bethu abatsha beenkozo kweli lizwe. Kubonakele kuzo zonke iingcacio nokuba bekusemaqongeni oluntu okanye ePalamente. Usasazo olungasebenzi ngezolimo nalo lufumene ulwazi ngokuba zeziphi iingxaki nciam.

Inkomfa yaseBela-Bela ibe negalelo elikhulu elibonisa indlela ezolimo zino-kusombulula ngayo iingxaki zethu, kodwa umbandela wemali uphelele uphakanyiswe njengesona sithintelo sikhulu esifanele ukoyiswa. Amalungelo malunga nempahla yabu-cala ayadingeka ukuze kukhululwe imali kanti xa abalimi bengenamali yokuqalisa ngomsebenzi wokufama, uRhulumente ufanele ukungenelela ancedise. Kodwa, yindlela yakudala leyo. Enye yeenzuso malunga nale ngxoxo ishushu kangako malunga nomhlaba ibe ngumba wokuba ubuhlulelane phakathi kukaRhulumente necandelo labucala buyadingeka ekusonjululweni komba wemali.

Maninzi amaqela aye ahlangana sekuda kuphela unyaka ka-2018 esenza isicwangciso sendlela ezinokuhlangatyeza izidingo za-balimi abatsha malunga nomba wemali. Ithemba lam lisekubenit unyaka ka-2019 uya kuba ngunyaka ebesisoloko siphupha ngawo kwiminyaka emininzi: Isisombululo esitsha esinokusebenza kwingxaki yemali yokulima izityalo. Ubizo oluthi 'Thuma mna' oluvela kuMongameli lubhekiselele kuthi sonke. Asinakho ukuqhuba ngokutyhola uRhulumente okanye iibhanki okanye nabani ngokuthi akukho mali.

Ubizo oluthi 'Thuma mna' luthetha ngqo oku: Sifanele ukuxhumela phakathi ukuze siqalise ngokusombulula le ngxaki. Nje-nqoko siliqumrhu elisebenza ngemveliso, asinakukwazi ukuqhuba ngokuzimela emva kwesimo sethu sokungafaki nzuko okanye ngokuthi thina asiyobhanki. I-Grain SA inesibophelelo sokufumanisa isisombululo somba wemali. linkokeli zethu zifanele ukudibanisa iintloko kanti njengomlimi woqobo weenkozo yiza necebo. Uza kuva ngakumbi ngalo mba ngo-2019.

Ngoku ndijonge phambili kwinto eza kuziswa ngala mandla matsha ngo-2019 ukuze lo nyaka ube ngulowo uya kuvukhumbula. Kungabi ngenxa yemozulu okanye izivuno ezhile, kodwa ibe ngulowo soyise kuwo imiqobo esendleleni ukuze



Jannie de Villiers

sikwazi ukuxhasa izityalo zethu zexesha elizayo. Ikhwelo lam kuni njengabalimi kukuba nincede niqhuba ngokuthetha nathi ngezi ngxaki. Sincediseni ngokufumanisa izisombululo ukuze thina esiya kuzisebenzisela ukuthumela okulungileyo phakathi kwabo bonke abazidubayo ukuze liphile ipupha lethu esibeke ithembra lethu kulo nesilithandazelayo. Inkqubo yokucoca ukuze kutyihilwe futhi kuliwe nenkohlkalo yorhwaphilizo kweli lizwe, isinika ithembra lekamva eliphucukileyo lawo wonke umntu. Urhwaphilizo lwenza ukuba kuxhamle abambalwa kwaye luyingozi kuninzi lwabantu bethu. Qiniseka ukuba uhlala ukwicala elilungileyo lomthetho. UThixo akanakusikelela abo bazifhla ebunmya-meni nabaphila ethinzini.

Umthandazo endinawo ngam kukuba ukunyamezela kwenu nokuba lunchedo kwenu kunyusele umsebenzi wokufama kwinqanaba elilandelayo. Hlalani nijolise amehlo kuYe olucedo ngenene ningathembeli kangako kwiinkosana. Nibe noNyaka oMtsha!

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01 Ingaba luncedo ukujonga imozulu?

Ngoko ke, yintoni 'inguquko yeemeko zemozulu'? Yinkxalabo ephambili ngokusingqongileyo enokubangela ifuthe elibalulekileyo kwinkqubo zendalo nezimalunga nabantu. UKosie van Zyl waseAgri SA, uqhube ulawulo lwemingcipheko yentlekele yecandelo lezolimo laseMzantsi Afrika ngo-2006 waze wagqiba kwelokuba iinguquko ezibalulekileyo ziyingegeleka malunga noMzantsi Afrika kwiminyaka engama-50 ezayo.

Ukufudumala kwelizwekazi laseAfrika phakathi kwe 1°C ne 3°C, apho izandiso ezizezonza ziphezulu kwiinqinqi ezibharhileyo ukuze isandiso sibe sesona siphantsi enxwemeni, kuyacingeleka kwangaphambili. Amanqanaba emvula, anganeno kumanqanaba angoku emvula ngeqondo eliphakathi kwe 5% ne 10%, aya kuthanda ukwethla kakhulu. Amaqondo obushushu angawona aphezulu emihla ngemihla ehlotojeni nasekwindla kwisiqingatha esisentshona selizwe aya kunyuka ukuze amaxesha asehlotojeni olulwe, apho ezinye iindawo zizizisulu zolwandiso kumaxa eembalela nezhikhukula.

Iziphumo ezibi ezingafunekyo zenguqoko kwiimeko zemozulu kwakuthethiwe ngazo kwiNkomfa yeAgriSA yango-2008 nguNjinga-Iwazi Colleen Vogel: Umgcipheko kubalimi abalima kancinane baseAfrika, kubathathinxaxheba abakholisa ukuba ngabona bazizulu kweli candelo, ngesakhono sokuziqhelanisa neemeko zokunyamezela ezizezinye ezinzi zodandatheko, nawo ugxininiwi. UVogel



Umzekelo wesixhobo seAccuWeather.

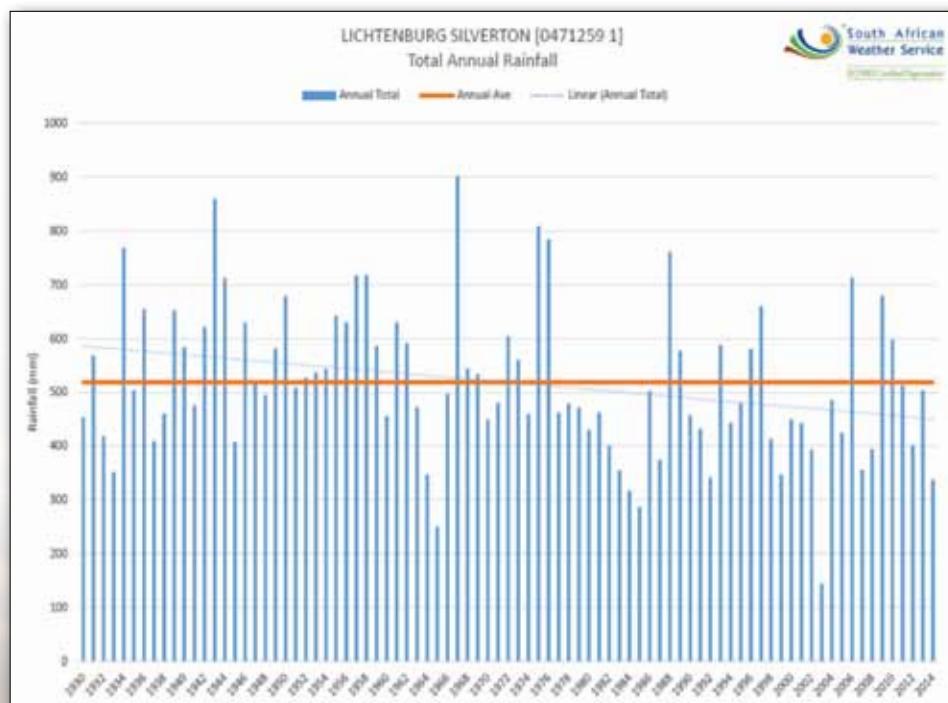


Umzekelo weewebhusayithi ye-YR.

ucebise ngokuthi makubekho ugqaliselo ekuchongeni owona mgaqo wezolimo ongowona ubalaseleyo ukwenzela ukuncitshiswa kweomingcipheko efanele ukufundiswa abalimi ukuqinisekisa ubomi babantu obunozinzo.

Kuthetha ukuthini konke oku? Ukuguqu-guquka kweemeko zemozulu kwenza ukuba kubekho iinguquko kwindlela esenza nganyo izinto. Abalimi abanakuqhuba ngokwenza izinto ezinye ngendlela efanayo baze balindele ukuzuza iziphumo ezifanayo emdlalweni ofanayo.

Igrafu 1: Uhlalutyo Iweengxelo zemvula zeSAWS zaseburhulumenteni zesikhululo sokuxela imvula: eLichtenburg Silverton [0471259 1], 1930 - 2014.



(Umthombo weenkukacha: linkonzo zaseMzantsi Afrika zeMozulu, 2016)

Umlimi olungileyo unolwazi ngemozulu

Endaweni yokubona ezi zithintelo njengezinto ezi-fane zenzeke, uya kuziqwalasela, ukuze azivumele ukuba zimkhokole.

Ukuba nolwazi oluphucukileyo kulingana nethuba lempumelelo nelokuhuba ngobomi. Oku kubalulekile kubume obungqongwe yimingeni apho abalimi bajongene khona neemeko zoxinzelelo ezivila kwezopolitiko ezingenazinzo, impumelelo ephuncukayo yezoqoqosho kunye nobume obusingqongileyo obutshintshayyo.

Abalimi baseMzantsi baziwa kakhulu ngomgaqo wokuthatha amanyathelo kuselithuba malunga nemigaqo emitsha yobuchwephesh. Umzekelo, abanye abalimi eNtshona Koloni baguque iigadi zeziqhamo zaba yimiyezo kuba umdiliya udinga amanzi angamaninzanga kwaye uwanyamezela bhetele amaqondo obushushu aphezulu.

KwiAfrika eseMzantsi abanye abalimi bakuyekile ukulima izityalo endaweni yoko balima amadlelo ukuphucula isakhono sokulondoloze ka kwamanzi. Abalimi abaninzi sebeziqhelanisile kwaye basebenzisa imihlanganisela emitsha abayikhetha

YENZA IZIGQIBO UNOLWAZI

Umsebenzi wokufama uneemeko ezininzi ezingenazinzo ngoko ke ubukho beenkukacha ezandleni zomlimi kunakho ukunciphisa ezinye zeentandabuzo. Icandelo lezolimo kumazwe aphuhlayo liya ngokukhula ekubeni nolwazi oluphangaleleyo.

Abalimi badinga ukufikelela kwiinkukacha ezi-thembekileyo, ezifika ngexesha neziyimfuneko ukuze bahlale besemgangathweni wabanye abalimi. Umlimi weenkozo udinga iintlobo ezahluka-hlukileyo zeenkukacha ngokwamabanga ahluka-hlukileyo. Eli nqaku likhanyisa ezinye zeenkukacha ezibalulekileyo abafanele ukuzikumbula abalimi ukuze benze izigqibo benolwazi.

• **Uhlahlo-mali:** Lukholisa ukukhokelwa ziinkukacha ezifumaneka efama; luncheda umlimi ngokwenza izigqibo zemali ngokwesicwangci-so esimiselwego kanti oku sisalathisi sempilo yeshishini.

• **lingqikelelo zezityalo:** Ezi ngxelo zinikela ngeenkukacha ngeenjongo zokulima, ukuze emva koko, kubekho indawo yokulima neyemveliso. Zinikela okulindelekileyo nkomeleleyo malunga nobukhulu besityalo ngasinye kuyaka ozayo wokulima. Lo ngumkhomba-ndlela wamaxabiso eenkozo kwixesha lokulima. Oku sekudibene nengxelo yeSAGIS ngempahla egciniwego ekhoyo ukuze kubekho umalathandla ofezekileyo wokulindeleke ngamaxabiso ngokusekwa kwiinkukacha ezibalulekileyo.

“Abalimi badinga ukufikelela kwiinkukacha ezithembekileyo, ezifika ngexesha neziyimfuneko ukuze bahlale besemgangathweni wabanye abalimi.”

- **linkukacha ngemozulu nangemvula:** Lemeko ivumela umlimi ukuba enze izigqibo ezi-baluleke kakhulu ezifana nokuthi sesiphi isityalo esifanele ukulinywa kwaye silinywe nini. Ezi nkukacha ziphindza zincedise umlimi ngolwazi lokuba kukho imbalela ekhoyo, nangokufaka isityalo sakhe kukhuselo lweinshorensi.
- **linkukacha ngezifo nangezidalwa ezonakalisa izityalo:** Zinceda umlimi ukuba alwazi uhlobo lwezifo ezichaphazela isityalo sakhe nendlela afanele ukusiphatha ngayo.
- **Amalungiselelo angaphambili:** Amaxabiso abekw' esweni amalungiselelo ancedisa ngokugcina indlela ekusetyenzwa ngayo ilungile ukwenzela wonke umntu.
- **linkukacha ngamaxabiso eSafeX nezibalo ngolungelewaniso:** Oku kuya kukunceda njengomlimi ngokwenza izigqibo ngokuthengisa nangokujinisekisa ukuthembeka okuthe kratya entengisweni.
- **linkukacha ngokuthengisa nangokuthenga:** Le yingxelo enokukunika isishwankathelo sempahla esilindeleke ekugqibeleni ekupheleni

kwexesha lokuthengisa, nesinegalelo kwimba-delala esisiseko malunga nokubekwa kwexabiso kwintengiso yendawo.

Ukuze abalimi bahlale beneenkukacha ezihlaziyiweyo, bafaneli ukuziqhelanisa nobuchwepheshe obutsha, ngokusebenzia imigaqo yokulima nangokufikelela kwiinkukacha. Zonke ezi nkukacha zifumaneka kumaqonga ahluka-hlukaneyo afana nala:

- **Amaqela ofundonzulu nabacebisi:** Ukwalbelana ngolwazi nangamava kwasekuvaleni.
- **Iwebhusayithi yaseGrain SA:** Izibalo zolungelewaniso amaxabiso, amaxabiso eSafeX emihla ngemihla, amaxabiso amalungiselelo njalo njalo.
- **Iwebhusayithi yeSAGIS:** lingqikelelo zezityalo, ukusiva kwempahla ngumlimi, iinkukacha zokuthenga ngaphandle nokuthengisela amazwe angaphandle njalo njalo.
- **Iwebhusayithi yeARC:** Izidalwa ezonakalisa izityalo, izifo, imihlanganisela emitsha, uqeqesho njalo njalo.

Ezi nkukacha zidingeka kumabanga ahluka-hlukileyo okukhupa imveliso ngoko ke zinceda umlimi ukuba akwazi ukwenza isigqibo selenolwazi ngakumbi.

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Ingaba lunchedo ukujonga imozulu?

ngokweenkukacha zemozulu abazifumeneyo. Umzekelo, ukuba ixesha lokulima lifutshane ngenxa yeemvula ezifike emva kwexesha, kukhethwa umhlanganisela okhula msinyane, okanye banokwenza isigqibo sokulima isityalo esisesinye, izityalo ezikhula ngokukhawuleza esifana noojongilanga.

lindlela ezintsha zobuchwepheshe kunye nemihlanganisela emitsha inokwenza umahluko phakathi kobukho bokutya okwaneleyo nendlala. Uhlobo olutsha lombona olumelana nendlala lukhuliswe ngendlela eyenza ukuba kube nesivuno esandileyo phantsi kweemeko zembalela 'nesityalo esithe chatha ngethontsi ngalinye'. Ukulungisa umhlabo ngokuhlakula kancinane okanye ngokungahlakuli kubaluleke kakhulu - njengoko kunjalo kuggaliselo lokubuyiselwa komhlabo kwisimo sawo. Abalimi baseLesotho bandies izivuno zabo ngokusebenzia iCSA, eyaziwa kweli ngokuthi 'likoti', ngokulondolozza isigcina-kufuma esifanelekileyo esigquma

umhlabo. Oku kwandise ukuchuma komhlabo futhi kunciphise ukukhuliseka komhlabo.

Yiba ngumlimi onolwazi

Malunga nabantu abaphila ngomhlabo, sisiqhelo ukugcina iingxelo okanye amanqaku enyanga nenya nanya konyaka nonyaka. Iingxelo zemvula zigcinwe kwifama yethu ukususela ngo-1929. Seziguqulelwé kwigrifu enomdla (**Igrafu 1**). Zinanzi iintetho ezinomdla kwincwadi yeengxelo zosapho eziphawula ngemozulu, ixesha lokulima okanye izivuno ngonyaka othile.

Xoxa ngeengqikelelo zemozulu kumaxesha okulima neengcaphephe. Ungamamela iingxelo zosasazo ezikhutshwa rhoqo kwirediyo okanye kwithelevizhini. Kanti unakho nokuqhagamshelana nosomashishini wendawo yakho kwezolimo ukufumanisa ukuba zingafumaneka phi iinkukacha ezifaneleke kwindingqi ethile. Ziliqela ii-apps ezinokuthotya ukuze zikuni-ke iingxelo zomzuzu nomzuzu eziqokelelwé

kwimifuziselo yezikhululo ezssemajuku-jukwini ezifana nezi: i-YR, Weather & Radar SA ne-AccuWeather.

Ukwenza isigqibo esilungileyo ngolawulo lwemingcipheko kudinga iinkukacha ezichanekileyo ne-data ethembekileyo. Nangona ungasengenewa ezantsi ngokupheleleyo umba womngcipheko emsebenzini wokufama, iinkukacha ezifanelekeleyo ziya kusoloko zimnceda umntu ukuba azicingele kwangaphambili iingxaki ezinokubakho uze wenze izigqibo ezivakalayo ngolawulo. Ukuthatha inyathelo emva kokwenzeka kweemeko ezingafunekeyo xa sezikhona asilolawulo lulungileyo.

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AMANYA THELO OKUCOCA NOKULO- NDOLOZA ISITSIZI ESOLULIWEYO

1

FUNDA

Phambi kokuqalisa ukucoca isitsizzi sakho, qiniseka ukuba uphengulula ileyi-bhile yekhemikhali ozifakileyo zezida-lwa ezonakalisa izityalo. Ileyibhile iya:

- Kukuxelela indlela efanelekileyo yokulahlala iimveliso eziziintsalela.
- Kukunikela ngayo nayiphi imiyalelo yohloba olulodwa lokucoca enoku-ba yimfuneko.
- Kukucebisa ngokususa izinto eziziityhefu kwimveliso.
- Kukuxelela iziXhobo ezizeZakho zoKhuselo (PPE) ozidingela ukucoca isitsizzi sokhuselo.

2

PULISHA

Injongo yokupulisha kukususa naziphi iindawo ezineengqimba okanye ezinkulu zemveliso ezinokuba zisekwitsitshizi. Ukucoca izixhobo zesitshizi kubandakanya amanzi ajikeleza kwinkqubo iphelele ukuze aye kwisiza esidweliswe kwileyibhile yekhemikhali ezitshabalalisa izidalwa ezonakalisa izityalo osowuzisebenzisile (ngamanye amazwi, ukutshiza ngomxube weekhemikhali wamanzi/axutyiweyo, nebizwa ngoku ngokuba yi-rinsate kwindawo yokhuselo).

Ukuze uqinisekise ukuba ucoca itanki ngokunjalo nemibhobho kune ne-milomo, yenza itanki ithi gabhu ngamanzi acocekileyo wandule ukuqhuba itrektra kumgama omfutshane kwenye yeendlela zefama – ukuxhuma-xhu-ma endleleni kuya kushukumisa amanzi kuze kuqinisekise ukuba atshiza yonke indawo phakathi kwetanki iphelele. Upulisha kumaxa ambalwa ngokusebenzisa intwana encinane (ukufikelela kwi 10% yomthamo weta-nki wesitshizi) kubhetele kunokuzalisa itanki yesitshizi kanye ngamanzi acocekileyo. Kucetyiswa ukuphinda-phinda inkqubo yokupulisha kathathu obona buncinane.

3

UKUTSALA OKUNGAPHAKATHI

Ukuchitha ulwelo lokupulisha iikhemikhali zokutshabalalisa izonakalisi zezityalo ngokwemiyalelo enikwe kwileyibhile, faka ulwelo lokupulisha kwisiza apha iimveliso ziqhele ukusetyenziswa khona (kwakhona, esiphelweni somhlaba apha ikhemikhali ibitshizwe khona sikholisa ukuba yindawo efanelekileyo). Yiphinde inkqubo yokutsala okungaphakathi emva kokukhcula iityhefu nokupulisha isitsizzi ngokutsha. Qiniseka ukuba utsala nakuphi okungaphakathi kwiitanki njengamanzi acocekileyo okupulisha phambi kolondolozo ukuze unqande umonakalo obangelwa ngamanzi anoku-ba ngumkhence ngaphakathi.

4

UKUHLOLA

Emva kokupulisha okokugqibela unakho ukuhlola isitsizzi sakho wenze nomsebenzi wokukhanda nokulungisa ukuba kukho imfuneko. Nangona isitsizzi sicoci-we, yiba soloko unxiba izivatho zokhuse-lo ezizezakho. Enye intsalela inakho ukusala ngaphakathi nakwisitshizi.



NGEXESHA LOKU-COCA NASEMVA KWALO

Khangela okulandelayo ngexesha lokucoca nasemva kwalo.

- Imilomo ebhidanisiweyo nekrazu-kileyo.
- Izikrini zemilomo ezonakeleyo.
- Izikrini zezitreyina ezonakeleyo.

- Intanda, ukuvuza nokusebenza okupheleleyo empompini.
- Imeko yombobho wokutshiza, ngakumbi ukuphuqeka okanye iintanda.
- Imeko yeevalvu, ukuchonga naziphi iindawo ezipuzayo okanye iindawo apha imitywino ingasabambelelanga kakuhle khona.
- Imilo yesitshizi esoluliweyo, ukuchonga naziphi iintanda ezifanele ukulungiswa.

*Inqaku libhalwe ngokweziFundoo
zaseGrain SA ngemilinganiselo.*



Lazi ixabiso LEEMBOTYI EZOMILEYO

Inkozo ezomileyo zeentlobo ezilishumi elinanye kwiintlobo zeembotyi ezityiwayo ehlabathini, ukususela kusapho lwezityalo lwalonke usapho lwemidumba, elinyelwa urhwebo okanye ukuzisebenzisela okanye ezisetyenziswa lusapho zaziwa ngokuba ziinkozo ezomileyo.

Ibinzana lamagama elithi 'inkozo ezomileyo' libhekiselele ngqo kwiinkozo ezomileyo ezilinywayo nezinokuvunwa ngezandla okanye ngomatshini zize zibekelwe zandule ukuphekwa ngeendlela ezahluka-hlukileyo okanye zigcinwe kumathuba amade njengeenkozo ezomisiweyo nanjengezitaylo ezivelisa iinkozo eziilo hlobo. Ulondolozo lunokuba zizbonelelo zezixa ezikhulu, iingxowa, kune neepakethi ezincinane ngokunjalo neembotyi eziguqu-guqulwego zafakwa ezinkonkxeni kumxube wamanzi netyuwa okanye kwisisi zetumato nangezinye iindlala ezininzi. Sonke siyazazi ezi

mveliso kuba zifumaneka emathaleni oobhazabha za beeenvile kanti nasezivenkileni eziziRhoxo na-kubathengisabathengisa ezikoneni zezitrato.

limbotyi ezintsha, iirertyisi, iimbotyi zesoya kune namandongomane konke onke akunakubonwa njengeenkozo ezomileyo. limbotyi zesoya namandongomane ke ngoko akusayi kuxoxwa ngazo kweli nqaku. linkozo zeembotyi zesoya nezamandongomane zinesiqulatho esiphezulu samafutha kanti iinkozo ezomileo azinamafutha kwaphela.

Intloblo zeenkozo ezomileyo

linkozo ezomileyo ezinezona zaziwayo ziquka iintloblo ezilandelayo zeemboyi: Zezinamachokoza abomvu, i-haricot entsundu, ezimhlophe ezinkulu nezincinane. Ezinye izityalo eziziinkozo ezomileyo ezibalulekileyo ziquka iirertyisi ezomileyo, ilentili, iirertyisi ze-chickpeas, iimbotyi ze-carioca, iimbotyi ze-alubia, iirertyisi ze-pigeon, iimbotyi ze-faba,

iirertyisi ezomileyo ezingamaqhekeza, iimbotyi zmung, iirertyisi zeliso elimnyama, illupine, iimbotyi zebambara nee-ertyisi ze-cowpeas.

linkcukacha ngezondlo

limbotyi ezomileyo zingumthombo wokutya onempi-lo entle kakhlulu nongenayo icholesterol, zityebile ngeearmino asidi ezifana neniacin nethiamine, i-iron nezinye izondlo ukwenzela ukukhula okuqhelekileyo nokukhula kwezicwili zomzimba. linkozo ezomileyo zinesiqulatho esiphezulu kakhlulu seprotheyini ne-siqulatho seentsinga ngokunjalo kanti esamafutha siphantsi zikwasisongezo esilunge kakhlulu kuluhlu lwezityo lweentsana nabantu abatsha.

Usinga lucothisisa ukufunxeka kweekhayibhohayidrethi ukuze ngokwenza njalo kucothisise ukutsha kwamandla kwithuba elide kanti oko kunceda abantu abanesifo seswekile abanengxaki yokumelana kwe-insulin ukuze kunciphe



limbotyi ezomileyo ezibukekayo nezicocekileyo. Ifoto ithathwe: nguJohan Kriel

ukunyukela phezulu kwamanqanaba eeswekile esegazini asuka abe yingxaki.

Iimbotyi ezinamachokoza abomvu ziulethe ama 74% ekhabhohayidrethi, isi 3% nama 23% eprotheyini xa kusenziwa uhlalutyo. Ikomity enye yeembotyi eziphekiwego okanye iinxaleny ezmibini kwezintathu zenkonkxa inika phantse isiqingatha sesixa ekucetyiswa ukuba sityiwe sosinga sama-21 eegram ngosuku ukuya kuma-25 eegram malunga nomntu obhinqileyo oselekhulile. Indoda eseyikhulile idinga ama-30 eegram ukuya kuma-38 eegram ukuze isebenze kakuhle. Inyama ayinalo usinga.

Itsheyini yabathathi-nxaxheba ukusu-sela ekulimeni ukuya ekuvuneni

Njengomlimi olima kancinane, ungaqala ngokulima iihktare ezi 0,5 zeembotyi ezomileyo ezinamachokoza abomvu ukuya kwihektare e-1, 2 okanye iihktare ezi-5, kude kuge zihktare ezili-10. Le ngxoxo ibonisa ukuba zininzi izinto eziluncedo ekulinyweli kweembotyi ezomileyo ukususela kwibanga elisisiseko ukuqinisekisa ubukho bokuya okwaneleyo ukuya ekuphuculweni kwemveliso ethubeni kude kuge ngaphaya kokwanelisa izidingo.

Ukuba umntu unamava nemali eyaneleyo yamalungiselelo unakho ukuba ngumlimi orhweba ngokupheleleyo othengisela oohola beeenvile kwiindawo zentengiso okanye ekuggibeleni iimbotyi zibekelwelwe zize zithengiselwe ngqo abathengi. UMZantsi Afrika uthenga kumazwe angaphandle malunga neetoni ezingama-85 000 zeembotyi ngonyaka ngaphezu kwezityalo zesizwe ukususela kwitonni ezingama-44, 100 ukuya kwezingama-82,000 ngonyaka. Basebaninzi abathengi beli lizwe abafuna ukuthengiselwa.

Ixabiso lesango lefama malunga nemigangatho ephezelu yeembotyi liphakathi kwe-R12 000 ne-R14 000 ngetoni xa kuthengiselwa abarhwebi abacoca, babekelele ngokunjalo baphinde bayithengise imbewu leyo. Abalimi bakhola ukuba phakathi kweetoni ezi-1,8 ngehektare neetoni ezi-2,2 ngehektare zembewu ethengisekayo xa bekusetyenziswa imigaqo elungileyo yokulima kwimimandla eyomileyo. Oku kuthetha ingeniso ephelleyeo emalunga nama-R26 000 ngehektare nethelekiseka kakuhle kakhlulu nengeniso efumeneke ngokusebenzia eminye imigaqo yokulima izityalo kwimimandla eyomileyo.

Awona macebiso maninzi anokusetyenziswa ngamanani anqwenelekayo ezitalo afuna iikhilogram ezingama-75 zembewu ngehektare. Iindleko ngeekhilogram ezingama-25 zeenkozo zeembotyi zodidi oluphezelu zikuluhlu oluphakathi kwe-R1 200 ne-R1 450 ngengxowa kumaqumru aiziwa ngokuthengisa inkozo. Iindleko zeenkozo zakho ngehektare zinokuba yi-R3 600 ngehektare ukuya kwi-R4 350 ngehektare. Zonke ezinye iindleko ezingqalileyo zeemveliso zamalungiselelo mafakelwe. Iimali neminye imithombo yoncedo yokulima ekhoyo ziya kwalatha ukuba yeypifi indawo yobukhulu obususela kwi 0,5 yehektare ukuya kwiehektare ezili-10 zezona zifanele isityalo.



Lintlobu zeembotyi ezahluka-hlukileyo.

Eupheleni kwetyathanga labathengi iimbotyi ezibekelwelyo eziyi 1 kg zithengiseka ngemali emalunga nama-R22,00 ngekhilogram yeepakethi ezingama-500 g ukuya kwiipakethi ezishiya-shiyanayo ngobukhulu nezenza iipakethi ezinokufikela kwi-5 kg. Oku kunika ixabiso eliqikelelkayo lama-R22 000 ngetoni kwithuba langoku. Ngoko ke likhona ithuba lokongeza ixabiso kwizigaba ngeziga-gaba zorhwebo kwitsheyini esuka kumlimi ukuya kumthengi.

Imida yokulima nemijkeleziso yezityalo

Amava abalimi ukuya kweyabathengisi bee-nkozo alatha ukuba iimbotyi zifanele ukulinywa kumandalalo olungiswe kakuhle nococelkileyo xa amaqondo obushushu bomhlabu engaphaya kwe 13° nakubushushu obukhoyo belo xesha lokulima obuphakathi kwe 18° ne 20°. Umhlabu oluvunduvunu onesanti, uvunduvunu olunesanti nodongwe okanye umhlabu oluvunduvunu nodongwe nesiqlatho sodongwe esiphakathi kwe 15% ne 35% onke afanelekile.

Abalimi abasebenzisa umgaqo wokulima ngolondolozo mabaqaphele ukuba kungabikho ntsalela yezityalo eggithisileyo emhlabeni esuka kwisityalo ebessilywe ngaphambili. Imbewu ifanele ukulinywa kwiimeko ezifumileyo ukwenzela ukulima okukokona kuphezelu kune namanani esityalo alungileyo ekuggibeleni. Lo mba ubalulekile nje-noko iindleko zokulima imbewu ziyingxalenye ephelzu yeendleko ezingqalileyo ziphelele.

Nangona iimbotyi ziymidumba kwaye zizinzisa initrogen abalimi mabafake isichumiso senitrogen

kwisityalo sabo, ngokwengqiqo yokuba isityalo asisyat kufumana nitrogen ngokwaso. Sebenzisa uhlalutyo lomhlabu ukuphucula izondlo ezifuneka kangangoko.

Iimbotyi zinakho ukuba nendima ebalulekileyo kwaye ixabiso layo eliphezelu lifanele ukupukwa kwisicwangciso sojikeleziso wezityalo. Amava abonisa ukuba yeypifa nto ilungileyo ukulandelisa umbona kujikeleziso kwaye ufanele ukulinywa kwakuloo masimi qho emva kweminyaka emithathu. Amazimba nawo anokusetyenziswa nombona kujikeleziso kodwa ngenxa yokulkhula okunokubakho kweSclerotinia kucetyiswa ukuba oojongilanga bangaqkwa kujikeleziso kune neembotyi ezomileyo. Apho kulunge khona ukulinywa kwengqolowa, okanye ukulima ukuya okuluhlaza okudingwa yimfuyo kanti oku kunokusetyenziselwa uncedo kwisicwangciso sokujikeleziswa kwezityalo.

Isiphetho

Ukulinywa kweembotyi ezomileyo kufanele ukubonwa njengelinge elinokukhethwa kubalimi abalima kancinane nabalima kakhulu, xa kucingwa ngexabiso eliphezelu lesityalo ngokulithelekisa nezinye izitalo ezinokukhethwa kwimihlabu eyomileyo kodwa enkenkceshwayo ngokwamaxabiso angoku akhoyo eengqikelelo zeSafex. Kunokusetyenziswa njengesityalo esiluncedo kwinkqubo ecwangciselweyo yojikeleziso.

Inqaku linikelwe ngumlimi othathe umhla-phantsi.



ICANOLA

– ucwangciselole Iwexesha elitsha

A bona balimi baphumelelayo ngabenza olona cwangciselole lumphukileyo. Makube kuncinane kangangoko okushiyeka kokinokwenzeka kwithuba elithile futhi qiniseka ukuba uneenkukacha eziggibelete kangangoko ezinokukunceda ekwenzeni iziggibo ezizezona zifaneleke kakhulu. Cinga ngemibandela elandelayo xa usenza ucwangciselole Iwecanola kwixesha lokulima elitsha.

Ngawaphi amasimi afanele ukulinywa icanola

Iliqela imibandela efanele ukucingwa xa kusenziwa izigqibo ngokuthi ngawaphi amasimi ekunokulinywa kuwo icanola kwixesha elizayo lokulima. Icebiso lithi icanola ifanele ukulinywa kuphela qho ngonyaka wesithathu okanye ngowesine kwakuyo loo ntsimi, ngakumbi xa kubekho mhlawumbi i-black leg okanye iSclerotinia kwelo xesha lokulima. Ngaphaya koko, icanola kubhetele ingalinywa kumgama weemitha ezingama-500 ukusuka entsimini apho bekukho khona izifo kwixesha lokulima langoku.

Abalimi abaninzi basasebenzisa icanola njengesixhobo sokulawula ukumelana kwezitshabalali zokhula nekhemikhali, ngakumbi ukhul oluyingca, emasimini ebelinywe iisiriyeli kumaxeshya alicela okulima. Icanola yenza abalimi ukuba basebenzise izitshabalali zokhula ngesicwangciso senyathelo esahluka-hlukileyo (moa) ukuze kutsatyalaliswe ukhula olupuhule imeko yokumelana nezitshabalali zokhula eziqhele ukusetyenziswa kwiisiriyeli. Likhemikhali ezijikelezayo ezinee-moa (isicwangciso senyathelo) sisicwangciso-cebo esilungileyo esinqanda imeko yokumelana kokhula nekhemikhali, ukuze oko kubangele ukuba ukulanganiswa kweanola kwirkqubo yojikeleziso Iwezityalo kube sisixhobo esibalulekileyo solawulo.



Intsimi yecanola entsha.
Ifoto ithathwe: nguLiana Stroebel

Inginga yesibini ebalulekileyo kukufumanisa ukuba ingaba ikhemikhali yokhula esetyenziswe kwixesha elidlulileyo ayinakudala iingxaki eziyintsalela nezinokudala umonakalo kwizithole zecanola. Qinisekisa ukuba ithuba lokubambezela elixelwe kwileyibile yemveliso libonisa ukuba kukhuselekile ukulima icanola. Icanola, ngakumbi yona intununtunu kakhulu kwiqela leekhemikhali ze-sulphonylmethyl (SU) kanti ithuba lokubambezela leeSU ezahluka-hlukileyo lisuka kwiiyanga ezi-lithoba ukuya kwiminyaka embini.

lingxaki ezikhoyo malunga neentsalela ze-diflufenican ziqtashelwe kumaxesha okulima angaphambili ambalwa. Emva kwamaxhesha emvula enganeno kweyesiqhelo kubakho isothuso sentsalela yemveliso edlulela phambili okwandileyo kuba sukuba kunciphile ukukhuliseka kweemveliso ezi-suka kumaleko ongaphezelu womhlaba ngokunjalo nentshukumo yezidalwa ezincinanana ezisemhlabeni, nokubangela ukuqhekeka kweemveliso ezi-nini, kuya kuncipha kwimihlaba eyomileyo.

Umandela wesithathu ofanele ukulqwalaselwa sisixa sentsalela yezytalo esisala kumphezelu womhlaba emva kokuvuna. Umgao ofanelekileyo wokulima ukhuthaza ukugcinea kwsigcina-kufuma esinini kumphezelu kangangoko, kodwa isigcina-kufuma esinini ngakumbi xa sizizigaqa ezikhulu ezikhoholisa ukwenzeka ngesitroyi asisikeki ngokobude obufutshane, kwaye sinokubangela iingxaki kwizithole zecanola ezintshulayo. Izixa ezikhulu zesitroyi eziphezu komqolo olinyiwego zidodobalalisa ukuntshula ngenxa yobushushu obuphantsi bomhlaba phantsi kwesitroyi obenza ukuba izithole zibe sisisulu sesifo okanye sokonakaliswa zizinambuzane. Enye ingxaki kukuba ngenxa yokuba izithole zifanele ukhula zidlule kumaleko wesitroyi phambi kokufikelela ekukhanyeni kwelanga, oko



Icebiso lithi icanola ifanele ukulinywa qho ngo-nyaka wesithathu okanye ngowesine kwakuyo loo ntsimi kuba intununtunu kwisifo.
Ifoto ithathwe: nguChris Cumming

kubangela izityalo ezide, ezinciphileyo ezinethuba elincinane lokuphila.

Cinga ngokwenza iibhali zesitroyi esigqithisileyo. Ukuba umlimi ukhetha ukugcina intsaleda emhlabeni ongaphezelu lide lifutshanise ixesa lokutyala icanola, emva koko kusetyenziswe amany amacebo ukuthintela izigaqa zesitroyi ezisele emhlabeni. Ngokusika isitroyi sibe ziziqwengana ezifutshane ngexesa lokuvuna kungalula ukuzilungelelanisa emhlabeni. Uku-ruqua amathayara okanye izixhobo phezu komhlabia phambi kokutyalala nako kuyawaqhekeza amagaqa kunabise nentsaleda.

Okokuggibela, icanola ayifanelanga kulandela ii-lupine kwinkqubo yojikeleziso Iwezityalo nje-ngoko zozibini zingabamkeli be-Sclerotinia ukuze oko kuwukhuthaze kanobom umngcipheko wosulelo kwicanola.

Yenza isiggibo ngokuba yeyiphi imihlanganisela yecanola ofuna ukuyilima kwixesha elizayo lokulima

Kukho iinkcukacha eziggibeleyo ezivela kwimavanyo ezenziwa kwimihlanganisela neziqhutywa liSebe IezoLimo eNtshona Koloni ngonyaka ngamnye. Khetha imihlanganisela esoloko iqhuba kakuhe kwindawo olima kuyo kumaxesha okulima alicela. Faka iodolo yembewu msinyane kangangoko ukuthintela ukudana ngenxa yokungakwazi ukulima imihlanganisela oyikhetayo.

Khumbula ukukhetha umhlanganisela we-Clearfield (CL) okanye omelana ne-triazine (TT) xa unenjongo yokusebenzisa mhlawumbi i-imazamox okanye ikhemikhali yokhula i-triazine kwicanola.

Lima intwana yemihlanganisela eyahlukileyo ngokwamandla okupuhla kokusebenza kwayo. Oku kwenza ukuba umlimi akwazi ukulola ixesa elilelona lifanelekileyo lokuqhuba imisebenzi eyahluka-hlukileyo yeziwangciso-cebo, efana nomaleko ongaphezelu, ukutshiza izifo okanye ixesa elifanelekileyo lokuvuna ukwenzela imihlanganisela eyahluka-hlukileyo, ukuze izigqibo ezenziwa ngolawulo kube lula ukuzenza. Ukungawafaki kwinggaobzi enye onke amaqanda akho nako kunciphisa umngcipheko.

Wakuba uqinisekile ngenqubo yakho yezichumiso ngokohlalutyo lomhlabia, khawuleza ufumane iisampulu zomhlabia ukuqinisekisa ukwenziwa kwa-macebiso ithuba liselihle.

Wagcine amasimi elungele ukulinywa kwecanola kwixesha elitsha lokulima elingenakhula, ngakumbi kwizityalo zecanola ezizikhulelayo nezinye iintloba zokhula, ezifana ne-ramenas kune nemastadi ezikhulelayo, ezingabamkeli bezidalwa ezonakalisa izityalo nezifo ezenzekayo kwicanola.

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IZIFUNDO EZIFUNDWE KWISHISHINI LEEMBOTYI ZESOYA LASEBRAZIL

Eli nqaku lioxa ngezifundo ezinokufu-ndwa nguMzantsi Afrika kumfuziselo oyimpumelelo wokukhula kwezolimo waseBrazil, liphinda liqwalasele ukuba uMzantsi Afrika unxayiphi malunga notyalo-mali kwishishini leembotyi zesoya nangoku-zilima ngokuthe kratya.

Ngo-2050, amanani abantu baseAfrika aya kuba ekhule ukususela kwi-1,86 yebhiliyonu ukuya kwiibhiliyon ezi-2,4. Ngenxa yokukhula okukhawulezayo kwamanani abantu, abalimi bokutya bafanele ukunusa umgangatho ngokulima ngeendlela ezincomeka ngakumbi, ngokukhumbula neminye imibandela efana nenguquko kwiimeko zemozulu nezandisa iindleko zamalungiselelo.

Kubalulekile ukuxhasa amaziko ophando ngokwasemalini, ukuze uphando lulungelelaniswe nezidingo ezithile zelizwe.

I-Brazil ihamba phambili kwezoqoqosho eMzantsi Melika iphindie ibe liliizwe lesixhenxe ngobukhulu ehlabathini. I-Brazil inenani eliphezulu leezowuni zetropiki, nezingumngeni kwezolimo; amanani aphezulu ezidalwa ezonakalisa izityalo, imbalela, ubumuncu bomhlaba, izondlo ezinganeno njalo njalo kanti konke oku kwanda ngenxa yeenguquo kwiimeko zemozulu ngokubanzi.

Kwiminyaka yoo-1970, iBrazil yayingenakutya kwaneleyo, babenenqanaba eliphantsi lokulima nezivuno eziphantsi, kukho unxunguphalo

kwintengiso yokutya ezzinileyo kunye nentswelo yasemaphandleni, babengenamigaqo-nkqubo yophuhliso eyaneleyo. Namhlanje iBrazil ingabulela utyalu-mali olomeleleyo lukarhulumente kuphando nakupuhliso ngempumelelo yayo kwezolimo.

Kwiminyaka yoo-1970, iBrazil iseke ibhunga lophando elibizwa ngokuthi yiBrazilian Agricultural Research Corporation (EMPRPAPA), elikhokela ihlabathi malunga nophando lweemveliso zetropiki. Elinye igalelo phakathi kwamanye leli ziko lophando kukuba baphuhlise iintloblo ezintsha zeembotyi zesoya ebezifanele iimeko zemozulu zetropiki ezifana nezaseBrazil, nezhkhula kumaxesha amafutshane. Oku kudalwa kwezinto ezintsha ngamanda angako kuyibeke kwibanga eliphambili iBrazil kukhutshiwano olukhulu neUS kunye neYurophu malunga nokuthengisa iimbotyi zesoya emazweni angaphandle, ngokunjalo ipuhlise abalimi nabarrhewbi abakhulu beembotyi zesoya.

Kwiminyaka engama-20 edlulileyo, izivuno zonyaka ezingumyinge eBrazil zikhule nge 1,33%, eArgentina nge 0,64% eMelika nge 1,46%, kanti eMzantsi Afrika umyinge wezivuno wehle nge 40% kunomying ephunyezwe ngamazwe angasentla.

Xa siqwelasela imeko yaseMzantsi Afrika, sizi-bona sihambe umgama obonakalayo ekukhuliseni ishishini leembotyi zesoya, apho zithe chatha khona iihektare ezinkelwa kwesti sityalo ngonyaka ngamnye ngokunjalo nabalimi beqhelanisa imigaqo yabo yokulima ukuze bafumane izivuno ezinozinzo oluth chatha neziphuculiyeyo, kanti sinaso nesakhono sokucudisa esingasisebenzisi ngokupheleleyo.

linkcukacha ngokuthengisa zibonisa ukuba amaqumru awanathakazelelo lokusebenzisa ubu-chwepheshe obubobona butsha eMzantsi Afrika ngaphandle kwerhafu yokukhulisa neyobuchwepheshe. Irhafu yokukhulisa neyobuchwepheshe



yirhafu esemthethweni ehlawulwa ngabalimi ngetoni nganye yeembotyi zesoya ezinkelwayo, ukutyla imali ukuze ibuyele kwishishini apho ixhasa khona imisebenzi efana nophando kunye nophuhliso. Irhafu yokukhulisa neyobuchwepheshe yamkelwe eMzantsi Afrika malunga neminyaka emibini elandelayo kwaye iya kuphunyezwa ukususela kuMatshi ngo-2019 ibe yi-R65/yeetonu kunya ka wokuqala ize ibe yi-R80/yeetonu kunya ka wesibini.

Ibali laseBrazil likukhanyisa ngokucacileyo ukubaluleka kophando nophuhliso xa siqwelasela izinto ezeluncedo kuqoqosho nakurhwebo olubonakele eBrazil. Kubalulekile ukuxhasa amaziko ophando ngokwasemalini, ukuze uphando lulugelelaniswe nezidingo ezithile zelizwe.

NjengoMzantsi Afrika, kucacile ukuba zinzi izinto esinokuzifunda kumfuziselo osetyenziswa yiBrazil weshishini lokulima iimbotyi zesoya nakwezolimo ngokubanzi. Nangona kunjalo, siqhuba kakuhle malunga nerhafu yokukhulisa nobuchwepheshe, kodwa kusekunini ekufuneka kwensiwe kweli lizwe ukuze libe semgangathweni wokhutshiwano kushishino lwehlabathi leembotyi zesoya.

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Pula Imvula's Quote of the Month

With patience, persistence, and partnership, we can create economic opportunity for every person willing to work hard for it.

~ Thomas E. Perez





Khulisa ishishini LAKHO LOKUFAMA

Yinyaniso engenakuphikiswa ukuba bonke abalimi bethu, nokuba balima indima enkulu okanye encinane okanye basandul' ukuqala ukufama okanye sebeneminyaka eliqela befama, banephupha elinye lokufuna ukuphumelela nokukhulisa amashishini abo okufama.

Ukuze kwenzeke oku kufuneka libe nozinzo ishishini lakho, ngamanye amazwi, lifanele ukufaka inzuzo ngonyaka ngamnye kwithuba elide. Nangona kunjalo, ukuze kubekho uzinzo akunakuyeka ukutshintsha-tshintsha, ukuziqhelanisa, ukuziphucula nokukhula. Ukukhula akubhekisi ekukhulen ngokwezinto ezibonakalayo kuphela kodwa kukwathetha ukukhula kwemveliso ngaphezu kobabanzi besiqhelo. Kulula ukuthetha, kodwa into enzima kukwenza.

Khumbula ukuba eli nqaku linikelwa ngenongo yokuba ube ngumntu okwaziyo ukuzinceda. Musa ukuxhomekeka, umzekelo, kurhulumente ukuba akuncede ukhulise ishishini lakho. Xa abalimi bethu benokufumana uncedo olithe kratya kurhulumente ekugqibeleni, oko kuya kuba libhaso kuphela. Okwangoku, zincede, ngamanye amazwi, sebenza ngokuzimisela uqokelele iinkukacha.

Ukuze likhule ishishini lakho, kukho izinto ezimbini onokukhetha kuzo – yandisa okanye yahluka-hlukanisa.

Ukwandisa kuthetha ukongeza umhlaba, nokuba uyawuthenga okanye uyawugesha. Nangona kunjalo, unakho ukuphinda ucinge mhlawumbi ngokuvula omnye umhlaba kulowo sowunawo ukuze wandise indawo olima kuyo. Mhlawumbi ungafakela ezinye izibonelelo zoncedo okanye izixhobo zokusebenza.

Ukwahluka-hlukanisa kuthetha ukufakela amanye amashishini kwimisebenzi yakho yokufama. Umzekelo mhlawumbi ungaba kukuquka ishishini lemfuyo, okanye ukufakela ishishini leziqhamo, elilutyalo-mali lwethuba elide. Ukwahluka-hlukanisa, enyanisweni kukwasixhobo sokulawula imingcipheko yeshishini lakho.

Ingaba ufanele ukwandisa okanye ukwahluhukanisa okanye ufanele ukuhlanganisa ezi zicwangciso-cebo zimbini? Umlimi ngamnye makacinge ngemeko yakhe enze isigqibo ngeyona nto ifanele iimeko zobomi bakhe. Xa uqwalasela zicwangciso-cebo ezibini okanye umdibaniso wazo khumbula okulandelayo.

Yiba nomonde. Khumbula intetho ethi 'I-Roma zange yakhiwa ngosuku.' Impumelelo ithatha ixesha ukufika kodwa zingisa – qhuba ngento oyenzayo.

Khetha ngholobo Iwakho. Fama ngento oyithandayo. Abanye abalimi bathanda ukufama ngemfuyo, kanti bakhona abathanda izityalo. Ukuba uyayithanda into oyenzayo uya kukwazi ukuzimisela ngakumbi ukuze ufumane ezona mveliso zintle zinokufumaneka.

Qalis a kancinane. Bonke abalimi bethu bodumo okanye ooyise babo okanye nootato-



Ukuphumelela kuthetha ukuchitha iiyure ezininzi nokusebenza nzima. Ifoto ithathwe: nguJohan Kriel

mkhulu baqalisa kancinane baze bawakhulise amashishini abo ebudenibexesa. Qiniseka ukuba unemali elingeneyo, izixhobo zokusebenza, abantu, izithole, izichumiso, isondlo, okanye nayiphi imveliso yamalungiselelo efunekeyo ukuze ukwazi ukovelisa nokutheengisa imveliso/iimveliso zakho. Ngqamanisa izicwangciso zolwandiso Iwakho nengeniso kunye nemithombo yoncedo efumanekayo.

Funda kangangoko unakho. Zimisele ngokufunda kangangoko unakho ngamashishini akho. Yiba ngumlimi oydingcali nokuba ulima ihektare e-1 kuphela yombona okanye nokuba ufama ngeenkomozelile.

Hlala uzinzise ingqondo. Zinzisa ingqondo kwizityalo zakho okanye kwiiirkomo ozandisa emsebenzini wakho wokufama ngokunjalo uwakhulise amashishini akho kakuhle kangangoko unokwenza. Ungazivumeli ukuba uphazanyiswe ngamabali amaxabiso aphezulu ezinye izityalo okanye iintlobozemfuyo. Xa uhlala uzinzise ingqondo uya kukwazi ukuzilawula phucukileyo iimveliso zakho futhi ukwazi nokuqwalasela iingxaki ezinokubakho phambikukuba zibe yingxaki enkulu.

Umgangatho. Ukuba ufunaukufaka imali, ufanele ukukhupha eyona mveliso intle futhi uyithengise kangangoko. Umgangatho ophezulu uyathengiseka qho, naxa okuthengiswayo kuxaphakile. Umgangatho ophezulu mawusoloko ufumana inkaso yobukho obunganqumamijo kwento ethengiswayo. Abathengi bayakukuthemba kuba usoloko unako abakufunayo.

Inkxaso-mali. Ukuze wandise okanye wahluhukanise ishishini lakho uza kudinga imali. Phumeza oku ngokwakha iingxowa-mali zakho ngeenuzo ozifumanayo. Ukuba kuyenzeka musa ukuboleka imali, esi sesinye isizathu sokuba nomonde.

Gqalisela kwintengiso yakho. Okokuqala, khumbula phambi kokuba usebenze ngemveliso yakho ethile, ukuba uqinisekise amalungiselelo akho okuthengisa. Ngaphandle kwezinxaxhi ezimbalwa, zonke iimveliso zethu zizinto ezintsha kanti futhi ixesha lazo lentengiso lifutshane. Yakuba imveliso yakho ilungele ukuthengiswa, akusayi kuba naxesha lokuzula ufunu indawo onokuthengisa kuyo. Kuqaphelle kakuhlu ukutshintsha-tshintsha isicwangciso-cebo sakho sokuthengisa. Yiba ngumthengisi abantu abanokuxhomekeka kuye, thengisa ngexesha ngokwamalungiselelo futhi uthengise iimveliso ezisemgangathweni ophezulu, zibekelwelwe kakuhle zize zinikelwe ngendlela efanelekileyo.

Ngama lorhwebo. Yenza isigqibo ngegama lorhwebo uze wakhe igama lakho lorhwebo phakathi kwabathengi ngokusoloko unikela ngeemveliso zodidi ezisemgangathweni ophezulu. Nonke nifanele ukuba niyazazi iitumato ze-ZZ2 njengomzekelo.

Ukwandisa kune/okanye ukwahluhukanisa zicwangciso-cebo ezibini ofanele ukuzisebenzisa ukuze ugcine umsebenzi wakho wokufama unozinzo kwixesha elide. Ukcikideka malunga namaxabiso kuya kukunyanzela ukuba uzisebenzise ezi zicwangciso-cebo zibini ukuze ufumane inzuzo enozinzo. Kodwa khumbula, ukuze usebenzise ezi zicwangciso-cebo zibini udinga iinkukacha ezininzi kangangoko unakho. Linkukacha zifumaneka kwimithombo emininzi, kodwa kufuneka uzame kakuhlu ukufumana iinkukacha. Ufanele ukukwazi ukuzinceda.

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

Wulawule umdlalo wakho

- YENZA UMALEKO WANGAPHEZULU

Ukuba uza kulima umbona, ngoko ke ngokujinisekileyo unenjongo yokufuma-na esona sivuno sihle sinokufumaneka kwezo zityalo ezikhula kuloo ntsimi. Oku kuthe-tha ukuba uya kuba uziqaphela ngenene zonke iimfuneko zembewu yakho, zezichumiso kunye nezokutshatyalaliswa kokhula.

Omnye wemibandela ebalulekileyo kukuqaphela ukondleka kwezityalo. Kubalulekile ukusebenzisa isichumiso esifanelekileyo ukuqinisekisa ukuba iingambu zezityalo ziyakwazi ukufunxa zonke izondlo ezikhoyo emhlabeni ngokunjalo ziziguqu-leta kwiinkozo. Kuyimfuneko ke ngoko ukuzithatha rhoqo iisampulu zomhlaba, ukuze wazi ukuba uza kugalela isichumiso esingakanani. Kusekunini ekufanele kufundwe malunga nenkulwazi yoku-chumisa, kuba **kukwabaluleke kangako ukufaka izondlo eziyimfuneko ngexesha elifaneleki-leyo**, ngoko ke isityalo singazisebenzisa ngendlela efaneleke kangangoko kunokwenzeka.

Umaleko ongaphezulu

Umaleko ongaphezulu ubhekiselele kwinkubo aphi nayiphi into nokuba intsusa yayo yindalo okanye asiyondalo isongezeleleka emhlabeni ukuze ikhuphele izondlo ezikuyo kwisityalo mhlawumbi esilinyiweyo. Eyona nkcazelo isisiseko somaleko ongaphezulu ithi kukufakwa komgquba okanye kwesichumiso kumphezulu womhlaba. Umaleko ongaphezulu ke ngoko yindlela yokuqinisekisa ukuba isichumiso esifikwe ngumlimi sisetyenziswa ngeyona ngendlela ifanelekileyo ukuze sibe luncedo kwisityalo sombona ngokunjalo ekuggibeleni sibe sihle isivuno.

“Okufanelekileyo kukuba umaleko wangaphezulu wensiwe xa umhlaba ufumile.”

Sithetha ukuthini xa sisithi isixa nohlobo lwasichumiso sisetyenziswe ngeyona ndlela ifanelekileyo?

Indlela encomekayo yokusetyenziswa kwesichumi-so esifikwe ngexesha elichanelekileyo ithetha ukuba kungenzeka ngakumbi ukuba ufumane esona sixa siphezulu seenkozo kangangoko kunokwenzeka. Kananjalo oko kunokukholela kwisakhono esiphuculiweyo samanzi ukuze emanzini akhoyo kungabikho manzi amoshekayo afanele ukusetyenziswa sisityalo. Oku kuthetha ukuba isityalo siya kuthwala iinkozo ezi-the kraty ngemilimitha nganye



Emva komaleko ongaphezulu initrogen itshise amaggabi. Ifoto ithathwe: nguJohan Kriel

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isiXhosa,
IsiNgesi, IsiBhulu, iSeTswana,
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Wulawule umdlalo wakho – yenza umaleko wangaphezulu



Lixesha lokwandala umaleko wangaphezulu.

yamanzi akhoyo – ngamanye amazwi gcina 'isityalo esithe chatha ngethontsi elinye'!

Eminye imibandela ebalulekileyo efanele ukukhunjulu xa kusandlalwa umaleko wangaphezulu

- Qiniseka ukuba isichumiso asidibani noq nayo nayiphi indawo yesityalo ukuthintela ukugqatseka okanye ukutsha.
- Eyona ndlela igqibeleyo kukubeka ibhanti njengoko liyonga kakhulu imali.
- Kubhetele ukukhawuleza uwandlale umaleko wangaphezulu wakho, umzekelo kanye phambi kokufikelela ekuphakameni okufikelela emadolweni xa isityalo sesifikelela esinqeni kodwa singekafiki kwibanga liso lokubumbeka kwamanquma.
- Kusenokuba yimfuneko ukufaka umaleko wangaphezulu mhlawumbi kabini obona buncinane kwiindawo apho imihlabi ingachumanga kakhulu khona.
- Luluvo olulungileyo ukwahlula umaleko ukuze isichumiso sakho esinini sinciphe kananjalo singafane sibangele isimuncu somhlaba ongaphantsi kophezulu ukuze oko kutshise iingcambu ngokunjalo kwenzakalise iingcambu ukuze konakale isakhono sesityalo sokufunxa izondlo nangayiphi indlela.
- Okufanelekileyo kukuba umaleko wangaphezulu wenziwe xa umhlaba ufumile.
- Kuthintele ukufaka umaleko ongaphezulu ngexesha leemvula ezinkulu njengoko isichumiso siya kukhukuliseka emhlabeni okanye sihlambeke.
- Ukuutshatalaliswa kakhula makwensiwe phambi komaleko ongaphezulu. Oku kuthetha ukuba ukhula alusayi kufumana thuba loku funxa naziphi izondlo ezigqaliselwe kwizityalo.
- Kufanele kusoloko kutshatalaliswa ukhula ukunqanda ukhutshiswano malunga nezondlo kune nokukhanya kwelanga.

- Uze ungazibhaqi ufafe sonke isichumiso esimiselweyo kwinkqubo enye. Iziphumo ezingafunekiyo zimandunu kakhulu ngoko ke akufuneki kwamngcipheko njengoko ingekokutsha kweengcambu kuphela kodwa nesichumiso singaphumela ngaphandle kwendawo yebhanti elilelona lifanelekileyo ukuze izondlo zimosheke.
- Khumbula ukuba iimfuneko zezondlo zesityalo esingumbona zanda zithe chu kanti isakhono sasekuggibeleni siqwalaselwa kwibanga le-V12. Eli libanga apho umbona ukhula ngokukhawuleza kulo, ukuze kuvele igqabi elitsha qho kwiintsuku ezimbini ngokunjalo nokuphuhla kweengcambu okubalulekileyo.
- Kubalulekile ukwenza imilinganiselo echanekileyo yesisasazi sesichumiso phambi kokuqlisa ngokugalela. Kubaluleke kangako ukufaka isixa esimiselweyo sesichumiso ukuze ufumane iziphumo ezizezonza zifanelekileyo.

Kubalulekile ukuyikhumbula le mbandela xa ufaka isichumiso sakho somaleko ongaphezulu. Kodwa owona mbandela uxabisekileyo **kukuthatha inyathelo kwangoko** nokuthi wenziwe umsebenzi! Kaninzi, asisifaki ngexesha elichanekileyo okanye asifaki zixa zichanekileyo ukuze oko kubangele izivuno ezicekethikileyo. Njengoko besukutshivo ngaphambili; ukuze sizuze ezona zivuno zifanelekileyo sinokuzifumana, sifanele ukuqaphela yonke imibandela yokukhula kwsityalo. Ungawubethi ngoyaba umbandela womaleko ongaphezulu.

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