

PULA IMVULA

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CANZIBE
2017

Okuphambili ngeNkomfa YEGRAIN SA NGO-2017



Kule nyanga iPula Imvula idibene noSekela-sihlalo omtsha weGrain SA, uDerek Mathews ongumlimi weenkonzo kufuphi neSannieshof. Ebesoloko ezibandakanye kulimo olulungiselelweyo ukususela ngo-1984, uqale ngokunika inkonzo kwibhodi yeNAMPO (uMbutho weSizwe wabaLimi boMbona – *National Maize Producers Organisation*) kwaza kwathi xa kwakumanyana imibutho yokutya okuziinkozo, waba lelinye lamalungu okuqala ebhodi yeGrain SA njengoko isaziwa namhla.

Intsebenziswano kaMathews yethuba elide nolimo olulungiselelweyo kumfundise ukuba abalimi bafanele ukuzibandakanya kulimo olulungiselelweyo babe nemibutho efana neGrain SA ebamelayo njengoko abalimi bengasoloko benexesha lokububek' esweni ubume obungqonge uqoqosho, izikhokelo-nkqubo zemigaqo-nkqubo nezolawulo ngokunjalo nowiso-mthetho olubuchaphazela ngqo ubume obungqonge ushishino lwabo.

Ndicele uDerek ukuba achonge amanqaku aphantsi ngeNkomfa yeGrain SA yango-2017. Ubalule udlwabevu lwentetho lukaMike Mlengana, uMlawuli oPhambili (DG): DAFF njengobeludlwe-ngul' umxhelo. Umyalezo wakhe ubusekwe kwiNkolo yobuKrestu, kumava obuqu bakhe bolwahlulelwano lokufama olukhokelele kubudlelwane obunzulu phakathi kwabantu ababini, kunye nothando lwakhe olushushu lokulima. UMathews uthi kumkhuthazile ukuva ukuba yintoni umbono kaMike, njengoko ilukhokelo lwakhe kwiDAFF oluxhobisa abadlali-ndima bezopolitiko nolukhokela imisebenzi kunye nezimvo zesebe. Kubaluleke kakhulu ukuba nokhokelo olunengqiqo yecandelo noluyibona njengoko injalo indlela esenza kuhanjwa.

UMlengana ebengawaxubi amazwi akhe malunga nomalathindlela osisiseko kwicandelo lolimo:

Imagazini yakwaGrain SA
yophuhliso lwabavelisi

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UMAKHULU uJANE UTHI...

Ngamanye amaxesha siyayilibala indlela okwaqaliswa ngayo ukufama – kaloku abantu bafanele ukuzondla kananjalo ukutya kulinywa emhlabeni. Kwaba sisidingo sokwelisa ukutya okwenza ukuba kuqaliswe ukufama. Kule mihla, abalimi abasakhuthazwa ukuba balimele ukutya kwabo kuphela. Kutshanje xa besindwendwele abalimi abathile abakwiprojekthi yeJobs Fund (ukususela eku-ziPhiliseni ukuya kwiprojekthi yeNdyabo), sikhumbule indlela ekubaluleke ngayo ukuba aba balimi balime ukutya kweentsapho zabo (njengenjongo ephambili) ukuze bathengise okuseleyo.

Xa sicinga ngokulima, into efika ngokucacileyo engqondweni ngumba wokutya nowesondlo. Yintoni abafanele ukuyitya abantu? Yintoni uluhlu lwezondlo olulungeleleneyo? Kananjalo le mibuzo isikhokelela kwi-ngxoxo emalunga namaqela eentlobo zokutya (umthombo wohlobo lwesitatshi, olweeprotheyini, amafutha, iityuwa) kunye nezityalo ezahlukehlukileyo ezinokulinyelwa ukwanelisa ezi zidingo zezondlo. Sakuba siwuqondile umba wokondleka komntu sinakho ukuqala sicinge ngesondlo sezilwanyana – ukutya esifanele ukunikela iinkukhu zethu, iibhokhwe, iigusha, iinkomo neehagu. Zonke zidinga uluhlu olulungeleleneyo lwezondlo kanti ngokusebenzisa umhlaba wethu, sinakho ukuvelisa ezidingayo.

Sinenjongo yokuqukanisela uthotho lwamanqaku amalunga nombwa wokondleka (ebantwini nasezilwanyaneni) ukuze sonke sibuyele kwiziseko zokufama – ukuzondla thina kunye nezilwanyana zasekhaya ezondla thina.

Besindwendwele abalimi abaninzi abalimela ukuziphilisa abakwinkqubo yethu – (kulo nyaka bonke baza kufumana izivuno zokurhweba (ukususela kwiitoni ezi-5 ngehektare ukuya kwiitoni ezili-10 ngehektare zombona olinye wonke phantsi kweemeko zomhlaba owomileyo). Sithe sakubona ezi mpumezo saqonda ukuba sizifazile iinjongo zethu malunga naba balimi – injongo yokulimela ukurhweba emhlabeni akwazileyo ukuwufumana umlimi. Ngoku kufuneka sijonge ekuncediseni abalimi abasebenzisa oomatshini ngendlela ephucukileyo ukuze bakwazi ukulima umhlaba othe kratya ngokwenza njalo babe negalelo kubukho bokutya kwesizwe okwaneleyo.

Kule nyanga kukho iNAMPO – Ndinethemba lokuba abaninzi benu baya kuphumelela ukuzimasa lo msitho. Uze uncede usikhangele – siya kuba silapho.

Okuphambili ngeNkomfa yeGrain SA ngo-2017

'Ukususela kumbono okumgaqo-nkqubo sifanele ukuqonda ukuba silungisa iya-ntlukwano eyadalwa ngenx' engaphambili.' Ifanele ukwenzeka inguquko malunga nomhlaba, kodwa ithintelwa kukungabikho kwesicwangciso-cebo sorhwebo kwicandelo. Izicwangciso-cebo zangaphambili bezigqagqanisa kakhulu futhi zikhathshwa ziindleko eziphezulu zemali naxa bezinefuthe elingephi kakhulu. Ubonise ukungabi nathemba kwiiprojekthi ezifana neCASP neLIMA apho kuchithwe khona imali engangeebhiliyoni ezili-9 kodwa ezingenamkhondo. Umlengana uwakhabile amalinge exesha elidlulileyo ngelithi ebenefuthe elincinane ukuya kwelethutyana kuphela malunga nobomi kunye namashishini eendlalifa. Ukukhankanyile ukuba abantu banikwa izithuba zemisebenzi ngenxa yokuzimanya nezopolitiko kunokuba banikwe ngokwezakhono zobuchule, ukuze oko kukhokelele "kumbhodamo owonakalisayo".

Akakuthandabuzi ukuba **yimibutho efanane neGrain SA kunye nabalimi ngokwabo abaya kuyenza isebenze inguquko, xa benokumanyana baze baphuhlise umbono omnye, iintsulungeko ezifanayo kunye nemigqaliselo efanayo.** Ubambiswano lwabalimi abajongene neengxaki ezifanayo, luya kwenza umahluko kwindlela abathetha ngayo ngemceli-mingeni elijongene nayo icandelo. Uphinde wathi kuxa icandelo lizoba indlela yalo eliza kuyihamba ukuze libe ngabanini beempumelelo neentsilelo apho inguquko iya kukwazi khona ukuqhuba ngempumelelo. Ingozi ngokunqongophala kobambiswano kukuba kudala ithuba lokutyholwa kukarhulumente wocalucalulo malunga nenguquko esileleyo kwezomhlaba, kanti kuphinda kuvumele ubukho bezimvo ezingachanekanga malunga nabalimi.

Umlengana uphinde wancoma amalinge okuziduba kwabalimi ngeelali, izikolo nanga-maqela abo oluntu, kodwa wathi oku kufuneka kutyhilwe ngakumbi **ukubonisa urhulumente ukuba abalimi banenxaxheba nabo kwinguquko.** UDerek naye ubona sinamabali amaninzi alungileyo esinokuwabalisa kwaye iNkqubo yeGrain SA yoPhuhliso lwabalimi ingaba negalelo malunga nalo mba ngokubonisa umsebenzi omkhulu wophuhliso kunye neziganeko eziliqela zobudlelwane obushushu obakhiwa kwiminyaka ngeminyaka.

Umlengana uthethe sinakho ukwakha amaqela olwahlulelwano olubalulekileyo ukomeleza icandelo lolimo ngokunjalo kuphunyezwe inguquko waze wakhuthaza abalimi nemibutho yabo ukuba basebenze kunye **ukudala imibutho exhasa amaqela olwahlulelwano.**



Uthe iinkqubo zolungiselelo ziya kuxhomekeka kolo lwahlulelwano phakathi kwabalimi abarhwebayo nabalimi abamnyama. Umlengana uqinisekile ukuba ugqaliselo olunganqunyanyiswayo **kulungiselelo lombuso luya kukhokelela kwinkxaso ethe kratya yemisebenzi yamashishini yokwenza iimveliso** kanti yena uya kuqwalasela kuphela 'izicwangciso zoshishino ezinozinto'. Kuya kusetyenziswa **inkqubo engqongqo yokukhetha iindlalifa zomhlaba:** lifama azisayi kunikelwa okanye zithengiswe nanjani futhi 'abantu abangegobalimi' baya kukhutshelwa ngaphandle. Ukhangela amadoda namabhinqa abazelwe benothando olushushu ngokufama. Umlengana uphinde wathi ufuna ukubona isakhono esandileyo kumasebe afanelekileyo kunye nofikelelo oluthe chatha, 'Umnyango weofisi yam uvulelwe wena, yiza nezimvo zakho! Akufanelanga kubakho zicwangciso-cebo zophuhliso kwibanga lenda-wo yokuhlala abantu kungakhange kubandakanywe abanenxaxheba kwicandelo lolimo.

UMathews uphinde wawuqaphela umyalezo kaMike kubalimi wokuba ingabothusi



Bekubanjwe iNkomfa yonyaka yeGrain SA eNAMPO Park ngowesi-8 nowe-9 kuMatshi ngo-2017.

imibandela yobunini bomhlaba esisizikithi somxholo kwiintetho zopolitiko waze wabakhuthaza ekubeni bawuthembe umgaqo-siseko.

Eminye imibandela ebalulekileyo ekuxoxwe ngayo kwiNkomfa ibijoliswe **kubume obungqonge uqoqosho nakwisakhono sokulinywa kweenkoko** kwixesha elizayo. UNjing Ferdi Meyer ukwiZiko loMgaqo-nkqubo woKutya noLimo (*Bureau for Food and Agricultural Policy – BFAP*) ejolisa kwimida emiselweyo nebek' esweni imikhwa elandelwayo kunye 'nemibandela emikhulukazi' echaphazela ubume obungqonge intengiso norhwebo. Ukholelwa ekubeni **uphando nophuhliso olunganqunyanyiswayo nolunogqaliselo** lubaluleke kakhulu, ngokunjalo nobume obungqongwe zezopolitiko ezinozinzo. Eminyane imibandela enefuthe kwicandelo yile: Ukuncipha kwamanani abantu base-maphandleni nokwanda kwawo ezidolophini kudala amatsheyini amaxabiso amabini ahluka-hlukileyo. Isidingo **sokudalwa kwamathuba emisebenzi** kwicandelo – kuchongwe amathuba amathathu aphambili okudalwa kwemisebenzi: imisebenzi enokubakho eyi-350 000 inokufumaneka kwiiprojekthi ezingasetyenziswa ngokupheleleyo okanye ezenguquko kwimihlaba engalimekiyo; kanti kunokuvula imisebenzi eyi-200 000 kwicandelo leemveliso ezidingeka kakhulu elifana nezityalo zexabiso eliphezulu xa zikhona iindawo zokutengisa;

kunye nemisebenzi eyi-326 000 enokudalwa kwicandelo lokuguqu-guqulwa kweemveliso zolimo.

UMeyer uphinde waphawula ukuba **ayehla amaxabiso eemveliso zoqobo zolimo zamathuba amade** ngokuphathelele kubo bonke abalimi abarhwebayo kulo lonke ihabathi. Uthelekiso lweendleko zokulima lukhanyisa inyaniso yokuba abalimi baseMzantsi Afrika bahlawulela amalungiselelo ngeendleko ezingaphezulu phantse nge \$10 ngetoni, umzekelo, amaxabiso athe kratya ezichumiso, ngxaki leyo ebabuyisela emva abalimi beli lizwe kukhutshiswano lweendawo zokuthengisa ehlabathini. **Nangona sinohlobo lwentengiso ekhululekileyo, alusoloko kulungile, ngoko ke kulapho kanye apho ziyimfuneko khona izicelo zongenelelo.** Ukulinywa kweembotyi zesoya sekusisiphephelo nethuba elihle elikhoyo lokulinywa kweembotyi zesoya kwiminyaka embalwa ezayo.

UMathews uthi umbono wakhe kwithuba lakhe njengoSekela-sihlalo weGrain SA kukuqinisekisa inxaxheba ethe kratya **yesizukulwana esitsha kulimo olulungiselelweyo ukuze kwakhiwe ulungiselelo olubalulekileyo nolwesimbo sanamhla oluza kunika inkonzo kubo bonke abalimi beenkoko**, nokuba lukhulu okanye mcinane kangakanani futhi kungakhe kugqaliselwe kwimibandela yembali. Uyaphawula ngokubaluleka kwenguquko njengomba ophambili ngoku kodwa

ukholelwa ekubeni ethubeni siya kufika kwixesha elitsha eliya kuba lisayidinga iGrain SA ukuba ibeke iliso futhi inikele ngolwazi, ikhusele ngokunjalo ihlale iqwalasele ubume obungqonge ulimo ngokomdla wabo BONKE abalimi bokutya okuziinkozo.

Kwilinge lokuba nenxaxheba kwinkqubo yenguquko, inkomfa kwakhona ivotele ukuba kubekho iinguquko kumgaqo-siseko eziza kuba nefuthe elingqalileyo kubalimi beNew Era futhi kwandiswe nethamo lenxaxheba yamalungu eNkqubo yoPhuhliso lwabaLimi njengeenkeli zombutho nabameli abakwibhodi. Indima yeNkomfa yeGrain SA iya kusoloko ikukumamela iinkokeli ezifana noMlangana nokufunda kwiingcaphephe ezinjengoMeyer ezinolwazi oluxabisekileyo, kodwa futhi nokuyila iqonga apho abalimi beenkalo ngeenkalo zobomi banokuxoxa khona ngemibandela etshisayo ukuze ekugqibeleni kufikelelwe kumbono omnye, iintsulungelo ezifanayo kunye nemigqaliselo efanayo ayinqwenelayo uMike Mlangeni.

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Amaxabiso ombona asixelela ntoni?

Kwiingqikelelo zayo zokuqala zokulima zango-2017, iKomiti yeeNgqikelelo zeziTyalo (*Crop Estimates Committee – CEC*) ixele ukuba uMzantsi Afrika unaso isakhono sokuvuna isityalo esikhulu ngaphezu kwesiqhelo kwixesha lokulima lango-2016/2017.

Ngokwe-CEC, umbona omhlophe notyheli kujoyngwe ekubeni wande nge 79% ukuya kwiitoni zezigidi eziyi-13,9 ngo-2017 ukususela kwiitoni zezigidi eziyi-7,7 ezivunwe ngo-2016. Ithemba lesityalo esandileyo libonisa ukuba uMzantsi Afrika kungenzeka ube nombona ongazi kusetyenziswa kwixesha lokuthengisa lango-2017/2018, ukuze kubekho ithuba elikhulu ngokuthe chatha lokuthengisa emazweni angaphandle nokwehla kwamaxabiso ombona.

Ukususela kuJanyuwarini ngo-2017, indawo yokuthengisa ibe namava amaxabiso aphantsi ombona. Phambi kokuba kwenzeke oku,

okwakusaziwa ngokubanzi kukuba isakhono sesivuno esithe kratya sicacile malunga nexesha lokulima elizayo nangenxa yeemvula ezintle kunye neemeko ezibalaseleyo zezityalo kwiindawo ezithile nezinkulu ekulinywe kuzo eMzantsi Afrika. Ngoko ke bekulindlele kangangoko ukuba amaxabiso ombona abuyele kwisiqhelo emva kwembalela ebisoyikeka kulo nyaka nenyuse amaxabiso ngendlela emangalisayo. Xa sichaza ukutshintsha-tshintsha kwamaxabiso ombona, sisebenzisa uluhlu lokulungelelanisa okuthengiswa nokuthengwa ngaphandle ukuze kubonakale okunokulindeleka ngamaxabiso kunyaka ongachumanga ngesivuno xa kuthelekiswa nawonyaka wesivuno esichumileyo.

Ukulinganiswa kwentengo kumazwe angaphandle kuthetha ukuba elo lixabiso elihlawulwa ngumthengi okanye anokulindela ukulihlawula kanti **ukulinganiswa kwentengi-**

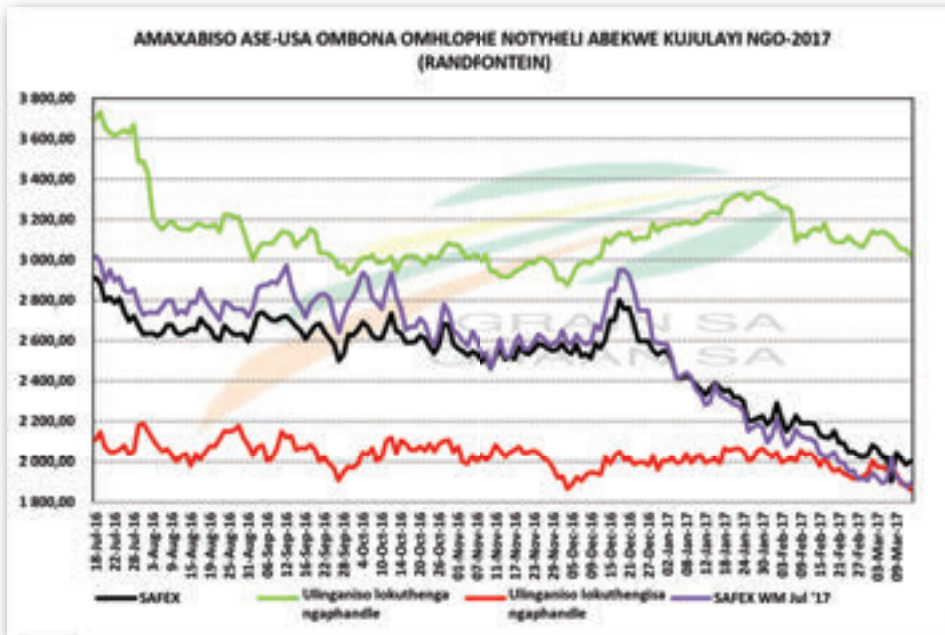
so kumazwe angaphandle kuthetha ukuba elo lixabiso elifunyanwa ngumlimi.

UMzantsi Afrika uvune owona mbona mncinane kwiminyaka elithoba, kwaze oko kwabangelala ukuwa nganeno kombona ukuze uMzantsi Afrika ushenxe kwisimo sokuthengisa ngaphandle ube kwisimo sokuthenga ngaphandle. Isiphumo sale meko emaxabisweni njengoko kubonakala kwisazobe 1 sikhokelele kumaxabiso ombona athe kratya, ngoko ke athanda ukusondela kumda wolingano lokuthenga kumazwe angaphandle. Ngomhla we-18 kuJulayi 2016, amaxabiso ombona omhlophe notyheli alungiselelwe uJulayi 2017 ebephakathi kweR3 018 neR2 912 ngokokulandelelana kwale mihla, maxabiso lawo awe nganeno kancinane kulinganiso lokuthenga ngaphandle; nangona kunjalo, kuthe xa kuza kuqala unyaka, amaxabiso ombona aqala ehla naxa bekukho iindaba zokuba kungenzeka uMzantsi Afrika uvune isityalo sasezimbalini. Amaxabiso ombona omhlophe eSafex kuJulayi ngo-2017 ehle ukususela ngomhla we-18 kuJulayi ngo-2016 ukuya kowesi-4 kuMatshi ngo-2017 nge 37% ngeli xesha ixabiso lombona otyheli lihle nge 31%. Xa kunjalo, kucacile ukuba ukwehla kwamaxabiso ubukhulu becala, kuyintsilelo kwintsalela elindelekileyo yesivuno sombona ngo-2017.

Naxa unyaka ka-2016 efumene izivuno eziphantsi kunye namaxabiso aphezulu ombona; indlela ephambi kwethu ibonakala inika ithemba lezivuno ezithe kratya kodwa wona amaxabiso ombona abe phantsi. Amaxabiso athande ukuba phantsi ombona asenokubabeka engxakini abalimi abaphantsi koxinzelelo njengoko besazama ukubuyela kwindawo yabo emva kwembalela kodwa asenokuba khona amathuba okuthengisa ngaphandle, amaxabiso ombona anakho ukukhawuleza abonakalise ukubuyela endaweni yawo.

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Isazobe 1: Amaxabiso ombona omhlophe notyheli afumaneka kuJulayi ngo-2017 (eRandfontein). Umthombo weenkukachacha: Grain SA



Pula Imvula's Quote of the Month

Things do not change; we change.

~ Henry David Thoreau



Ulawulo olubalaseleyo lokhula luphawu lwesakho esincomekayo.

Ndikhuphisana njani NABALIMI ABAKHULU?

Umntu unokuzibuza kwangoko ukuba umlimi omncinane angachazwa njani xa ethelekiswa nomlimi omkhulu orwebayo. Ifama ezininzi zahlukaniswa ngokwezeenkozo nezitshintshana nemfuyo kunye namanye amashishini.

Zona zingakuqka umhlambi weenkomo zenyama, umhlambi weegusha kunye namanye amashishini emfuyo okulinyusa kangangoko ixabiso lamashishini afana neleemveliso zobisi, eleezagu kunye neleenkukhu ukuze komelezwe ukuphila koshishino lokufama liphelele.

Inkcazelo ngefama encinane

Abalimi bokutya okuziinkozo banendawana engangehektare e-1 ukuya kwezi-5 zokulima izityalo eziziinkozo, okanye bangade babe kuluhlu lwehektare ezili-10 ukuya kweziyi-20 ngokunjalo babonwe njengabalimi abancinane kakhulu bokutya okuziinkozo. Ezinye izintlu zinokuba phakathi kwehektare eziyi-20 neziyi-50 ukuya kweziyi-100, eziyi-100 ukuya kweziyi-300 futhi zingade zifikelele kwiihektare eziyi-500 ezilinywe izityalo eziziinkozo ezahlukahlukileyo. Kanti nabalimi abanehektare ezikwisiphakathi esiyi-1 000 sendawo enokusetyenziselwa ukulima iinkozo basenokutsala nzima kumzabalazo wokuziphilisa kwixesha elizayo.

Umbono wakho 'njengomlimi omncinane'

Nokuba yifama enkulu kangakanani ephantsi kolawulo nempatho yakho, ifanele ukuhlalutywa ukuze kufunyaniswe ukuba yeyiphi imithombo yobutyebi efumanekayo phambi kwexesha ngalinye lokulima iinkozo. Le mithombo yobutyebi inokuquka uhlobo lomhlaba ngokwemigangatho yokuhlela, ubunzulu

bomhlaba ngokwemingxuma yenkcazo, amanqanaba okuchuma ngokusebenzisa iimvavanyo zomhlaba, isakhono sokusetyenziswa koomatshini nokusebenza okuncomekayo, iimali ezigciniweyo okanye isakhono sokufikelela kwiimali-mboleko zokulima, udidi, amanqanaba ezakhono zokusebenza nokuqeqeshwa kwabasebenzi, ngokunjalo novavanyo lwawakho amanqanaba ezakhono zokusebenza kunye namava onawo okulima. Nawuphi umba okanye umbandela oya kuchaphazela isakhono sakho sokulima iinkonzo mawuquke kuhlolo.

Ezi nkukacha maziqokelelwe ukuze zityhile uhlalutywe lwenene lweenkcukacha ezibanzi zemida yemali. Umbandela ngamnye womjikelo wemveliso ke ngoko unokuchazwa ngokwamanani. Nakuphi ukuwa nganeno malunga nokulima kunye nesakhono sokulima kuya kutyhileka.

Uhlalutywe olubanzi lwemida luyinxenye yesicwangciso seshishini elilelakho esiquka ingcaciso yomnqophiso, imigqaliselo yethuba elifutshane nelide ngokunjalo neziphumo ezilindeleke kwifama yakho, kuwe nakusapho lwakho.

Fumanisa ukuba ingaba ixhuzulwe na ingeniso yomda obanzi okanye inzuzo eshiyekileyo emva kweendleko ezingqalileyo okanye eziguqugukayo ngokunjalo neendleko ezisisigxina okanye ezokusebenza. Esi sixa-mali eneneni siya kufumanisa ukuba ingaba wena 'ungumlimi omncinane' n okanye akunjalo nokuba ingaba usapho lunakho na ukuphila ngesixa-mali esinganeno esifumanekayo. Ukuba akunjalo, isakhono sokuphila kweshishini lokufama sifanele ukuhlolwa ngocoselelo ukuze kufunyaniswe ukuba kungasetyenziswa futhi kuphunyezwe kweziphi iindawo ukufama ngendlela encomekayo nechanekileyo. Masithembe ukuba xa ifama yakho inkulu ngokwaneleyo kwaye ilinywa kakuhle,

inokukunika inzuzo eyaneleyo enokuluphilisa usapho lwakho iphinde ikuvumele ukuba uthenge izixhobo ezitsha zokusebenza ukuze ucwangciselele nokwanda kweshishini lakho lokufama lenzeke ngendlela encomekayo nechanekileyo.

Iinkozo njengemveliso ebutyebi

Njengoko bekunjalo kwiminyaka emibini edlulileyo, kubekho amava okubona umbona ukhulu kakhulu ngokwexabiso ngenxa yemveliso engaphantsi kunefunekayo kwaze kwakho ukwehla okukhulu kwamaxabiso ngokuya iimeko zexesha lokulima zifikelela kwisiquhelo. Umzekelo, umbona usuke phezulu kwixabiso elimalunga neR3 800 ngetoni ukuya kwiR2 000 ngetoni kwiingqikelelo zikaJulayi ngo-2017. Abalimi abangabanga sazizuka iindleko zokulima kunyaka wembalela kungenzeka ukuba ngelishwa abekho kwimeko entle yemali nangona bebesebenzisa imigaqo elungileyo yokufama kwaye kulo nyaka izityalo zabo zingaphezu kwezisiqhelo.

Ixabiso elithande ukuba phantsi lombona njengemveliso esentloko liya kuvuselela amashishini okongeza ixabiso afana nokufuya iinkukhu, iihagu nokuthengisa iimveliso zobisi.

Isiphelo

Izicwangciso-cebo eziphangaleleyo ezichaza neziphucula imigaqo yakho yokulima izityalo kuya kuxoxwa ngazo kwinqaku elilandelayo.

**Inqaku linikelwe ngumlimi
othathe umhlala-phantsi.**

Yandisa imveliso ngobuchwepheshe bodidi

Abalimi eMzantsi Afrika bajongene nengxaki enkulu – eyokufumana inzuzo enozinzo kwithuba elide lexesha. Oku kwenziwa kukucudiseka kwamaxabiso eendleko. Ngoko ke, lidabi eliqhubayo ukugcina iinkcitho zilawuleka nokwandisa ingeniso.

Abalimi bethu kwakhona baphinda baqubisane nomceli-mngeni wokuthengisa ukutya okwaneleyo ngamaxabiso aphantsi kumanani abantu akhulayo. Umhlaba olimekayo wona awandi, ngoko ke imveliso ngokomlinganiselo omnye ifanele ukusoloko isanda ukuze inzuzo inike uzinzo nokuthi kondliwe isizwe. Indlela yokwandisa ingeniso nokunciphisa iindleko iqwalaselwa ngakumbi kutshanje ngokusebenzisa ubuchwepheshe bodidi.

Enyanisweni, sibubona ubuchwepheshe bodidi njengokusetyenziswa kohlobo oluthile oluphuculweyo malunga noomatshini (umzekelo isixhobo sokutyala esiphuculweyo) esincedisa umlimi ukuba avune iimveliso ezithile chatha neziphucukileyo. Izixhobo ezithile zokusebenza ezifana nekhompyutha okanye isimatifowuni nazo zinokubonwa njengobuchwepheshe bodidi. Ngoku sekuqhelekile nokufakelwa kwezixhobo ezisabukhompyutha njengeGPS kwezi zixhobo ukuze kuphuculwe ukusebenza kwazo. Esi senzo ke ngoko sichazwa njengokufama ngokobuchwepheshe bodidi okanye njengokufama ngocoselelo esiza kuxoxa ngako kwinqaku eliza kulandeliswa.

Injongo yobuchwepheshe bodidi ngoko ke kukuba busetyenziselwe ukwandisa nokuphucula imveliso. Nangona kunjalo, makukhunjulwe ukuba, ukusetyenziswa kobuchwepheshe akunakuze kuthathe indawo yolawulo, akusathethwa nto ngolawulo oluyeye-yeke. Xa ungasebenzisi imithetho-siseko yolawulo esisiseko efana nokugcina amaxwebhu ngendlela efanelekileyo, akunakukunceda nganto ukusebenzisa ubuchwepheshe bodidi. Umlimi weenoko ufanele ukugcina ingxelo, umzekelo, yemvula, ubukhulu bamasimi akhe, amanani ezityalo, ubunzulu bezityalo, iisampulu zomhlaba, iinkcazo ngomhlaba kunye nemveliso. Inyathelo lokuqala lolawulo olufanelekileyo kukugcina iingxelo eziyimfuneko zeshishini lakho. Khumbula ukuba xa ungenzi milinganiselo, akunakukwazi ukulawulo.

Isixhobo sokutyala sodidi onokulawula ngaso amanani ezityalo kunye nobunzulu bezityalo ngendlela echanekileyo, asisayi kuba luncedo olungako xa ungakwazi kusilawula ngendlela efanelekileyo – ukusigcina kakuhle,

ukusisebenzisa ngokwemimiselo yaso, njalo njalo.

Ukuze kubekho inzuzo enozinzo kufuneka nisebenze ngendlela encomeka ngokuthe kratya kunyaka ngonyaka. Ngaphandle kweenkcukacha ezaneleyo, ezichanekileyo, akusayi kwenzeka oku. Amalungiselelo olawulo anxulumene ngokungathanga ngqo namalungiselelo omlimi emali. Oku kuthetha ukuba xa ulawulo lwemisebenzi yokufama lungenamandla awaneleyo, ziba phezulu iindleko zokwenza imisebenzi, kodwa ibe phantsi inzuzo efuneka kwishishini.

Uncedo olukhulu olunye ngokusetyenziswa kobuchwepheshe bodidi ke ngoko kukuba imveliso iyanda ngenxa yesakhono samanyathelo esiphucukileyo. Abanye abalimi bafumene imveliso enyuke nge 10% ngenxa yokusebenzisa ubuchwepheshe obuphezulu. Olunye uncendo lulondolozo oluthe kratya kwiintlawulo zabasebenzi ukuze kunciphe iindleko. Abalimi abanamava baxeke ulondolozo lwe 10% kwiindleko zamalungiselelo. Kodwa khumbula ukuba ukusebenzisa ubuchwepheshe bodidi buneendleko zabo, ezifana nenzala, iindleko zolondolozo ezinokuba phezulu, ukuthotywa kwamaxabiso, kunye neinshorensi, nazo zifanele ukukhunjulwa.

Olunye uncendo lobuchwepheshe obuphezulu kukuba buya kwenza ukwazi ukuqoshelisa inyathelo okanye umsebenzi ngexesha elifutshane, ngokuchaneke ngakumbi nangokuncomeka ngakumbi, ngaloo ndlela kulondolozeke imali yeendleko.

Malunga nezinto ezingeloncedo, ukufumana ubuchwepheshe bodidi kufuna imali eyinkunzi eyongezelelweyo. Kuxhomekeke kuhlobo lobuchwepheshe bodidi onqwenela ukubufumana imali eyinkunzi eyongezelelweyo isenokuba sisixa-mali esikhulu. Xa unokucinga ngokuboleka imali yokuthenga ubuchwepheshe bodidi, khumbula ukuba uza kuhlawula inzala yeemali ezibolekiweyo. Ukusebenzisa oomatshini bodidi nako kufuna abasebenzi awuqeqeshelweyo umsebenzi wabo zibe phezulu neendleko. Kanti oomatshini bodidi nabo busenokuba neendleko eziphezulu zolondolozo. Xa ufuna ukuthenga ubuchwepheshe bodidi kuyimfuneko ukwenza uhlalutyo ngocoselelo ngezinto eziluncedo uzithelekise nezingeloncedo. Indlela esebenzayo ekuphela kwayo xa ucinga ngokuthenga ubuchwepheshe bodidi kukuhlanganisela isicwangciso soshishino esifanelekileyo – ulawulo olufanelekileyo.

Njengeniyathelo lokuqala lokusebenzisa ubuchwepheshe bodidi, singakucebisa ukuba



ufumane ikhompyutha elungileyo – iPC eqhelekileyo kodwa elunge ngokwaneleyo, akudinga laptop ukuze ukwazi ukuqalisa. Isizathu seli cebiso kukuba ulawulo lwakho olusisiseko kufuneka lube semgangathweni ophezulu phambi kokusebenzisa ubuchwepheshe bodidi. Ikhompyutha iya kuba luncedo olukhulu emsebenzini wakho wokugcina amaxwebhu. Usenokubhala futhi ugcine zonke iingxelo zakho ekhompyutheni ngokusebenzisa iifomula ezithile zokutolika iinkcukacha ukuze zibe luncedo kuwe kwimizamo yakho yolawulo olufanelekileyo. Ikhompyutha enxulunyaniswe nobonelelo lweintanethi inakho ukomeleza unxibelelwano lwakho nabaxumi, abathengisi, kunye nabanye kwaye inokusetyenziswa njengomthombo obalulekileyo wemicimbi emalunga nolimo ngokusebenzisa iGoogle.

Abalimi bafanele ukunikela ngeemveliso zowona mgangatho uphezulu futhi ngendlela eqhubayo ukuze kwelinye icala kuncitshiswe iimveliso zamalungiselelo, ngaphandle kokonakalisa imo ezingqongileyo. Ukukuphumeza oku, ufanele ukukwalaselwa ngocoselelo ukusetyenziswa kobuchwepheshe bodidi – kusenokuba luncedo kodwa lubeka uxinzelelo kwimali onayo nakulawulo.

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



II-MYCOTOXIN

kwiisiriyeli nakwezinye izityalo

Kwinqaku lethu lexesha elidlulileyo (kwelikaEpreli 2017) siye sabhekiselela emboneni kuphela. Kodwa ngoku siza kujolisa kwezinye izityalo eziziisiriyeli (ezasebusika nezasehlotyeni) sandule ukudlulela koojongilanga, emandongomaneni, kwimidumba, kwiimveliso zeziqhamo nase-mandongomaneni emithi.

lisiriyeli zasehlotyeni nezasebusika

lisiriyeli zasehlotyeni eziza kuqwalaselwa ngamazimba, iinkozo zesiriyeli (imilethi), i-teff nerayisi (ezingalinywa kakhulu eMzantsi Afrika), kanti amazimba ngawona abalulekileyo.

Amazimba akhathazwa lusulelo nokuhlaselwa ziintlobo eziliqela zentsholongwane yomngundo ngexesha lamabanga okuphuhla kwezicukwana zeentyatyambo neenkozy. Usulelo lukhokelela kuMngundo weeNkozy zaMazimba, okukwaziwa njengokuba 'mnyama' kwazo. Ziliqela iintsholongwane zomngundo ezibangela umngundo weenkozy emazimbeni, apho inkoliso yazo zingangqalanga kangako kwaye zinokuhlasela iintlobo eziliqela zezityalo. Iintlobo ze*Fusarium*, *Aspergillus* ne*Alternaria* zezinye zeentlobo ezikholisa ukuhlaselwa kakhulu ziintsholongwane zomngundo weenkozy zama-zimba eMzantsi Afrika.

Umngundo weenkozy ukholisa ukwenzeka kakhulu ngamaxesha onyaka aneemvula okanye xa zinkcenkceshelwa. Inkoliso yeentsholo-

ngwane zomngundo weenkozy zisulela imbewu yezicukwana zeentyatyambo emasimini naphantsi kobushushu obuphakathi, ekufumeni komoya okuthande ukuba phezulu nasekufumeni kweenkozy, ezi ntsholongwane zinokukhula kwiimbewu ehlaselweyo kwaye zisenokunwenwela kwenye imbewu xa imeko zasemva kokuvuna zivumelana nazo. Okunokufane kwenzeke (intwana yezicukwana zeentyatyambo ezinomngundo) kunye nobuzaza (intwana yeenkozy ezinosulelo kwizicukwana zeentyatyambo) malunga nesifo kuxhomekeke kuhlobo lweentsholongwane, kumhlanganisela nakwiimeko zokuzingqongileyo.

Iityhefu ezizii-mycotoxin, zikunye neentsholongwane zomngundo ezinxulumene nazo, ezifumaneka lula kakhulu emazimbeni eMzantsi Afrika zezi: iFumonisin (FB), i-zearalenone (ZEA) ne-deoxynivalenol (DON) [ekhutshwa ziintlobo ze*Fusarium*]; ne-aflatoxin (AFLA, ekhutshwa yi-*Aspergillus flavus*).

Ezi ntsholongwane zomngundo nee-mycotoxin zazo nazo ziyakwazi ukungcolisa imilethi ne-teff. Kusenokuba njalo nangerayisi, kodwa malunga nayo imeko ye-mycotoxin inobugocigoci ngakumbi ngenxa yokuba irayisi ilinywa phantsi kweemeko zokulima ezifana zodwa.

lisiriyeli zasebusika (ingqolowa, ibhali, iowuthsi, irayi ne-triticale) ubukhulu becala ziphenjelelwa bubukho nokunwenwa kweFusarium Head Blight (FHB) okanye iHead Scab, isifo esibangelwa ubukhulu becala yi*Fusarium*

graminearum (ekwaziwa ngokuba yi*Gibberella zeae*) kunye nezinye iintlobo eziliqela ezinxulumene kakhulu neentlobo ze*Fusarium*. Oku kunokukhokelela kungcoliseko oluxhalabisayo lweetyhefu ze-mycotoxin ezifana neDON (ekwaziwa ngokuba yi-vomitoxin), iZEA ne-nivalenol. I-FHB yeesiriyeli zasebusika iba khona kulo lonke ihlabathi kwaye sesinye sezifo ezibaluleke kakhulu ezinxulumene ne-mycotoxin kwezolimo, nezibangela ilahleko ezixhalabisayo malunga noqoqosho. Izihlandlo zogqabhuko lwe-FHB zibakho apho imvula ine khona ngamandla phambi kwethuba lokudubula kweentyatyambo nangexesha lakho, okanye apho ankcenkceshelwa khona amasimi.

Ubukhulu becala iimpawu zeFHB ziba sentloko nakwiinkozo. Okuqhelekileyo kukuba, uphawu oluphawuleka kuqala kukumbatsha (ukuba mhlotsana) kwenxenye okanye onke ameva ngeli xesha iintloko eziseluhlaza zisesempilweni. Xa iintsholongwane yomngundo ifika kwi-rachis, nasemeveni amancinane angasentla okanye ezantsi kwendawo ehlaselwe kuqala lusulelo nayo le ndawo isenokumbatsha. Kusenokubonakala izicuku zezipora ezipinki ukuya kwezi-orenji emeveni amancinane anosulelo navela kwimozulu emanzi, okanye efumileyo. Iinkozo ezinosulelo, ezikholisa ukubizwa ngokuba 'ngamatye amangcwaba', zibonakala zishwabene, zingasenabala lesiqhelo, kwaye zikhaphukhaphu. Njengoko iimpawu zeenkozy ziya ngokuba mbi, aya ngokunyuka amanqanaba anokulindeleka ee-mycotoxin ezinxulumene nazo.

Iinkozo ezonakeleyo nakanjani ziya kuku-chaphazela ukuhlelwa kweenkozy nokunokwenziwa kwizisele/koomatshini bokukha iinkozo, ukuze oko kuchaphazele iinzuzo ebezinokufunyanwa ngum(ngaba)limi. Imbewu enosulelo inokunciphisa ukuntshula kwembewu kuze kwande isiganeko sokubola kweengcambu nomtshaza kwizithole xa kulinywa.

Imiba yemingcipheko yeFHB engqoloweni yile: Ukufuma okugqithisileyo phambi kwexesha lokudubula kweentyatyambo nangalo eli xesha; itlakohlaza eneemvula, ukuncenkcesha; ukulima ingqolowa emva kombona; ukulima ingqolowa emva kwengqolowa; umgaqo wokungahlakuli okanye ukuhlakula kancinane; kunye nemihlanganisela enokuba zizisulu.

I-DON inxulunyaniswa nokuhlanza, uku-ngakufuni ukutya nokuncipha kwesondlo esisetyenziswa ezihagwini, ukuze oko kuchaphazele umgangatho wokusebenza kwesilwanyana. Iinkomo zizinyamezela phucukileyo iziphumo ze-vomitoxin kuneehagu. I-ZEA yikhemikhali



Ibalulekile imigaqo echanekileyo yolondolozo lweenkozy zasebusika.

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li-mycotoxin kwiisiriyeleli nakwezinye izityalo



**Umgundo weenozo wenzeka kakhulu ngamaxesha onyaka
anemvula okanye phantsi konkcenkcesho.**

esebenza phantse ngendlela efana nehowu-
moni yobukhomokazi, i-estrogen, kanti imi-
thamo egqithisileyo inokuphazamisa umjikelo
wenkqubo yokuzala kwezilwanyana. Kwakhona
iihagu zinobuntununtunu ngaphezu kweenkomo
nezinye izilwanyana ezetyisayo. Ukuba sisululu
seZEA akubangeli ukuchitheka kwesiqulatho
sesibeleko kuphela, kodwa kunakho ukubangela
ukungasebenzi kakuhle kwenkqubo yokuzala
kwizini zesikhomokazi nezesiduna.

Owona mgaqo uphambili wolawulo lweFHB
yinkqubo emanyanisiweyo, kuba yona inolawulo
olubhetele kujikeleziso lwezityalo nakwizenzo
zokungahlakuli, ezikhatshwa kukulima imihla-
nganisela enyamezelayo.

Ezinye izityalo ezikukutya

Asiyonto inokwenzeka ukuba kuthethwe ngazo
zonke ezinye izityalo ezikukutya kweli nqaku,
ngoko ke ugqaliselo lukwezona zityalo ziba-
lulekileyo kuphela. Sifanele ukuphawula ukuba
uninzi lwezi ngxaki zee-mycotoxin luxhomekeke
kwiimeko zemozulu nakokungqonge izityalo,
kodwa asifanelanga kuyibetha ngoyaba le mi-
ngcipheko yee-mycotoxin.

Nangona iAFLA ingabalulekanga kakhulu
emboneni nakwizityalo zeesiriyeleli zaseMza-
ntsi Afrika, kukho isoyikiso esibalekileyo
malunga nokulinywa kwamandongomane
eli lizwe. Amandongomane awasosityalo
sorhwebo esibalekileyo kuphela, kodwa
akwasosityalo sokuziphilisa kwizithili ezithile
zeAfrika esemzantsi. Njengoko iAspergil-
lus flavus iyintsholongwane esemhlabeni,
iwasulela kwasentsimini amandongomane
kwaye oko kunokubangela iingxaki ezizezinye
ngexesha lokomisa nakulondolozo olungelulo.
Ukuze silucuthe ungcoliseko lweAFLA, kuba-
lulekile ukuba bonke abalimi bamando-
ngomane basebenzise iMigaqo eLungileyo

yoLimo emasimini, bomise imidumba msi-
nyane kangangoko emva kokuvuna ukuze
kusetyenziswe amanyathelo afanelekileyo
okuhlala njengokukhutshelwa ngaphandle
kwemidumba namandongomane anomngundo
phambi kokusetyenziswa ngabantu.

Ezinye izityalo ezisemngciphekweni
wongcoliseko lweAFLA eMzantsi Afrika **ngoo-
jongilanga, imbewu yomqhaphu, amando-
ngomane emithi, icanola kunye nemidumba**
(iityisi neemboty ezomisiweyo). Ukuvuna
okuchanekileyo, ukomiswa nokugcinwa kwezi
zityalo kubaluleke kakhulu.

Iziqhamo kunye neemveliso zeziqhamo
zisenokuba semngciphekweni wee-mycotoxin
ezifana ne-patulin (ema-apileni nasemapereni)
kunye ne-ochratoxin A (kwiziqhamo neediliya
ezomisiweyo). I-patulin ayinabungozi bunga-
ko empilweni, kodwa ingaluthintela urhwebo
namazwe angaphandle xa amanqanaba ayo
engaphaya kwemigangatho emiselwe lulawu-
lo lwehlabathi. I-ochratoxin inemingcipheko
ebalekileyo empilweni yabantu kwaye iseno-
kubangela iingxaki xa kuthengiselwa amazwe
angaphandle iimveliso zokutya ezifana neesi-
riyeleli nezinye iimveliso zeesiriyeleli, iziqholo zo-
kutya, iimveliso ezomisiweyo zeediliya, iimboty
zekofu neemveliso zekofu, kunye newayini.

Nceda qaphela, malunga nayo nayiphi imi-
buzo enxulumene ne-mycotoxin, zidibanise
negosa lesolulo lendawo yakho, okanye na-
basebenzi baseGrain SA.

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