

PULA IMVULA

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UKUGCINWA KWAMAREKHODI - ngabe uhlezi ulumkile ngentuthuko yakamuva kule simo?

KULE SIZINI YASEHLOBO KUBALULEKE KAKHULU UKUQINISA AMABHIZINI AMANINGI ALIMA UMMBILA. EZINDAWENI EZININGI EZIFANA NE-NYAKATHO NTSHONALANA NASEFREYSTATA, SIQALA KAHLE EMAZINGENI AMAHLE OMSWAKAMA WENHLABATHI, KODWA IMISEBENZI EMININGI YOKULIMA KUSAFANELE IMELANE NEBHAJETHI ENCIPHILE YAMA-INPUT AMASHA NGENXA YOKUBUYISA ISIKHATHI ESIDINGEKAYO NGENXA YOCHUNGECHUNGE LWEZOMISO EZIKE SAHLASELA.

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Ukukhiqiza ummbila kunobungozi obukhulu. Uma ube nenhlanhla waba ngomunye walabo abathola isilimo sommbila esihle ngesizini edlule, ngakho ungaqala ngenhliziyo ethokozile.



IZWI LIKA...

Dirk Strydom

MA UYINGXENYE YEZOLIMO AYIKHO INTO EFANA NEPHUNGA LENHLABATHI EMANZI. SIKE SABA NAMASIZINI AMBALWA ANZIMA KAKHULU ESOMISO NEZIMVULA EZIFIKA ISIKHATHI SESIHAMBILE. KULO NYAKA UHLELO LWAHLUKILE, IMVULA IFIKE NGESIKHATHI FUTHI AMATHUBA MAKHULU OKUKHIQIZA ISILIMO ESIYIMPUMELELO.

Kodwa, emhabeni osathuthuka ziningi izinselelo ezikhona ngaphambi kokuba kutshalwe enhlabathini emanzi. Izimali ziysisimbelo esikhulu njengoba sazi futhi umkhiqizi angakujabulela ukwamukela lonke usizo noma luluncane kangakanani. Ngesinye isikhathi liba khona ithuba lokusebenzisa izimali noma usizo ngokwamaphrogramu ezbonelelo. Inselelo kuba ukuthi lezi zimali ngokuvamile zitholakala sesihambe kakhulu isikhathi sesizini abakhqizi sibafakela ingcindezi yokuthi balisebenzise lelo thutshana elisasele laleyo nhlabathi emanzi.

Usizo luncane kakhulu kulezi zinsuku, ngakho ke uma uluthola usizo qinisekisa ukuthi ulusebenzisa ngokucophelela ukute uthole umphumela omkhulu. Uma usizo litholakale emva kwesikhathi, qathanisa amathuba nobubi bokutshala sekuhambe isikhathi. Ungatshali uma sesidlulile isikhathi ngaphandle uma sikhona ngempela isidindo.

Pho kungani ngisho lokhu? Inhlabathi emanzi nesidingo nentshisekelo yokutshala kupoqa wonke umuntu unolimo egazini lakhe ukuba athande ukutshala. Kodwa into engcono kunoma yimuphi umkhiqizi osafufusa ukuqala kahle/usukume futhi nangokusebenzisa izimali ngendlela engaphelele kusho ukuthi uhfatu wokuqala uzophumelela. Kubakhqizi abasafufusa konke kuncike ekuhubekeni isikhathi eside uqinisekise ukuthi okungenani kuzosalal ngasemaphethelweni onyaka, usingathe unyaka omusha wokukhiqiza. Isinyathelo esilandelayo sentuthuko kwezolimo ukuba uqinisekise ukuthi ukulima kwakho kuyathuthuka.

Siyabonga ngokuhlala unethemba ngisho nasezikhathi ni ezinzima nangothando Iwakho kwezolimo. ■

Ukugcinwa kwamarekhodi...

IMIDANTI ELANDELANO YO NOKUGCINWA KWAMAREKHODI

Kunamaphuzu ambalwa abalulekile nokudingeka siwasombulule njalo ngoanya ukute senze ngcono amathuba ethu okuthola izivuno eziphezelu futhi siphinde sinciphise ubungozi bethu. Lolu hla lokuhola luyabuyekezwa njalo nesizini; futhi umlimi nosomabhizini ohlakaniphile uzoqinisekisa ukuthi uyirekhoda ngokuqondile yonke imisebenzi eyenzeka epulazini njalo ngeviki.

Ukugcinwa kwamarekhodi kubaluleke kakhulu njengoba ngokuvamile kudingeka ubheke emuva bese ubheka umlando wensimu ethile, isibonele:

- Ngabe yisiphi isilimo esasitshaliwe ensimini eminyakeni emibili engaphambili?
- Ngabe iyiphi iprogramu yesifafazo eyayisetshensiwe kuleso silimo nokuthi saphumelela kangakanani – ngabe weneliseka ngokusebenza kwamakhemikhali owawuwasebenzisile? Ngabe ungaphinda futhi uyilandele futhi le phrogramu?
- Ngabe uyayazi isevisi yomlando ye-implimenti ngayinye, umshini, noma ugandaganda, isibonele ngabe agcina nini ukushintshwa nini ama-filter aloyo gandaganda? Ngabe agcina nini ukushintshwa amathayi?

AMAREKHODI EMVULA

Ngokuhlala ubeke iso lakho kumarekhodi esimo sezulu sizokwazi ukuhlela imisebenzi yethu yokulima ngendlela enempumelelo. Singasetha izinsuku zokutshala lapho ngokwamarekhodi ethu kungenzeka kuge yisikhathi esihle sokutshala esinomswakama owanele. Ngokusobala, isimo sezulu ngeke futhi asisoze sabikezelwa ngokushaya emhlolweni. Kodwa siyakwazi njalo ukuba nombono othile mayelana nalokho okungenzeka. Lelo khono liyasa ukute thina njengabalimi sidinga ukugxavula sibambe – ngakho qala eyakho i-logbook manje!

IMIDANTI EDINGEKAYO

- Thatha amasampuli ngesikhathi esifanele ukute ku-odwe umanyolo.
- Thola iseluleko kochwepheshe nakubadayisi bembewu enkamanini abayaziyo indawo yakho futhi nioxoxisane ngokuthi yiziphi izinhlobo zembewu yommbila ongavitsala.
- Zazi izinhlobo nezikhathi zokulinywa kwezinhlobo ezahlukene zembewu yommbila, zonke zahlukene zinosizo olwehlukene zesimo zamathuba okulima ahlukena.
- Qinisekisa ukuthi onke amanye ama-input akho a-odiwe futhi akulungele ukute ukwazi ukusebenzisa ithuba lesikhathi esihle esifanele sokutshala.
- Ungatshali masinyane umswakama usemcane kakhulu enhlabathini.
- Qinisekise ukuthi okungenani uylungisile i-topsoil yakho ukute ukhuthaze ukungena phansi kwemvula uma ifika isib. mhlambe nge-disking noma i-vibroflexing.
- Qinisekisa ukuthi ukhula lokuqala lulawulwa ngamakhemikhali noma nge-tined implement ukonga umswakama okhona. Iphrogramu yokulawula ukhula ibalulekile futhi izophazamisa ukukhula kommbila wakho kanye nenani lama-pips akhula esikhwebini ngalokho ke isivuno sakho sonke singaphazamiseka kakhulu ngenxa yokwehluleka ukulawula ukhula isizini yonke.
- Nakekela ama-planter kanye namanye ama-tillage implements isib. shintsha ama-tines e-vibroflexes nama-shears emakhubeni njengoba akudingeki uchithe isikhathi ukhanda ama-implements ikakhulukazi uma imvule ifike isikhathi sesedlulile njengoba kuyinto edamame yenzekayo kulezi zinsuku.
- Isizini yokutshala ummbila yibhekisise isikhathi eside futhi nangaphambi kokuba ufaka uhlamu lokuqala lwemebewu yakho enhlabathini cabanga ngendlela yokumaketha ongavikhetha. Thatha isinqumo ngokuthi ulidingela ini ipulazi lakho okufana nongakusebenzisa ekhaya ne-fodder yemfuyo bese ucabanga ngokuthi uzodayisa kanjani futhi uzosidayisa kuphi isilimo sakho sonke.



Bonke abalimi kufanele bahlale belumukile ngentuthuko yakamuva ngokubuza nokufunda kabanzi ngesikhathi sonke.



We do not inherit the earth from our ancestors;
we borrow it from our children.

~ SOURCE UNKNOWN



- Kubaluleke kakhulu ukuba uyyjwayele indlela esebenza nayo imaketha ehweba ngokusahlamu eNingizimu Afrika noma ngabe unayo i-ejenti ekusizayo. Thatha isikhathi ufune usizo ukuze uqondisise *i-futures exchange e-JSE* kanye nendlela esebenza ngayo. Qinisekisa ukuthi uyakuqondisisa ukwehlukana kwendawo okuyo nokuthi yini inhloso yayo ukuze ukwazi ukuxoxisana uthole intengo enhle ngesilimo sakho sommbila.
- Umshwalense wesilimo uyabiza kodwa ungaba wusizo esikhathini sesizini enobungozi. Kungaba ngumqondo omuhle ukuxhumana nosomabhizinisi wakho wezolimo noma umebolekisi mali wakho bese uxoxisana nongakukhetha futhi kubonakale ukuthi ungaphumelela yini ukuthatha umshwalense wesilimo kule sizini ezayo. Angeke ukuthathe kancane ukuthi uzokhwalifaya njengoba izinkampani zemishwalense ongenayo igaranti ukuthi bangamane bakunikeze ikhava nje.

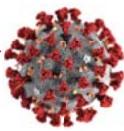
NAKELELA, UMONITE UPHINDE UMENENJE

Zithibe isizini yonke yokutshala ummbila. Akukhona ukuhlanipha ukuchitha imali eningi ufaka isilimo sommbila bese ungawumonithi futhi ungawumenenji isikhathi eside.

- Lokhu kuchaza ukuba khona emasimini zonke izinsuku.
- Kusho ukunakekela ogandaganda kanye nama-impliment abe sesimeni esihle sokusebenza.
- Kusho ukugcina sonke isitoko sakho ngobunono futhi uwaccine ngaphansi kwe-shed ize idingeke bese kuthi amakhemikhali noshev ukgcine kuphephile endaweni ekhiywayo futhi ukhiye.
- Kusho ukugcina kahle, nangokungaququki – ukugcina ama-akhawunti ne-administration yehhovisi ngobunono futhi kume ngomumo.
- Kusho ukuthatha izeluleko kochwephesh bendawo nkwabanye abalimi abasecophelweni eliphezulu. Kusho ukujoyina inhlangoano.
- Kusho ukujoyina inhlangoano yakho, *i-Grain SA*, nokwethamela imihlangano, ama-study groups, nezifundo zokuqequesha njalo – nokufunda iPula Imvula efundisayo njalo ngenyanga uifunde yonke nayo impela!

Akekho umlimi owake wathi usefunde konke useyazi. Indawo yokulima ummbila iyaguquguquka, iqhubekela phambili nezinkampane zembewu eziguquka njalo njengoba izinkampani zembewu zilwela ukwenza ngcono imbewu yazo futhi nezinkampani zamakhemikhali zinikeza amasha, imikhiqizo emihle kakhulu. Kusemahlombe omlimi ngamunye ukuthungatha nokufunda futhi ufunde kakhulu futhi zonke izikhathi futhi ngale ndlela azihlomisa noma yena uqobo ukuze abe umlimi ongcono nokuhlala emini ngomumo ngokushintshashintsha kwemboni yommbila ezweni lethu. ■

Imithelela ye-COVID-19 kubathengi



SI ZITHOLE SIPHAKATHI KOBHUBHANE LWESIFO I-COVID 19 NOKUBE NOMPHUMELA WOKUVALWA KWEZWE FUTHI SINESIKHULU ISIQINISEKISO SOKUTHI UKUVALWA KWEZINTO KUSAZOHLALA NATHI ISIKHATHI ESIDE. UMVALELANDLINI, NOKUYISIMO ESINGAJWAYELEKILE, KUBE NOMTHELELA NGEZINDLELA EZAHLUKENE KUBANTU BETHU. NJENGABATHENGI, ABANTU ABATHENGA UKUDLA, AMAREFERENSI ABO NAMAPHETHINI ABO OKUTHENGA ASHINTSHILE.

Kafushane, ngokwemibiko ukuziphatha kwabathengi eNingizimu Afrika kungafunqwa ngokuthi usayizi womndeni ngokwe-avareji unciphile, iningi labantu lifundisekile, liyaphucuzeka futhi liba yintsha, namazinga ezikweletu futhi ayenyuka. Okungeze kulokhu ukuvalwa kwezinto thaqa sekudale ekulahleka kakhulu kwemisebenzi. Kubikezelwa ukuthi abantu abangisukela ku-2 kuya ku-3 million bazolahlekela yimisebenzi yabo. Ngamanye amazwi, iningi labantu lihlaselwa ububha, ikakhulukazi laba asebehola kancane. Zonke lezi zimpawu zinomthelela ekukhetheni ukudla.

Ukuswela ngokwe-avareji kudale umnyakazo wokuthenga uku-dla okungabizi kanye nokudla okuyisisekelo okufana nommbila, irayisi namaveji angabizi. Abathengi futhi sebathenga kakhulu inkukhu nenyama yengulube ne-*forequarter* yenyama ebomvu. Ukudla okubizayo okufana nenyama yemvu kuzoba yingxene encane kubhasikidi yokudla.

UKUKHETHA OKUTHENGWAYO

Ukukhetha okuzokwenziwa abathengi uma bethenga ukudla kunemithelela eminingi, efana nenhoso, inkolo, ikhwantithi, impilo nokuphila kodwa inani lentengo yikho okuzohamba phambili. Ukubeka ngamagama alula – kungcono, okungabizi. Imibiko ikhombisa ukuthi iningi labaseNingizimu Afrika, ikakhulukazi elihola kancane nelihola amaholo aphakathi nendawo

izinqumo zabo zokuthenga uku-dla zincike ngokukhethekile enanini lentengo. Phakathi kwalabo abadla izambane likapondo idimandi isekelwa yizimo zempilo nokuphila kahle. Okujabulisayo, abathengi manje nabo bakhetha usayizi omcane wemikhqizo ongabizi futhi nokunenkunkuma encane.

Amanani entengo engeza inselelo kubakhiqizi bethu ngenxa yokunsinyeka kwamanani entengo. Abathengi abanangi iningi labathengi alikwazi ukuthenga ukudla okubizayo. Ukuze abalimi bakwazi ukumelana namanani entengo bayaphoqeleka ukwenyusa ukukhqiqa kwabo.

Ubhubhane futhi lube nawo umthelela wokuqwashisa abantu mayelana nokudla okunempilo. Kunedimandi enkulu yokudla okwenza ngcono amasosha omzimba namandla jikelele. Ukwengeza kulokhu ukwenyuka kwekhwalithi yomkhi-



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qizo, kanye nokugcizelela kakhulu kokulandeleteka – kusukela kusisekelo somkhqizo kuye kumthengi wokugcina.

Iphethini yokuthenga kwabathengi kwaphoqeleka ukuba kushintshe. Abathengi balalela imithetho yokumiswa kwezinto ezweni bathena eduza nasekhaya futhi basebenzisa nezindlela ze-digital. Nokuthenga on-line, kusetshenziswa ukukhangisa ku-Facebook naku-WhatsApp. Futhi lokhu kuyakhula futhi akuyi ndawo. Ukuthenga on-line kuyakhula ngenxa yokuthi kuyasiza, kuphephile nezizathu zokonga.

Ngisho nokudilivelu abathengi sekuyinto ebalulekile. Ngaphandle kwezizathu zokunethezeka, ukuphepha komuntu nakho kuneqhaza. Kukhona uguquko lokukhetha okushibhile nokuthenga izinhlotshana ezincane. Nemikhqizo ene-value yezempilo esekela ukuthenga kakhulu izithelo namaveji. Kuyenyuka ukuthenga kwabathengi izithelo namaveji njengoba abathengi begxila kakhulu kwezempilo nokuphila kahle. Idimandi yezithelo nemifino kukhule kakhulu emazweni adla izambane likapondo afana neMelika ne-Europe, lokho kuvulela abalimi bethu amathuba amaningi okudayisela amazwe angaphandle.

Ekuqaleni kwesikhathi sokuvalwa kwezwe ngesikhathi kuba khona ukuphazamiseka okukhulu kwemigudu yezimaketha ezifomali ukubaluleka kwemigudu engekho fomali (ukudayisa emgwaqeni) kwaqala ukwaziwa. Babenikeza ukudla ngezikhathi ezinzima, lokhu kwakusiza ekungavikelekini kokudla. Ukumaketha okungaguquki, lokho ukunikeza nokudiliva imikhqizo emaketha yakho njalo njengoba kwakuvunyelwene kuzosiza ngokuphumelelisa amanani entengo aphezulu. Lokhu kuyenzeka nalapho udiliva imikhqizo kumdayisi wasemgwqeni. Hlala ungashintshi, futhi ugxile kuhwalithi, ukuphakheja nalapha kwethulwa khona izinkulumo futhi uzothola abathengi bakho bemagange befuna ukuthenga imikhqizo yakho.

NGABE KUBAPHATHA KANJANI ABALIMI BETHU KONKE LOKHU?

Mayelana nokukhiqizwa komkhiqizo wakho akukho okuningi okushintshile. Ubhubhane Iwe-COVID -19 ngokuhlanganyela nesomiso esihlasele abanangi, kanye naso sonke isimo sezomnotho kulo lonke izwe lethu bonke bazogcizelela izibonakalo ezithile zokulima uma unombono wokuba umlimi ophumelelayo nowenza inzuso yesikhathi eside. Khiqiza imikhqizo eyikhwalithi, enempilo nephephile. Sebenzisa izindlela zokulima ezonga imvelo futhi uwenze ngcono njalo umkhiqizo wakho uphinde unake ukulandeleta kwavo. Ungakhohlwa ngezindlela ezikahle zokulima nezivkela imvelo.

Cabanga ngokuhlanganisa nokwehlukanisa izilimo ukuze unciphise ubungozi ekukhqiizeni, kodwa unganqamuli bese uyaguqula. Okungenani yiba umpsutha wokukhiqiza imikhqizo embalwa kanye nomkhqiziqizwa owethembekile.

Mayelana nemikhqizo yakho oyimakethayo kufanele ushintshe. Qaphela isibonakalo esibalulive kule-athikhili, esifana nokusetshenziswa kwamaplatifomu e-digital ukudiliva okungaguquki, ukudiliva kumthengi ngqo. Hlakanisa imakethe yakho ingafani – diliva umkhiqizo wakho emakethe engaphezulu kweyodwa uma kwenzeka. Lokhu kuzonciphisa ubunozi bemakethe yakho unganciki emali yakho engena ngemakethe eyodwa. ■



Bathenga kakhulu inkukhu nengulube ukuze bonge imali.



Ngokuhlanganyela SILIMA UKUDLA SIKHULISE ABANTU FUTHI SITHUTHUKISE

PHROGRAMU YOKUTHUTHUKISA ABALIMI BE-GRAIN SA IGXILE KAKHULU EKUTHUTHUKISENI ABANTU NGOKUZWAKALAYO NJENGOKUSEBENZISAI UMKHIQIZO WEZOLIMO. NGENXA YOMSEBENZI OWENZIWE KULE PHROGRAMU, ISISEKELO SOKUDLA KAKNYE NOKUKHIQIZA KOMKHAKHA WOKUKHIQIZA OKUSAHLAMVU UQINISIWE.

Abalimi abaningi baseNingizimu Afrika babukeze ukuzithemba nethembra kanye nezinkulungwane zabalimi abasathuthuka eNingizimu Afrika bavuna isivuno sokwenza into elungele ngesikhathi esilungele ngendlela elungele. Ithimba le-Grain SA lokuThuthukisa abaLimi luxhumene nabalimi, bathatha igxathu eliya phambili futhi bazibandakanye.

Sikhola ukuthi intuthuko imayelana nomuntu ngayedwa futhi akhho mayelana nenhlabathi, imishini, izimakethe, imali, ukuthuthukisa amakhono nokuqequesha – intuthuku imayelana nakho konke okungaphezulu futhi kuyinqubo akukhona ukugxuma.

NGABE YINI EBESIYENZA MUVA NJE?

Ama-Study groups

Sasijabule kakhulu ukuthi singaqala imihlangano ya-study group ngesikhathi sesizini entsha yokulima emva kwesikhathi sokuvalwa kwezwe.

Ukwakhiwa kwama-study group usetha i-Grain SA i-footprint ezifundeni ezilima okusahlamvu – ngisho nasezindaweni ezikude ezi-semajukujukwini. Umnyango wokungena kumlimi omusha. Yilapho sibazi khona abalimi – futhi bafunde ukusithemba. Kuphinde kube yindawo lapho sithola khona ithuba lokubona izinselelo ezahlukile namathuba esifundeni esithile kanye nokwedlulisa ulwazi olubalulekile namakhono. Amathimba ethu abaphathi nabeluleki bangasiza ekuvuseleleni isistimu yokulima nasekuguquleni izimpilo zabalimi abasebenza ngokuzikhanda.

Kusukela ngomhla ka-1 Okthoba kuya kumhla ka 17 Novemba 2020 sesithamele imihlangano engu-352 yama-study group ezifundeni, kugxi-lwe kakhulu emkhiqizweni wesizini entsha, ukulontsha amaphrojekthi amasizini amasha kanye nokuhlela ema-input azothengwa futhi ayodili-vwa kubalimi ababandakanyekayo.

Ngabe usuke wezwa ngephrojekthi yethu i-Beyond Abundance (BA)?

I-Grain SA ngokuhlanganyela ne-Jobs Fund of National Treasury nabanye abaxhasi ababalulekile baqalise uhlelo lweminyaka emihlanu – ‘Kusukela ku-Subsistence kuye ku-Abundance’ kube yimodeli ekhu-thazayo yokuthuthukisa abalimi. Unyaka ngonyaka kuhlalukile ukuthi abalimi bebesingatha imiqondo emisha, besebenzisa ubuchwepheshwa obusha nokushintshela ezindleleni ezintsha zokulima. – nemizwa yabo iklynelisiwe ngokuzikhanda kwabo. Okubaluleke nakakhulu, kwaba khoba umthelela njengoba abalimi abangomakhelwane bebona izithelo zoguqukuo lwabo nabo base beyijoyina le-phrojekthi.

Ngenxa yokwantuleka koxhaso ngale kweminyaka eyishlanu ngo-kohlelo lwephrojekthi kwasiza i-Jobs Fund, le phrojekthi ngabe yaphela,

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kodwa abalimi baba nomdlandla omkhulu wokwakhela kulokho abasebekufundile futhi isicelo sabo sokuba baqeqeshwe bathole nolwazi nokwelulekwa kwanika amandla ephrojekthi entsha – i-Beyond Abundance.

Ugqozi lwethu

- Abalimi babone imiphumela nakuba kukhona izimo eziyinselelo zezimo ezifana nesomiso nezinambuzane.
- Abalimi bafakelwe ugqozi ngabakufundile nemiphumela abayibonile.
- Abalimi bajabulile ngamathuba amasha abawathola empilweni yabo yokulima.
- Abalimi sebayigcine ‘ebhange’ imali yabo abayisebenzele kanzima ukuze bayisebenzise ngesizini ezayo.

Ukwesekwa yinkampani

Ngo-2019/2020 izinkampani eziningi ziqhukile nokuseka abalimi kuprogramu yabo entsha i-Beyond Abundance umlimi ngamunye obambe iqhaza utholile:

- I-Bayer isaplaye u-10 kg wembewu engatshala i-1 ha.
- I-SA Lime ne-Gypsum ibasaplaye i-lime ngesikhwama esingu-50 kg.
- I-Kynoch ifake umanyolo ezikhwameni ezingu-50 kg.
- I-Villa Crop ipakishe u-1 kg wezikhwama zamakhemikhali e-pre-ne post-emergence.

Abalimi abayi – 5 043 sebewafakile ama-R3 500/ha kuma-akhawunti abo e-TPFA. Isivuno sommbila wabalimi be-Beyond Abundance sibe sihle kakhulu. I-avareji yesivuno u-4,3 t/ha kanti i-avareji ezweni lonke ngo-bubanzi kwaba u-5,9 t/ha. Akukho ukujabula okwedlula lokhu – izithelo zemisebenzi yethu evunwe abalimi abaningi.

Kulo nyaka ayi-3 160 ha atshalwe kuprojekthi ye-Beyond Abundance – u-95% wabahlanganyele balima ummbila i-1 ha futhi babamba iqhaza ekwenzeni ngcono ekusekeleni ukudla komndeni nangokwamazinga enyuthrishi. Siyethemba ukuthi isizini ezayo izothela izithelo eziningi njengoba sihamba nokulinganisa nabalimi abathuthukayo.

Ukuvakashela emapulazini ukuyosekela abalimi ngabanye

‘Ngubani ozonqaka uma bewa?’ Kwabonakala isidingo sokusekela abalimi abathuthukile kakhulu asebekhule bedlulela phambili kwama-study group futhi sebakulungele ukulima ngokuzimela, kodwa bangalile bazuze ngokwelulekwa konyaka komuntu ngayedwa phecelezi i-one-to-one. Ithimba lethu labaphathi selivakashele amapulazi ayi-136 liyokwesekela abalimi ngabodwana ngo-Okthoba noNovemba. ■

Imigomo yamakhemikhali okulawula ukhula okufanele bonke abalimi bawazi

UKULAWULA UKHULA KODWA KUYINSELELO ENKULU KUBALIMI ABANGAMA- *SMALLHOLDER*, BACHITHA ISIKHATHI ESININGI BEHLAKULA NGEZANDLA FUTHI LOKHO KUNCIPHISA ISIVUNO. UKUHLANGANISA AMAKHEMIKHALI OKULAWULA UKHULA NGOKUFANELE NGAMASU OKULAWULA UKHULA, LOKHO AKUGCINI KUPHELA NGOKUTHOLA ISIVUNO ESIKHULU, KODWA KUZODALA ITHUBA LOKUBA UMLIMI ANDISE EMINYE IMISEBENZI.

Kubalulekile ukuba umlimi azijwayeze imigomo ehambelana nama-*herbicides* njengoba ukusebenza ama-*herbicides* ngokungeyikho ngeke kugcine ngokwehluleka ukulawula ukhula kuphela kodwa kuzophinda kulimaze izilimo. Uku-aplaya ama-*herbicides* ngendlela kuhlezi kungumsebenzi womlimi, futhi kubaluleke kakhulu ukuthi abalimi bazijwayeze imiyalelo yokuwasebenzisa njengoba kubhaliwe kulebuli ehambisana nomkhqiziso.

Okokuqala kubalulekile ukuqondisisa ukuthi i-*herbicide* ngayinye ihlukile mayelana nesilimo e-aplaywa kuso, ukhula elilulawulayo kanye nesikhathi e-aplaywa naso. Ngokuvamile ama-*herbicides* ahlukaniswe amaqembu amabili isib. *i-pre-noma i-post-emergence*.

Nge-aplikheshini ye-*pre-emergence*, ukhula lulawulwa ngaphambi kokuba lumile (luvele ngaphezulu kwenhlabathi) futhi kuhloswe ukulawula ukhula oluwtshani ngonyaka. Uma kukhulunywa jikelele, uku-aplaywa kwe-*pre-emergence* kwensiwa ngesikhathi esifanayo nesokutshala izilimo. Njengoba awekho ama-*herbicides* noma akwaziyo ukulawula ama-*species* otshani obumbalwa, akhona ukulawula utshani uma izilimo ezifana notshani uma isilimo esifana nommbila noma amabele esemilile, *i-pre-emergence herbicide* idlala indima ebalulekile ekulawuleni utshani.

Ama-*post-emergence herbicides* alawula ukhula uma seluvelile ngaphezulu kwenhlabathi. Kokubili isilimo nokhula kukhula kanye kanye ngamandla ngesikhathi *i-post-emergence herbicides* i-aplaywa, nesigaba sokuhula sesilimo nokhula kufanele kubhekwe kanye ne-aplikheshini.

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Ulwazi lwemigomo eyisisekelo ehambisana nama-*herbicide* nezidingo zoku-aplaywa kwayo, kuzomsiza umlimi ngokukhetha i-*herbicide* efanele kanye nokulawula ukhula ngempumelelo.

UKU-IMPLEMENTA IKHEMIKHALI YOKULAWULA UKHULA

Kufanele kuqashelwe kulezi zibonakalo eziyisisekelo uma uhlela uku-implementa ikhemikhali yokulawula ukhula njengengxenye yecebo lokulawula ukhula.

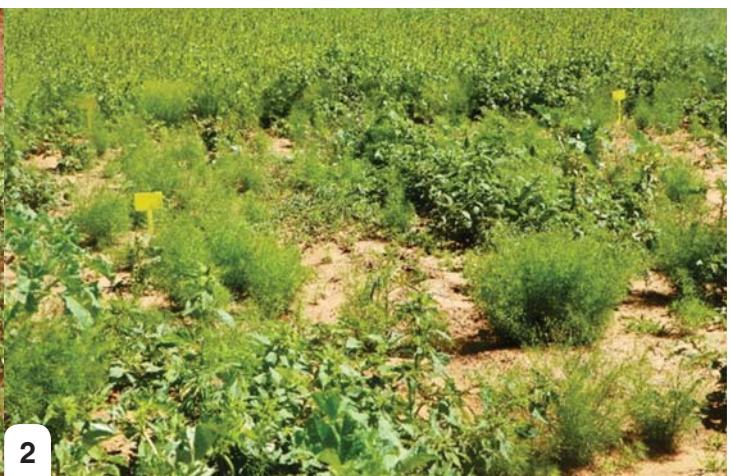
Hlonza ukhula oluhluphayo ngokufanele

Ama-*herbicides* ayahlukana mayelana ne-*spectrum* sokhula alulawulayo. Ukuhola insimu yakho njalo kubalulekile ukuze ubone ama-*species* ukhula olukhathazayo oluzovumela umlimi ukuba enze isinqumo esiphuisse mayelana ne-*herbicide* okufanele uyikhetho. Ukuhlonza ngokufanele ukhula kuyisekelo sokulawula ukhula ngendlela. Incwadi equkethe ulwazi lokuhlonza ukhula i-*Common weeds in the crop and gardens in Southern Africa* ibhalwe ngu-C Botha iyatholakala e-ARC-Grain Crops, Potchefstroom (018 299 6100).

Qinisekisa ukuthi leyo *herbicide* irejistelwe leso silimo esizotshalwa
Amanye ama-*herbicides* (afana ne-glyphosate) abulala zonke izitshalo ayikhethi isitshalo noma ukhula, kanti amanye ayazikhetha izitshalo azibulalayo. Ama-*herbicides* arejistwe ngokufanele kwezinye izilimo ezithile. Amanye anga-aplaywa kuzilimo ezifana nommbila namabele, kanti amanye arejistelwe ukusetshenziswa isib. kubhekilanga kuphela. Uku-aplaya i-*herbicide* engabhaliselwe isilimo esitshaliwe,



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I-spectrum sokhula olubonakala ku-A lusesikhathini esifanele esisesigabeni sokuhula se-aplikheshini ye-post-emergence. Ukhula oluboniswa ku-B lukhulu kakhulu, futhi ngeke lusawuleke ngendlela.

umphumela wakho kuzoba ukulahlekelwa kakhulu noma ukulahleke-lwa yisivuno sonke. Amakhemikhali alawula ukhula lapho kutshalwa khona izilimo ezechukene ensimini eyodwa ngesikhathi kuvamise uku-ba yinselelo futhi kudinga ukuhelelwa nokucophelela.

Ama-herbicides anomphumela wokusalela, kynomthelela ekushintshaniseni izilimo

Amanyama ama-herbicides anomthelela wokusalela. 'Izinsalela' kusho inani lama-herbicide asekhone njengoba enjalo noma nendlela efanayo esondele kakhlulu enhlabathini, emva kwasikhathi eside emva kokwenza umsebenzi wayo. Izinsalela ezinjalo zingadala umonakalo omkhulu ezilimeni ezilandelayo ezingabhaliselwe leyo herbicide. Lapho ukushintshaniswa kwezilimo kwenziwa ngendlela, qaphela imiyalelo ebhalwe kulebula mayelana nesikhathi okufanele sokulinda sezilimo ezilandelayo. I-atrazine yisibonelo se-herbicide esine-residual action esinikeza i-spectrum esibanzi sokhula olulawuliwe. Uma ubhontshisi, amathanga neminye imifino kushintshaniswa (noma kuttshalwe ensimini eyodwa ngesikhathi) nommbila namabele, i-atrazine akufanele kunganakwa nokunjalo.

Ukulungiswa kombhede wembewu

Amandla e-pre-emergence herbicide adinga umbhede wembewu omuhle nolanganayo.

Ukubaluleka kwamanzi

Izidingo zamanzi zahlukene ze-pre-ne-post-emergence herbicides.

- Ukuze ufanyelete okhuleni olumilayo ngaphansi kwenhlabathi engape-zulu, ama-pre-emergence herbicides adinga amanzi. Uma ese-aplayiwe, u-10 mm kuya ku-20 mm wamanzi (okunisa noma imvula) kudingeka ezinsukwini ezine zoku-aplaywa kwe-herbicide ukute uvusezele i-herbicides kuhinde kuqinisekise ukuthi isebeza ngendlela. Imvula eningi ngokweqile enomphumela wokuba kuwasheke ama-herbicide ku-soil profile nokhula lungalawuleki ngendlela.
- Ama-post-emergence herbicides, ngakolunye uhlangothi, adinga isikhathi lapho izulu lingeke lina uma ese-aplayiwe. Imvula ena isikhathi esingamahora ayi-6 kuya ku-8 azowasha ama-herbicide emaqabungeni umphuela walokho kuba ukungalawuleki ngo-kwanele. Akhona ama-herbicides, ezikhathi ezimfushene zemvula esheshayo. Kucelwa ubheke kulebula yomkhiqizo.
- Ungayi-aplayi i-post-emergence herbicides okhuleni olungaphansi kwengcindezi yesomiso noma yomswakama. Ukhula olunjalo alukwazi ukuthatha i-herbicide ngokufanele. Umphumela wokwenyusa isilinganiso ngeke kuholele ekutheni kulawuleke ngaphansi kwezimo zesomiso. Ama-post-emergence herbicides kufanele a-aplawe okhuleni olukhula ngamandla.

Aplaya ngesikhathi esifanele

Iphutha elikhulu elenziwa abalimi abanigi ngokuvamile nge-post-emergence herbicide uku-aplaya ama-herbicides ngesikhathi ukhula se-lukhule kakhulu. (**Isithombe 1**). Funda ilebula ukute uthole ukuthi ukhula lungalawuleka kahle uma selukusiphi isigaba sokukhula. Ngokujwayele-kile, isigaba sokukhula esilindelekile sizoba phakathi kwamaqabunga ama-2 kuya kwa-4 okhula. I-pre-emergence yokulawula, kodwa, ihlezi isebeza kakhulu kune-post-emergence yokulawula.

Aplaya isilinganiso esifanele

I-herbicide aplikheshini kufanele yensiwe ngendlela yokuthi ukhula lulawuleka ngokufanele ngaphandle kokulimaza izilimo. Izilimo zingalima uma ku-aplaywe isilinganiso esiphezelu. Bheka ilebula mayelana nedozi edingekayo. Ku-pre-emergence herbicides, iphesenteji yebumba lenhlabathi lunendima ebalulekile ngesilinganiso okufanele si-aplaywe.

Ukubaluleka kwamazinga okushisa

Ngaphandle kokuba nomthelela kumhwamuko wama-pre-emergence herbicides, amazinga okushisa futhi angaba nomthelela ekwenzeni ama-herbicide asheshe ukukhuphuka futhi ahambe nesitshalo. Ngokukhuluma okwejwayelekile, amazinga okushisa avumelanayo ngokuthatha nokuhambisa uma kuqhathanisa namazinga aphansi okushisa – kuphela nje leso simo sengcindezi senza ukhula lubune lungaqhubeki. Ukwenyuka kakhulu kwama-post-emergence herbicides enzeka ngaphansi kwezimo ezinomswakama ofudumele, kodwa ngaphansi kwezimo zesomiso umswakama usuke uphansi kakhulu namazinga okushisa ephezelu kakhulu.

Ithangi lengxube

Ukhula oluvamisa ukuba lukhuni lungalawulwa ngempumelelo ngokuse-benzisa amathangi engxube isib. lapho ama-herbicides amabili nangapezulu ehlanganiswa ethangeni elilodwa futhi kwenziwa kanye kanye ngesikhathi esisodwa. Imyalelo yamalebuli kodwa kufanele ilandelwe kuhokhu ukute kuqinisekiswe ukuthi imikhiqizo efakwe engxubeni esethangeni iyahambisana nokuthi futhi ibhaliselwe ukusebenza kanjalo.

Ama-Adjuvants

Ama-Adjuvants uketshezi olwenza i-herbicidal isebeza kangcono. Ama-Adjuvants ilekelela ukungena, ukumunceka nokusabalala kwama-herbicides futhi kufanele kuthayiselwe kuma-post-emergence herbicides amanangi. Kufanele u-aplaysi i-adjuvant njengoba kuchaziwe kulebuli, njengoba akuwona wonke ama-adjuvant anomsebenzi ofanayo noma inhoso. I-pH yethangi lamanzu kufanele lihlolwe futhi uma isidindo sikhona i-buffer na/noma i-amoniyamu salfethi kufanele ifakwe ukuqinisa amandla e-post-emergence herbicides.

Ama-aplikheshini okulandeleta

Ukulawula ukhula ngempumelelo isizini yonke kuhakanyiswa iminimamu ye-aplikheshini ama-herbicide amabili. Yeka ukusebeniza ama-herbicides ekhemikhali yeqemu elilodwa isikhathi esingaphezelu kwesisodwa ngesizini ensimini eyodwa. Lokhu kungaholela kutheni ukhula lube nenkani lungazweli kuma-herbicide lokho kuzoba nomthelela omubi ekulawulweni kwaloo.

Ukukhalibhrethwa kwama-herbicide applicator

Kubaluleke kakhulu ukuthi noma iyiphi indlela esetshenzisiwe uku-aplaysi i-herbicide, ukuthi kwenziwe ikhalibhreshini evamile. Qinisika ukuthi ama-nozzles ahlanzekile futhi awavalekile, njengoba lokhu kungaholela ekusalalen/ekugamanxeni kwama-herbicide ngesikhathi se-aplikheshini.

Okokugcina kubalulekile ukuggoka izingubo zokuvikela ezifanele uma usebeniza ama-herbicides, okungabalwa kukho ihembe elinemikhono emide nebuloko elide, amagilavu anangenisi amanzi, icizathulo ezinkulu, uvikele amehlo nokokusiza ukuphefumula phecelezi i-respirator. ■

OKUBHEKEKILE NGOBHONTSHISI ISOYA ngesizini ka-2020/2021



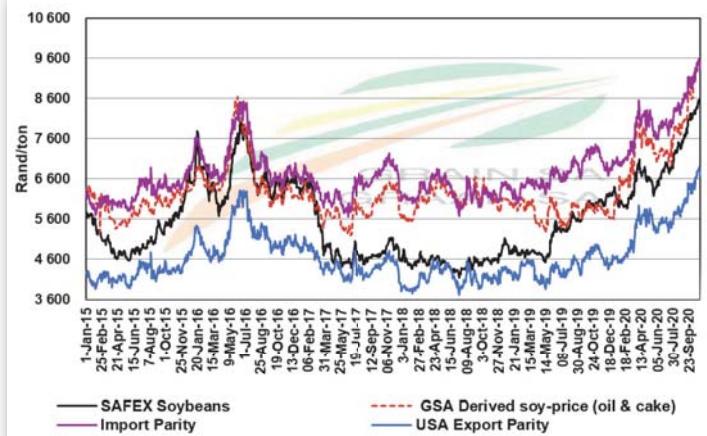
AMANANI ENTENGKO KABONTSHISI ISOYA ABELOKHU EKHUPHUKU NJALO NGENXA YOKUNGAQONDAKALI MAYELANA NEZIMO ZEZULU EMHLABENI, ISIMO SEMAKETHE YASE-US SIKHUPHUKU NGO-9% KUSUKELA EKUPHELENI KUKA-SEPTHEMBA KUYA KU-OKTHOBA KA-2020. UKUNGAQONDISISI KOKUKHIQIZA KUYABELESEL A-NINGIZIMU YEMELIKA NJENGOBA ISIMO ESINGAPHANSI KWESIHLE SESIMO SEZULU SIYAQHUBEKA, KUBAMBEZELA UKUTSHALA KWEZINYE IZINDAWO.



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Amanani entengo kabhontshisi isoya atathwe adilivwa eRandfontein.



Umthombo: I-Grain SA, 2020

nga nohhafu ukuze kulungiselelw izimakethe zakuleli zeszini entsha ukuzodiliva noma kuhlelwa ukuthena emazweni angaphandle.

Idimandi kabhontshisi isoya emakethe yakuleli ihlezi iyinhle. Ngokwamafiga akamuva e-SAGIS, kulo nyaka esikuwo ukuphroseswa kukabhontshisi isoya sekukonke kungama-882 506 amathani, okungalinganiselwa ku-2,6% ngaphezulu kwangesizini yonyaka ongaphambili ngokwesinyathelo sangalesi sikhathi. Lokhu kungadalwa ukuphroseswa kukawoyela ne-oilcake okungaphambili kwe-pace yangonyaka odlule kuka-7%.

Ezinyangeni ezimbalwa ezidlule, amanani entengo kabhontshisi isoya yasekhaya yaqhubea nokwenyuka ngenxa yokwesekwa ukwenyuka kwamanani entengo emazweni angaphandle, ukwehla kwamandla erandi nedimandi eqinile yasekhaya (**UFig 1**). Kusukela ngo-Ephreli/Meyi, amanani entengo esondela eduze kwamazinga e-import parity, ukulandela ukunyakaza kwamanani entengo ephushwa idimandi epeh-zulu kabhontshisi isoya yase-US kanye nokungaqondakali kwezimo zezulu eNingizimu neMelika.

Ukwengeza kulokho, idimandi yasekhaya yokugxoba yenyukile. I-futures price kaDisemba ikhule ngo-22,7% kusukela ngoJuni 2020 ngaleso sikhathi i-futures price ihweba ngokulinganiselwa ku-R7 200, ngesikhathi sokubhala le-athikhili. Amanani entengo kungenzeka ahiale ezinzile ngokwamazinga amanje ngokwesikhathi esifushane. Ukutshala okuningi kusadingeka kwenzeke; njengoba kusenobungozi ubuphezulu bomkhiqizo ongaba nomthelela kumanani entengo. ■

1 Isaplayi nedimandi kabhontshisi isoya kuleli.

	2019/2020	2020/2021*
Umkhiqizo i-(CEC)	1 170 345	1 261 250
Izitoko zokuvula (1 Mashi)	502 241	138 455
Okuthengwa emazweni	9 098	150 000
Okusele	0	2 600
Isamba sesaplayi	1 646 518	1 519 305
Isamba sedimandi	1 508 063	1 398 200
Isitoko sokuvala	138 455	121 105

Umthombo: Grain SA, NAMC
*Idatha ngo-Okthoba 2020



Ukuncenga izithombo zikabhekilanga esigabeni sokupuma/ukumila

UMLIMI ENGAKWENZA KONKE NGENDLELA EFANELE KUSUKELA EKULUNGISENI UMBHEDE WEMBEWU KUYE EKUJULENI KOKUTSHALA KANYE NENANI LEZITSHALO, KODWA KUBALULEKE KAKHULU UKUBA UKHUMBULE NJALO UKUTHI IZITHOMBO ZIKABHEKILANGA ZINESIMILO ESITHILE SOKUBA BUCAYI KAKHULU NGESIKHATHI SOKUPUMA/UKUMILA.

Ukupuma kwezithombo ngenye yama-fektha abalulekile ekwakheni isisindo esihle sesitshalo ukuze isivuno sibe sikhulu. Imbangela ejwayelekile yokungaphumi noma ukungamili kahle ukucqina koqweqwem lomhlathathi ongaphezulu isafesi.

INSELELO

Isafesi yenhlabathi lapho kutshalwe khona ubhekilanga ngokuvamile kwenza uqweqwem oluwugqinsi, olungavuleki lokho kungadala ukungamili kahle futhi kube namagebe phakathi kwezithombo. Njengoba ngokwejwayelekile ubhekilanga utshalwa phakathi-nehlobo, sinesimo sezulu esomile, esishisayo nemvula ehambisana nokuduma kwezulu nomoya. Amanzi athanda izinhlayiya zenhlabathi futhi bese ebambeka noma amuncwe yizinhlayiya zenhlabathi.

Uma kunezimvula ezinkulu, zilandelwe yizinsuku eziningi zokubalela ngokweqile, umphumela walokho uthi awufane kancane nohhavini obhaka inhlabathi nokudala uqweqwem oluwugqinsi lwasafesi. Ubhekilanga waziwa ngokukhula ngamandla kodwa izithombo ezsencane ezithambile akulula ukuba ziphume kalula kulolu qweqwem – uma kungenzeka. Umphumela walokho kungaba ukubambeleka kokupuma/ukumila noma kusale amagebe/izikhewu ezinkulu kolayini kanye nokungami noma izithombo ezingalingani.

YAZI INHLABATHI YAKHO

Izinhlobo ezahlukene zenhlabathi zenza ngokwahlukana futhi ezinye kulu ukuba zigqishelane zenze uqweqwem kunezinye. Ukuthoseka kakhuu, inhlabathi eyibumba akulula ukuba ibe uqweqwem oluqinile ngoba ine-sandy ne-sandy-loam. Enye ifektha eba nomthelela ekukhandekeni koqweqwem yinani le-organic matter esenhlabathini, ukukhula kwezinga le-organic matter, kunciphisa ithuba lokukhandeka koqweqwem – lokho kuba yinzuzu kulabo balimi abasebenzisa i-nothili farming.

Insimu esengcupheni yokuba noqweqwem lwenhlabathi ephezelu yinsimu esetshenziswe izikhathi ezimbili noma ezintathu kwenziwa umbhede wembewu futhi itheksha yawo icoyisakele.

Ngesikhathi ngibuza umlimi waseNyakatho neNtshonalanga use-lime ubhekilanga iminyaka engama-20 kwi-sandy soils, ukuthi yini ayenzayo ukubhekana nenkinga yoqweqwem, waphendula ngesibindi wathi: 'Duisendpoot, duisendpoot, duisendpoot!'

Itemu elithi 'duisendpoot' ngokujwayelekile lisetshenziswa iNingizimu Afrika kodwa itemi lakhona elisetshenziswa ngokokufanele ngo-kuthi yi-rotary hoe. Kubaluleke kakhulu ukuthi lesi senzo senziwe

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ngesikhathi esifanele ngoba izithombo zikabhekilanga zintekenteke/ziyatema futhi zingachoboka kalula uma i-'duisendpooting' uma kwenzeka ngesikhathi ziphuma/zimila.

UKUGCINA ISIKHATHI KUYIKHO KONKE

Njengoba kunje emisebenzini yonke yokulima, ukugcina isikhathi kuyikho konke! Umlimi kabhekilanga unethuba elincane lokungena ensimini ne-rotary hoe ngenxa yokuthi kunobungozi bokulimaza izithombo.

Wonke umlimi kabhekilanga kufanele alungise iphasi eyodwa ensimini ngosuku lwasithathu kuya kolwesine emva kokutshala. Ngaleso sikhathi aekho ubhekilanga ozobe esemilile ngalesi sikhathi uzoqinisekisa ukuthi ucuba inhlabathi engaphezulu kwisafesi. Ngesikhathi esikahle, lesi sinyathelo sizophinde silimaze ukhula oluzoqhurma eduzane kwesafesi kuna-lapho kulele khona imbewu kabhekilanga.

Inqubo yesibili kuzoba ebulayi kakhulu. Uma ingekho enye imvula, iphasi eyodwa unqamula ensimini kufanele yanele ukuze kuzomila kahle, kodwa uma liphinde lana futhi ngaphambi kwensimu yembe-wu isikhule ngokuphelele, ngaleso sikhathi umlimi uzocabanga nge-nye iphasi ukuze uqinisekise ukuthi zonke izithombo zimila kahle.

Inqubo yesibili inobungozi ngenxa yokuthi ezinye izithombo zizobe seziqhumble ngaleso sikhathi ezinye ngeke zikwazi ukumila njengoba kunoqweqwem oludinga ukwephulwa!

Nakuba ukusebenza nge-rotary hoe's kusebenza kakhulu ngesivinini elisheshayo, iphrakthizi enhle ngalesi sikhathi ukushayela ugandaganda ngesivinini esiphansi ukuqinisekisa ukuthi ijubane lephasi alizisiphuli izithombo ezincane noma lizephule lezo esezimilile. i-'duisendpooting'

Esinye iseluleko esincane esingasiza ukwenza umsebenzi i-post emergency rotary hoe ntambama ilanga lishisa noma libale – nalapho isafesi yenhlabathi yome kahle. Lapho izitshalo zikabhekilanga zizobe zikwazi ukugobeka futhi zithi ukubuna kancane nokunganciphisa ukulimala kwestimmo. Mhlampe ungaba khona umonakalo kodwa lokhu kungancishwa yinqubo yokuqapha nokucophelela. Empeleni, abanye abalimi baze bazindle ngokulahlekelwa bese benyusa inani lokutshala kwabo ngendlela. Iqiniso ongeke wenze iphutha ngaso ulahlekelwa okungenani u-5% wezithombo ngokuhlakula nakunye ngegeja.

Aekho umlimi ongavele athumele umshayeli wakhe nogandaga-nada ensimini futhi ayoqhubeka nomsebenzi – lokhu ngokunye kwalezo zikhathi lapho kubaluleke khona ukuba umlimi ayibheke ngeso lokhozi leyo nqubo. ■

Ngabe zisebenza kanjani izimakethe zommbila?

LE ATHIKHILI YINGXENYE YOKUQALA-KWEZINE EYE-ZAMA UKUCUBUNGULA AMAFEKTHA AYIZISEKELO EZINOMTHELELA EMAKETHE. INTO YOKUQALA ESIZOXOXA NGAYO YI-SAFEX PRICE FORMATION MECHANISM YOMMBILA.



I-SAFEX

Imakethe yaseNingizimu Afrika yaqala ukusebenza njengemakethe ekhululekile ngo-1996, ngesikhathi kumiswa uMthetho wokuMaketha imiKhinqizo yezoLimo, futhi izimakethe zazingasahnjiwa ngomthetho. Lokhu kusho ukuthi ukuhlanganyela ezimakethe; okubizwa, ngabakhqizi, abahwebi namaprosesa baphendula ngokuxineka kwesaplayi nedimandi ekuhleleni amanani entengo. Ngokwejwayelekile, bonke abahlanganye basebenzisa i-Agricultural Markets Division of the South African Futures Exchange i-(Safex) njengebhentshimakhi yamanani entengo abazoyibiza noma abazoyibiza noma 'i-spot' ezimakethe ezidayisa ummbila zonke izinsuku. I-spot price ichaza inteno ye-Safex ekhokhelwa impahla e-Randfontein, ukunciphisa izindleko zokuthutha ukuze kunqunywe intengo ekhokhwa ngaleso sikhathi kuwo onke ama-silo abhalisiwe.

Ngokwakhiwa kwe-Safex, nokuthengiswa kokuphumile (*i-futures and options*) kwethulelwu ummbila omhlophe, ophuzi nokunye okusahlamu. Intengo yekusasa nokungakhethwa asungulwa ezimakethe noku 'bhida' nangama 'ofa' lokhu kukhombisa imibono yokuhlanganyela kwezimakethe ngokwamanani empahla ethile ngezinsuku ezahlukene esikhathini esizayo (isibonelo uma kuhkona irefarensi ngentengo kaJuni, noma inteno yangoDisemba).

Izenzo esifanayo sisetshenziswa ukuthenqa (ukuvikela ngokuphophile) ubongozi bamanani entengo. Ukusebenza kahle kwe-Safex, kuvumela ukubamba iqhaza kwezimakethe ukulawula ubongozi bamanani entengo yabo, okungenza ngcono isimo sabo sezezimali. Izimakethe zangomuso zinikeza iplatformu lapho abathengi nabadayisi bangahlangana futhi badayise ngokukhululeka, ngendlela esobala. Ngakho-ke, ukuthola amanani entengo yempahla ngempumelelo. Ngakho ke kuya ngomlimi kuphela ukuthi bungakanani ubongozi azimisele ukubuthatha noma angakwazi ukubuthatha.

I-FUTURES PRICE

Bonke abathengi nabadayisi bezivumelwano zesikhathi esizayo zeSafex, baneqhaza lenqubo yokunquma ngamanani entengo. Amanani entengo esiwabonayo ku-futures market kumele yonke ingcindezi yesaplayi nedimandi anquma ngamanani entengo. Umthamo omkhulu wenombolo ahweba ezimakethe, ayaqinisekisa ukuthi kuhkona ukumelwa okuhle futhi abekho abantu abangawaphazamisa noma babe nomthelela kumanani entengo. Ngakho-ke, isinqumo samanani entengo sithathwa ngokuhlanganyela kwezinkulungwane zabathengi nabadayisi, okubandakanya abakhqizi, amaphrosesa, ababambi, abathumela emazweni, abathenga emazweni angaphandle, nabafaka imali ngenhoso yokuyizalanana. Amanani entengo ezimakethe azokwenyuka, ehle, ahlale ezinzile ngenxa yesinyathelo esihlanganyelwe sababandakanyekayo ukuba bathenge noma badayise.

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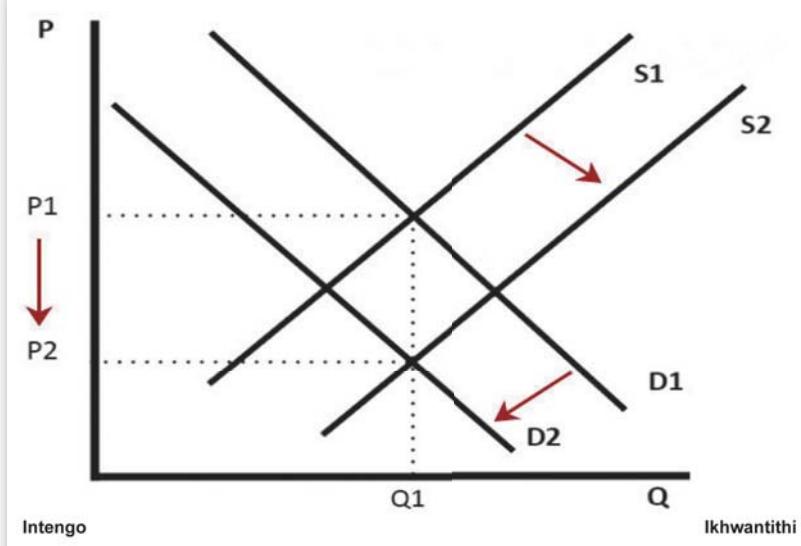
I-futures price ikhombisa amanani entengo abadayisi nabathengi abazilungiselele ukuyibhadala noma ukuyamukela impahla phecelezi commodity esikhathini esizayo. Ngakho-ke i-futures price ikhombisa umbono ohlanganyelwe wemakethe. Isibonelo, intengo yommbila inganqunywa ngalokhu okulandelayo:

- Umbono womkhqizi eNyakatho neNtshonalanga, kulindelwe sivuno esincane ngenxa yezimo zesomiso.
- Umbono kamkhqizi olindlele isivuno esihle eMpumalanga.
- Owenza ukudla olindlele ukuba idimandi yommbila ukuba ikhuphuke ngenxa yokwanda komhlambi emva kwezimvula ezinhle.
- Kanjalo nangombono womhwebi wokusahlamu olindlele isilimo esihle e-US kanye nokuqina kwerandi uma liqhataniswa nedola kungadala ukwehla kwamanani entengo ku-Safex.

Nakho-ke i-futures price ibikezelu ukuthi i-cash price yekhomodithi/impahla izobe eyenyanga ezayo ebekiye, ngokolwazi olukhona njengamanje. Incazelo yamafektha esaplayi nedimandi (kuleli/ekhaya esifundeni, nasemazweni angaphandle), izimo zesimo sezulu, okuthandwa abathengi nezinguquko ngokwamazinga empilo, umgomu kahulumeni, ukungaqondakali kwezopolitiki, isivumelwano sezohwebo nobuchwepheshe bunomthelela kumananini enteno yemikhqizo esikhathini esizayo. Ngokwesikhathi eside izimo zamanani entengo ngokuvamile akhombisa amafektha esaplayi nedimandi, ngaleso sikhathi izindaba zakamuva, i-exchange rate nokuzwela kunomthelela wezinsuku zonke ezimakethe. ■

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I-curve yesaplayi nedimandi.



I-stem borer complex yaseNingizimu Afrika

UMMBILA ENINGIZIMU AFRIKA UHLASELWA IZINA-MBUZANE I-LEPIDOPTERAN. ENINGIZIMU AFRIKA, MATHATHU AMA-STEM BORER SPECIES ABALULE-KILE AHLASELA UMMBILA, ABIZWA NGE-AFRICAN MAIZE STEM BORER (I-BUSSEOLA FUSCA), I-CHILO BORER (I-CHILO PARTELLUS) KANYE NE-PINK STEM BORER I-(SESAMIA CALAMISTIS). LAMA-SPECIES ADALA UMONAKALO OMKHULU EMMBILENI NASEKEKULAHLEKELWENI IZILIMO KUYAHLUKANA KUYA NGESIKHATHI NEZINGA LOKUCWALA KWE-STEM BORER.

I-AFRICAN MAIZE STEM BORER

I-African maize stem borer (**Isithombe 1**) i-moth flights yehlukana kathathu ngesizini (**Ufiga 1**). Iztshalo ezihselwe mhlambe yiszukulwane sokuqala noma sesibili, kuya ngosuku lokutshala ummbila. I-moth yesifazane izalela amaphakethe amaqanda ngemuva kwe-leaf sheaths yesitshalo. I-larvae esanda kuchanyuselwa inombala onsundu okuzothile phecelezi dark brown futhi ziyakhanya uma ziya ngokukhula.

Ngemuva kokuchamusela, i-larvae yenjukela phezulu emaqabungeni i-whorl leaves lapho ziqa khona ukudla futhi zihlale isikhathi eside ngaphambi kwe-burrowing ingene esiqwini. I-larvae enkulu idla i-whorl leaves lesongekile lokho kudala izimbobo njengoba kuhula amaqabunga. Izimpawu zokulimala zale-stem borer ngakho-ke kuvela njenge-'windows' ne-'shot holes' ku-whorl leaves (**Isithombe 2**). Uma i-stem borer ilimaza iphoyinti lokukhula lesitshalo lokho, kuholela ezimpawini ze-'dead heart' Isikhathi sesigaba se-larval ilinganiselwa emavikini ayisithupha emva kwalokho i-larvae iba yi-pupae. I-larvae engakauquki isuke ku-pupate izohlala ezimvithini ebusika, okungumthombo omkhulu wokugcwala kwezinambuzane ngesizini elandelayo.

I-CHILO BORER

I-Chilo borer (**Isithombe 3**) inempilo emfushane kakhulu uma kuqhathaniswa nalokho i-African stem borer nokuholela esizukulwaneni esikhulu kanye nokuhula okuqbekayo kwezinombolo ze-larval. I-Chilo borers ingaba nezizukulwane eziyishlanu ngesizini eyodwa. I-moths izalela amaqanda agamaqoqwana aamanxela ezindaweni zozimbili naphezulu nangaphansi kwamaqabunga abonakala njengamachashazi aphuzi emaqabungeni.

I-larvae inombala o-creamy white namabala amnyama, yingakho ke i-Chilo borer nokuphinde kubizwe nge-stem borer enamacha-shaza. I-larvae yedlulela ku-whorl iphinde idle cishe u-10 ku-14 izinsuku ngaphambi kokungena esiqwini. Izimpawu zokulimala ayafa-

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na ne-African stem borer. Njengoba kusondela isizini yasebusika, i-larvae iphenduka ivila ihale eziqwini ebusika nasemuva leaf sheaths.

I-PINK STEM BORE

I-pink stem borer (**Isithombe 4**) ngokuvamile yenzeka ezifundeni ezi-sogwini lapho khona kuyisinambuzane esibalulekile kodwa ukugcwala ezweni kuyakhula. I-moths yala ma-species izalela amaqanda emuva kwe-leafsheaths izitshalo zommiba ne-neonate larvae ezalela lapha, ingene ngqo esiqwini naleso sikhathi ezi-nye zisuke zichamusela emakhobeni azongena emadlebeni ommbila **Isithombe 5**. Ukwenza akufani amanye ama-borer species, i-larvae yawo idlulela kwi-whorl futhi ayingeni ngqo esiqwini.



I-African maize stem borer (*Busseola fusca*).

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i-Windows' ne 'shot hole' umonakalo odalwa yi-stem borers.

2

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**IPULA IMVULA IYATHOLAKALA FUTHI
NANGALEZI ZILIMI EZLANDELAYO:**
 IsiZulu, IsiNgisi, IsiTswana, IsiSuthu, nesiXhosa.

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I-stem borer complex...



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I-Chilo borer (*i-Chilo partellus*).

3



5

I-Neonate larvae ye-pink stem borer
ichamusela ngemuva kwe-leave sheath
yesitshalo sommbila, ibhoboza ngqo isiqu.



Izimpawo ze-'Dead heart' nakho ke, izimpawu zokuqala eziponakalayo zomonakalo ngenxa yokuthi i-larvae engena ngo esiqwini futhi ayiwalimazi ama i-whorl leaves. Isizukulwane sigamanxa ngendlela yokuthi isizukulwane ngasinye sihlukaniseki. I-larvae ikhula unyaka wonke futhi ayingeni esimweni soku-lala ebusika.

UKULAWULA

I-Bt maize yethulwa eNingizimu Afrika ukuzolawula ama-stem borer species omathathu. I-Chilo borer ne-pink stem borer Alawulwa yi-Bt genes ulibofuzo lwe futhi isiyatholakala eNingizimu Afrika nedayiswa yi-African maize stem borer, ngakolunye uhlanothi, ilawulwa ngempumelelo ngama-Bt genes etholakala ngo-kuthengiswa kodwa ikhombisa ukuba nenkani ku-Bt gene ekhishwe eNingizimu Afrika. Ngakho ke kubaluleke kakhulu ukusebenzisa isilinganiso esiphezulu/refuge strateji ukuze unqande ukuba nenkani. ■

1 I-Seasonal moth flights ye-African maize stem borer *ithathwe ku-light traps* (*Ngokwedatha etholakala ku-Van Rensburg et al., 1985*).

