

PULA IMVULA

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Uguquko aluvinjwa – ukukhula kuyakhethwa

MHLAMBE NGABE SIKHONA ISIMO, UMSEBENZI NOMA UMKHUBA EMPILWENI YAKHO OKUNGADINGEKA SIGUQULWE? FUTHI UTHINI NGEMIKHUBA YAKHO YEBHIZINISI NEZINDLELA ZAKHO ZOKULIMA – KUNGAEA NAZO ZIDINGA UKUVUSEZELWA, UKUHLEHLISWA UKUKHUNJUJWA UKUZE UGCINEKE USESIMENI ESIFANELE NESI FINYELELE EMAGOLINI AKHO?

Ngesikhathi ubaba wami oneminyaka engama-86 ubudala ephenduka umfelwa eminyakeni emithathu edlule, wakhungathwa usizi olukhulu waphelelwa yithemba kakhulu waphelelwa amandla njengoba



U-Jenny Mathews, umbhali wePula Imvula. Thumela i-imeyili ku-jennymathews@grainsa.co.za

wayesecabanga ukuthi ayisekho into ayiphilelayo. Ngolunye usuku ngathi, 'Uyazi Baba, uMama ubengenakho ukuba akhethe ukuphila, kodwa wena ... unakho ukukhetha ukuphila ngendlela yokuhlonipha izimpilo zenu nobabili ngokuthi uphile impilo yakho kahle!'



IZWI LIKA... Jannie de Villiers

ENINGIZIMU AFRIKA BEKUWUNYAKA OMUHLE KWEZOLIMO KULE SIZINI EDLULE. IZILIMO BEZIZINHLE, NGAPHANDLE NJE KE KOKUTHI IMVULA IFIKE EMVA KWESIKHATHI. ISIBIKEZELO SESIZINI ENTSHA OKWAMANJE NASO SIBUKEKA SISIHLE. INDAWO LAPHO ABALIMI ABASHA ABEBHEKENE NESOMISO KUYO YIZIMALI ZOKUXHASA IZILIMO. UBUNGOZI BOKUNATHANDI KWAMABHANGE OMNOTHO UKUXHASA IZILIMO ZETHU KUYADUMAZA. UMA LUNGEKHO UGUQUKO, NGEKE SIKUBONE UKUKHUKULO MKHAKHA.

Mhlawumbe sekuyisikhathi sokuba kubhekiswe uMthetho weZikweletu ozovulela ithuba elikhulu lemigomo ezolawula ukukhiqizwa kokudla. Sinesomiso futhi ohlangothini lwamaphrojekthi kahulumeni. Ikhona imali eyanele, kodwa kungani kufanele ifike emva kwesikhathi yonke iminyaka kuze kube manje asiyitholi impendulo. Isimo sokuba umnikazi wezinto kodwa zingadedelwa kweBhange loMhlaba i-Land Bank nakho akusizi. Lesi yisikhungo sikahulumeni okufanele senze kahle uma intuthuko kungumsebenzi waso. Ngikuthola kunzima ukukholwa ukuthi uhulumeni ucabanga ukukhipha i-SAA ekuhluphekeni kwayo, kodwa hhayi i-Land Bank.

Kodwa, ngaphandle kwazo zonke lezi zinkinga zokungaxhaswa kwabalimi ngemali yezilimo, amathani akhiqizwayo ayakhula. Uku-bekezela okwenza umhlaba wabalimi baseNingizimu Afrika waziwe nakho sekukhona kubalimi abasebasha. I-'n Boer maak 'n plan', yi-DNA yabalimi bonke, kungakhathalekile ngosayizi. Iphrogramu eThuthukisa abalimi i-Grain SA isayine isivumelwano esisha nabaxhasi abazosiza abalimi bethu ngezimali. Ezinye zalezi zivumelwano zifinyelela nangaphezulu kweminyaka emine. Lokhu kuyakhuthaza kakhulu. Abalimi abakula maphrogramu alawulwa yi-Grain SA benze kahle nabaxhasi bakhuthazekile ngemiphumela.

Ekugcineni, iGrain SA yenze utshalo olusha lokuthuthukisa ezokulima. Sithole inkampani entsha: iPahama Grain Phakama. Le nkampani izogxila kuphela ekuthuthukiseni abalimi bokusahlamvu futhi izoholwa abaholi beGrain SA iphinde iphathwe yisitafu seGrain SA.

Nginifisela ukuvuna okuhla kuka-2021. UNkulunkulu asiphe izimvula ezinhle, njengoba Asithumelela iNdodana Yakhe eYodwa ukuba isinikeze ithuba lokukhula nokuthela izithelo ezinhle ekubuyeni Kwayo ngelinye ilanga. Nibe noKhisimusi omuhle nonyaka omusha onempumelelo ongenayo i-COVID. ■

Uguquko aluvinjwa...

Ubaba wami wathula, kodwa ngosuku olulandelayo wenza iphoyinti lokuyohlolwa izindlebe zakhe, futhi wazibhukela ukuba ayohlolwa abezempilo. Wanquma futhi ukuthi esikhundleni sokulindela ukuthi abantu bamfonele, ukhona azomfonela yena osipesheli njalo ngosuku bavuselelane baxoxe izindaba zabo zakamuva ... futhi wakwenza lokho!

Ngosuku olulandelayo wathatha ifenisha endala waqala ukuyihwaya kwathi ngamahora ambalwa yabe isiguqukile isibukeka iyintsha ceke – kangangokuba zonke izingane zamcela ukuba aziphe yona. Lokhu kwaqalisa uchungechunge lokwenziwa kwemisebenzi. Waqala ukuhambela izindali ethenga ifenisha yokhuni endala futhi eyivuse ibe yinhle bese eyipha abantu. Masinyane izinsuku zakhe zaba matasa zagcwalisa injabulo. Ngesikhathi enesizungu futhi ehlezi yedwa bezingekho izindali futhi engekho nakhuluma naye, ngakho esikhundleni sokwentuleka komsebenzi wezinkuni, waqala ukwenza amathoyizi amahle okhuni. Eneminyaka engama-86 usafunda amakhono amasha zonke izinsuku. Ukuzithemba kwakhe kukhula zonke izinsuku. Ubaba wami ushintshile. Kumnandi ukuhlala naye futhi usabalalisa izinhlobo zakhe ezehlukile zothando nokunakekela. Usamkhumbula uMama zonke izinsuku – kodwa uphila impilo enhle futhi ufakelana ugqozi futhi nabazukulwana bakhe bayathanda ukudlala ngezimoto zabo namathraki awakhandayo! Ayikho inqubekelaphambili engenzeka ngaphandle koguquko; nalabo abangaziguquli izingqondo zabo akukho abangakuququla!

Zonke izinhlangano zabantu nemathiriyali yezinsiza kufanele zisetshenziswe kahle ngendlela efanele nangesikhathi esifanele ukusungula imikhiqizo eyikhwalithi ephezulu ngentengo eyiminimamu.

'KODWA BESIHLALE SIKWENZA NJALO NGALE NDLELA!'

Lo ngomunye wemishwana eyingozi kakhulu. Ezinye izindlela ezindala zinhle kodwa kuyadinga ukuba uyihlole i-value yokwenza izinto ngendlela obekuhlezi kwenziwa ngayo izinto futhi kubuzakale ukuthi ngabe zikhona yini izindlela ezintsha, ezehlukile zokwenza. Ukushintsha umuntu noma amaplane omuntu kuyinselelo, kodwa ukuvuma ukujwayeza nokuguquka kusho ukuthi uzimisele ukwenza noma yini ukuze ukhande izinto ezintsha zekusasa elingcono. Ushintsho luyadingeka futhi ngezinye izikhathi kudingeka sike sime sizibeke izimpilo zethu, amabizinesi, amagoli ethu nesikuhlosile. Kudingeka sizibuze ukuthi yini okufanele sicabange ukuyishintsha. U-Winston Churchill wake wathi: 'Ukuba ngcono ukushintsha; ukuba kahle kakhulu ukushintsha njalo!'

UMSEBENZI WOKUKHIQIZA

Isisekelo somgomo wokuphathwa kwebhizinisi uthi: 'Zonke izinhlangano zabantu nemathiriyali yezinsiza kufanele zisetshenziswe kahle ngendlela efanele nangesikhathi esifanele ukusungula imikhiqizo eyikhwalithi ephezulu ngentengo eyiminimamu'. Lokhu kusho ukuthi ukuhlala esikhathini samanje nokwenza izinguquko ngezikhathi zonke, isibonelo kudingeka senze ibhange lokudla elingcono ukuze sinciphise ingcindezi nezindleko ezedalwe ukondla imfuyo yethu ngezinyanga



ezinesomiso ngakho sifuna ukutshala amadlelo amaningi otshani kanye nezilimo eziyisembozo.

Umsebenzi wokukhiqiza wanoma yiliphi ibhizinisi unghlaziwa ngokubuza imibuzo enje:

- Impumelelo yomsebenzi – ngifinyelela kanjani egolini lebhizinisi lami?
- Impumelelo yekhono – yiziphi izindleko ongene kuzo endleleni yokuphumelelisa igoli lakho?

Imenenja umuntu oplanayo, ohlelayo, oqondisayo nolawula ukwabelwa kwabantu, impahla phecelezi *material*, izimali kanye nolwazi lwezinsiza zokulandela amagoli ebhizinisi futhi uma ungumlimi kusho ukuthi WENA! Ngabe ucophelela kangakanani nokuhlaziya uma uplana imisebenzi yakho yokulima? Ngabe uqoqa ulwazi, ukubheka indawo yezolimo, ukulinganisa umsebenzi wezithukuthuku zakho, izimoto zakho namasimplimenti, amasimu akho? Ngabe ukucabanga kwakho ngokujulile kungakanani okuletha ekulimeni kwakho?

Ukuphazamisa amaphethini amadala ajwayelekile emkhakheni wezolimo

Kwesinye isikhathi ushintsho luthambile nangokuzikhethela kwakho, isibonelo, mhlawumbe kudingeka silethe isilimo sesithathu kusistimu yethu yokushintshanisa izilimo noma mhlawumbe kudingeka siqashe enye insimu ukuze sikwazi ukuthi kube kuqhubeka ukushintshanisa; kodwa kunezikhathi eziningi lapho kufika khona isidingo sokushintshanisa siba sikhulu kakhulu 'ebusweni bakho' kuze kungakhululeki futhi kube yinselelo enkulu. Akekho kithina owabiza isomiso noma ukuguquka kwesimo sezulu ezimpilweni zethu kodwa siqinisele ngokubhekana nezinkinga futhi sijwayeze amasistimu okulima ukuze simelane kangcono nalezi zinselelo.

Kulula kabi ukuthi cha oguqukwani kodwa akukhona ukuhlakanipha

Qinisekisa ukuthi izizathu zakho akuzona izaba nje nemizamo yokuhlala entweni ejwayelekile: Anginaso isikhathi esanele; ayikho imali eyanele; sengimdala kakhulu ukuba ngingashintsha; Angazi ukuthi

ningashintsha kanjani; ngizokwazi kanjani ukuthi kuzoba usizo ... uguquko ludinga isibindi.

Kukangakhi singabhekani nemiqondo emisha emkhakheni wezolimo?

Eminyangeni engama-40 sisekulimeni senze izinguquko eziningi, ubuchwepheshe obusha, izinguquko kumadimandi abathengi, amasistimu angcono, ingcindezi ngemisebenzi ekuncipheni kwenzuzo; izinguquko zamaplane omshwalensi kanye namathuba oxhaso lwezezimali. Ngakho sezwa:

- 'Okukhulu kungcono' – ngabe lokhu kusho ukuthi umsebenzi wami wokulima mncane noma awuqinile?
- 'Ithileji eminimamu', 'ino – thileji', 'i-conservation tillage' – igama elisha elidumile elithi ulusungulwa kabusha kokulima phecelezi 'regenerative farming'; – yuliphi elilungele mina? Yiliphi engingalikhona?
- 'i-Climate smart farming' – Ngingumlimi omncane phecelezi i-small-scale; ngingashintshela kanjani ku-climate smart farming? Ngubani owaziyo ukuthi yini engcono esifundeni sami? Ubani okufanele ngimlalele?

ISIPHETHO

Qina isibindi futhi uyivume leyo ngcindezi yoguquko luhlale lukhona. Akuyona yonke into okufanele iguqulwe. Kodwa kudingeka ukuthi sinethiwekhe, asizifundiseni thina, sixhume emibonweni yochwepheshe futhi silubone lolo guquko ngezinhlobo eziningi kubalulekile empilweni nasemsebenzini womlimi. Abalimi abaphumelelayo nabaguqakayo babalulekile ekwakheni izwe lethu. Ukuthuthuka ngamunye nasekulimeni koyedwa akuguquki futhi kungamandla adingekayo. Ukuthanda ukulalela, ukufunda nokuguquka ukuqala kwempumelelo. Umqondo wokugcina futhi: 'Izolo bengihlakaniphile ngakho ke bengifuna ukuguqula umhlaba. Namuhla nginobuhlakani ngakho ke ngiziguqela mina!' ■

Qaphela izifo

ZAMAQABUNGA emmbileni

NGALESI SIKHATHI SONYAKA AMA-INPUT OKUKHIQIZA UMMBILA KUFANELE NGABE SEKWENZIWE EZINGXENYENI EZISEMPUMALANGA YEZWE. UKU-APLAYWA KWAMA-HERBICIDE NE-TOP DRESS ISENGENZIWA EZINDAWENI ZOKUKHIGQIZA EZISENKABENI NJENGASEFREYSTATA NASENYAKATHO NENTSHONALANGA. KUBALULEKILE FUTHI UKUBA UQAPHELE I-STEM BORERS YOMMBILA.

Kunezinambuzane ezahlukeno kule sigaba ngakho xhumana nabakumele ukuze wenze isiqiniseko sokuthi uthola amakhemikhali afanele a-aplaywa ngokulungile.

Ukucela usizo akulona uphawu lokuba buthaka kodwa ukuba namandla. Kunjalo ke nasezifeni zamaqabunga ommbila. Ukufakwa kwamakhemikhali ngendlela engalungile ngeke kusilawule isifo, isivuno sizolahleka namakhemikhali kusazodingeka ukuba akhokhelwe. Ukushaywa ngemfe iphindiwe.

Umonakalo odalwa yi-grey leaf spot, i-bacterial streak, ne-sunburn kwesinye isikhathi kudidaniswa ne-untrained eye. Ukulawulwa kwalezi zinkinga kuhluke kakhulu, futhi kwezinye izimo akwenzeki. I-Pannar Seed's free smartphone app, i-Sprout ngumthombo wolwazi okahle kakhulu. Uyafingqa futhi unikeze incenzele emfushane yezifo ezibalulekile ezitholakala emmbileni eNingizimu Afrika. Lokhu kwenza ukuba umlimi ngokuhlanganyela nalima nabo endaweni noma abadayisi bamakhemikhali ukuba bamenenje izifo eziqondene ngokufanele.

Ngaphambi kokuba kwenzeka, okubaluleke kakhulu isifo samaqabunga sommbila sinezidingo ezahlukeno ngokwezimo zendawo okuhlalwa kuyo. Okunye futhi, ukukhula ngokhwesigaba somzimba wesitshalo yikho okushoyo ukuthi izifo ezithile zizovela nini.

Isifo samaqabunga ommbila esibaluleke kakhulu okufanele umlimi asiqaphele zihlanganiswe **kuThebula 1**.

I-NORTHERN CORN LEAF BLIGHT

Isifo samaqabunga esivamile esenzeka ezindaweni eziningi ezikhizisa ummbila eNingizimu Afrika yi-northern corn leaf blight (i-white rust) **Isithombe 1**. Izimo zehlalo yendawo eziphromotha isifo yizimo zamazinga okushisa akahle (18°C - 27°C), izimo ezinomswakama namazolo esikhathi



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I-Northern corn leaf blight.



U-Pietman Botha, umbhali wePula Imvula. Thumela i-imeyili ku-pietmanbotha@gmail.com

eside. Ama-fungus aphila ngezinsalela zamaqabunga ommbila, kanye neminye imithelela eminingi ekhula isizini yonke ngenxa yokuba khona komonakalo.

Ngokuvamile omonakalo ubonakala kuqala emaqabungeni angaphansi, futhi njengoba ama-spores akhululwa ngaphansi kwezimo eziwavunayo kulawo monakalo, amahlamvu angaphezulu anomthelela futhi kungathi isifo sikhuphuka nesitshalo.

I-COMMON RUST

I-Common rust (**Isithombe 2**) ngokuvamile ibonakala kokuqala ngesizini ezitshalweni ezisencane zommbila. Izimo zehlalo yendawo eziphromotha isifo amazinga akahle (16°C - 25°C) nezimo ezinomswakama (>95% umswakama). Umthelela i-Common rust iphromothwa yizimo zamazolo/inkungu – ikhakhulukazi ebusuku ngenkathi ama-spores akusafesi yeqabungeni eqhuma ebhoboza iqabunga aze ayofika kustomatha.

Izimpawu zokuqala zomthelela i-rust zibonakala mhlambe ezinsukwini eziyisihlanu emva komthelela wokuqala njengamakhifikhifi amancane emaqabungeni, kanye namaqhuquhuva e-rust yangempela (izinsuku eziyishumi kuya kweziyi-14) (**Isithombe 2**) bese iyakhula futhi ikhulule izinhlavo ezincane phecelezi spores. Uma ziphuma izinhlavo zingasabalaliswa umoya zigcwele indawo enkulu. Lezi zinhlavana zingaze zibe nomthelela kuso leso sitshalo futhi ngayo isizini efanayo.

I-GREY LEAF SPOT

Esinye isifo seqabunga lommbila esibalulekile yi-grey leaf spot (**Isithombe 3**). Izimo zehlalo yendawo eziphromotha isifo amazing akahle okushisa kuye kwaphezulu kanye nomswakama omningi (>95%).

Izimpawu zesifo ziqala ukubonakala ngesikhathi sokuqhakaza – nakuba zingashesha ukubonakala ngaphansi kwezimo zengcindezi epehuzulu yezifo.



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I-Common rust.

Izifo zamaqabunga/Izimpawu	Uhlobo	Izigaba zokukhula	Izimo	I-Fungicide	Ukulawula
I-Common rust (Isithombe 2)	I-Fungus	Izigaba zakamuva i-V (V8+)	Amazinga okushisa akahle (16°C - 25°C).	Yebo	Ukukhethwa kwama-Fungicides ne-hybrid.
I-Northern corn leaf blight (Isithombe 1)	I-Fungus	Izigaba i-V6 kuya ku- R	Amazinga okushisa akahle (18°C - 27°C); Amazolo esikhathi eside/umswakama omningi.	Yebo	Ukukhethwa kwama-Fungicides hybrid, ukushintshaniwa kwezilimo nokutshala ezimvithini zezitshalo.
I-Grey leaf spot (Isithombe 3)	I-Fungus	I-Fungus uma kuqhakaza (VT - R1+)	Amazinga okushisa akahle kuya kwashisayo (22°C - 30°C); amazolo esikhathi eside/umswakama omningi (>95%).	Yebo	Ukukhethwa kwama-Fungicides hybrid, ukushintshaniwa kwezilimo nokutshala ezimvithini zezitshalo.
Isifo semikhwazi yombila (Izithombe 6)	Ivoriyasi	Izigaba i-V	Izindawo zeThrophikha lapho zihlala khona unyaka wonke, kanye nezimo ezikhulisa i-vector activity (ikakhulukazi ezindaweni eziniselwayo ezishisayo).	Cha	Ukulawula i-leaf hoppers (isistimu yokwelapha imbewu nokufafaza nokulawula ukhula).
I-Bacterial streak (Isithombe 5)	I-Bacterium	Ukusuka ekuqhakazeni (VT - R1+)	Izindawo ezifudumele, eziniselwayo.	Cha	Ukushintshaniwa izilimo, amasimu angalinywe nokubulala izinsalela zezitshalo ezinezimbuzane.
I-Sunburn (Isithombe 4)	Inhlalo yendawo	Izigaba zonke	Ukushisa/ukuvimbela ilanga.	Cha	Ukukhethwa kwe-Hybrid nokuphathwa komswakama.
I-Phaeosphaeria leaf spot	I-Fungus futhi mhlambe nebhakteriyamu ephicayo	I-R3+	Izindawo ezinomswakama omningi namazinga okushisa aphilile ebusuku.	Ukusebenza okuphansi	Okungavamile ukudingeka, Kodwa ukukhethwa kwe-hybrid kubulala izinsalela zezitshalo ezinezimbuzane nokuhlehliswa kwezinsuku zokutshala kungasiza.
I-Downy mildew	I-Fungus	Izigaba zokuqala ze- V	Izindawo ezifudumele nezi-swakeme, (ezindaweni ze-Throphikha), Ikakhulukazi emasimini lapho kwabonakala khona izifo esikhathini esiphambili. Amazinga okushisa enhlabathi angaphezulu kuka- 20°C aphromotha umthelela.	Yebo	Ukwelashwa kwenhlabathi nge-metalaxyl, izinsuku zokuqala zokutshala amasimu ahlaselwe yizinambuzane, imbewu eyikhwalithi enhle futhi ukugweme ukushintshaniwa izilimo ngamabele.
I-Diplodia leaf streak	I-Fungus	Zonke izigaba	Izindawo ezifudumele, ezinomswakama nethileji emininamamu.	Yebo	Ukushintshaniwa izilimo nge-agl enhle ngokutshala ezimvithini.
I-Eyespot	I-Fungus	I-R3+	Izimo eziphilile nezinomswakama, oyiminimamu thileji, izilokazana eziyizinambuzane ezifana nama-thrips ne-aphids kungaphromotha ukugcwala kwezilokazana.	Yebo	Ukushintshaniwa izilimo, ukutshala phezu kwezimvithi nokulawulwa kwezimbuzane.
I-Polysora rust	I-Fungus	I-R3+	Izindawo zeThrophika, ukufudumala (24°C - 28°C), isimo sezulu esiswakeme.	Yebo	Ama-Fungicides and earlier.

Lesi yisifo samaqabunga esenzeka kakhulu KwaZulu-Natal naseNkangala engasempumalanga, lapho kuheleza khona inkungu na/noma umswakama omningi namazinga aphezulu okushisa.

Ukhona umcabango oyiphutha wokuthi ama-spores e-fungus ahamba ngomoya kuphela futhi asabalaliswa wumoya nemvula. Ama-spores ngepela angasabalaliswa umoya, kodwa kukhona ama-secondary spores angasabalala asuke kwesinye isitshalo aye kwesinye ngasekupheleni kwezizini – futhi ngokuvamile kuba ngamabanga amafushane.

Empeleni umsuka walesi sifo kuba yizinsalela zezitshalo zangesizini edlule lapho i-fungus ihlala khona, futhi masinyane ngenkathi izimo ziyivuna ngesizini entsha, ama-spores ayakhululwa lokho kungaba nomthelela emaqabungeni angaphasi ezitshalo.

Lo monakalo ukhiqiza ama-spores amasha, kangangokuba njengoba iqhubeka isizini yokukhula, ayakhululwa futhi asabala-

liswe amathonsi emvula nomoya aye emaqabungeni amasha aphezulu esitshalweni. I-grey leaf spot ivamise ukudidaniswa ne-sunburn/drought inhibition (Isithombe 4). Ayisaphathwa ke, eyomonakalo wesomiso ongalawuleki kanye nomsebenzi ongadingekile yezimbangela ze-fungicide njengembambezela ephindiwe kumlimi. Azikho izifo ze-fungal ezibalulwe ngenhla ezishiwo eziyi-seed-borne.

I-BACTERIAL LEAF STREAK

I-Bacterial leaf streak (Isithombe 5) isifo esenzeka ezindaweni ezikhizayo ezisentshonalanga nazo futhi le zimpawu zididaniswa nalezo ze-grey leaf spot. Isifo se-bacterial ngeke silawuleke ngama-fungicides kanye nokufuthwa kwayo kungaba yiphutha elibizayo – ngaphandle kwemiphumela.

Qaphela izifo zamaqabunga...



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I-Grey leaf spot.



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I-Bacterial leaf streak.

ISIFO SEMIKHWAZI EMMBILENI

Isifo semikhwazi emmbileni (**Isithombe 6**) sidalwa yivariyasi yemikhwazi emmbileni. Yisifo esiphicayo, lapho ivariyasi idluliswa yi-*leafhopper*. Izimo zezendawo zithinta isigameko, sokuphila nokusabalalisa okwenziswa yi-*leafhopper* – okunquma ngesigameko namandla esifo.

Ivariyesi yemikhwazi yombila ngeke ilawulwe yi-*fungicide*. Ukulawula ivariyasi yemikhwazi kubandakanya inhlenganisela yezinyathelo zokunciphisa noma ukwehlisa ubungozi besifo. Nakuba izibulala zinambuzane phecelezi *insecticides* zisebenza njengokwelapha imbewu futhi kuvimbele ama-*leafhopper* engazidli izitshalo ezisencane nokungadlulisi ivariyasi, ayikho igaranti noma isixazululo esisheshayo sesifo.

ISIPHETHO

Zikhona ezinye izinhlobonhlobo zezifo zamaqabunga angabalulwanga kule athikhili ngenxa yokuthi azivamile noma zithukela ziba khona. Kodwa lokhu akusho ukuthi ngeke ziwudale umonakalo omkhulu esivunweni ngaphansi kwezimo ezilungile. Ukuze unyakaze ngaso sonke isikhathi, kuhle ukuba uqhubeke nokubuza emithonjeni emihle noma kokwepheshe uma kukhona izimpawu ezisolisayo ezibonwayo. ■



4

I-Sunburn/drought evimbela izimpawu emaqabungeni ombila.



6

Isifo semikhwazi emmbileni.

Ukusebenzela ukuba nabasebenzi abazinikele nabankamunkamu

ABALIMI BANGAPHANSI KWENKULU INGCINDEZI YEZINDLEKO EZIDALWA UKWENYUKA OKUBONAKALAYO KWAMANANI AMA-INPUT OKUBALWA KUWO I-MINIMUM WAGES. INDLELA YOKUNQOBA INGCINDEZI UKUKHULISA UMKHIQIZO. KUMATHIKHILI APHAMBILINI SIXOXILE NGEZINYE IZINDLELA EZINGASETSHENZISWA UKUZE KWENYUSWE IMALI ENGENAYO NA/NOMA UKWEHLISA IZINDLEKO ZOKUNAKEKELA IPHROFITHI IHLALE IKHONA.

Empeleni, abalimi kufanele bezame ukutshala kakhulu na/noma kangcono ukuze bagcine iphrofithi ihlale iba khona. Ngakho ke kuyadingeka ukusebenzisa umzamo wokugcina iphrofithi ngezindlela zonke ezahlukeneyo.

Kule athikhili sizogxila kubasebenzi bebhizinisi nobudlelwano babo nomqashi wabo okwaziwa ngokuthi ezabasebenzi. Ingcindezi yezezimali iphoqa abanikazi/izimenenja zebhizinisi ukuba zibeke abasebenzi bazo ngendlela ehlukile. Izindleko zabasebenzi zikhuphuke kakhulu futhi kelezi zinsuku zingezinye zezindleko eziphuzelu ebhizinisini.

Ukukhiqiza epulazini kuhambelana nabasebenzi abanengi abenza umsebenzi, isikhathi esithathwayo ukwenza umsebenzi kanye nemiphumela yomzamo womsebenzi. Uma abasebenzi bekhinqiza kakhulu, bonga isikhathi na/noma basebenzisa izinsiza ngokugculisayo nemiphumela engcono. Imiphumela kuba ukuncipha kwezindleko na/noma ukwanda kwemali engenayo.

NGABE NGINGAWENZA KANJANI UMKHIQIZO KANGONO?

Ukuze kwenziwe umsebenzi kubandakanyeka abantu nabo basebenzisa ezinye izinsiza (amathulusi nempahla yokusebenza) Ngakho ke **umsebenzi = abantu x izinsiza**. Ngakho ke abantu bangumgogodla ekubeni umsebenzi wenzeke kanti nomqondo wabo ubalulekile. Imigomo okufanele kuxoxwe ngayo iyasebenza noma unomsebenzi oyedwa noma ngaphezulu.

Esikhathini esiphambili abaqashi bebengazi ukuthi isimo somqondo wabasebenzi sibalulekile ekukhiqizeni. Umqondo ojwayelekile bekuba ukuthi abantu abafuni ukusebenza, kudingeka baphoqwe futhi babehlukunyezwa ukuze ubenze ukuba basebenze. Umphumela walokho kwabe kuwukungabikho kobudlelwano nabasebenzi. Izinto zaba zimbi kakhulu kwaze kwaze kwangenelela uhulumeni ngomezamo wokulawula ubudlelwano ngokomthetho. ENgingizimu Afrika sinendathane yemithetho yezabasebenzi okubalwa kuyo Umthetho wezabaSebenzi phecelezi *i-Labour Relationship Act*. Ngokugcina umithetho evunyiwe, abaqashi sebevelo benza isisombululo sobudlelwano obungcono. Kodwa, kuningi okukhona ekwakhiweni kobudlelwano obuhle kunezindaba nje ezishiwo ngumthetho.

Kubekwe kakhulu ukuthi isimo somqondo wabasebenzi sinomthelela omkhulu ekukhiqizeni. Ubudlelwano phakathi komqashi nomsebenzi buwukhiye enjabulweni endaweni yokusebenza nokuxhumana nesisebenzi. Ukungaphathwa kahle kwabasebenzi, umphumela walokho kuba yisimo mqondo esingasihle kubasebenzi, kanjalo nakumqashi. Abasebenzi abanesimo mqondo esingasihle basebenza kancane banwabuluke, umsebenzi bawenza ngokunganaki, bayawephula amathulusi nezinye izinsiza, benza umsebenzi ongagculisi, bafika emva kwesikhathi emsebenzini, bathatha izinsuku bethi beyagula isidingo singekho, nukonye okuningi. Lezi yizo zonke izinkinga ezidala ukwehla komkhiqizo ube phansi.

Uma abasebenzi bekhuthazekile futhi bephethwe ngendlela efanele, bazoba nomqondo ovumayo futhi bazozinikela ekwenzeni umsebenzi ngokufanelekile bazophinde babe abasebenzi abathembekile. Imiphumela – umkhiqizo uba ngcono. Inselelo kubaqashi kuba ukuthi kufanele babaphathe kanjani abasebenzi ukuze bagququzeleke ukutheni benze



U-Marius Greyling, umbhali wePula Imvula. Thumela i-imeyili ku-mariusg@mccgacc.co.za



Ukuba nobudlelwano obuhle nabasebenzi bakho kuzokhulisa umkhiqizo kanye nenzuzo yakho.

umsebenzi ngokugculisayo. Ukusebenza nabantu kungaba nzima ngenxa yokuziphatha ngezindlela ezingafani, ukuphakama kwemimoya, imicabango, ukuziphatha nangezenzo.

Kafushane, kufanele uphathe abasebenzi bakho njengabantu futhi njengoba ungathanda ukuba imenenja ikuphathe ngayo. Phatha abasebenzi bakho ngesizotha, ngenhlonipho, ungenzeleli ngaphansi kwazo zonke izimo, ubone umfutho wabo, ubanikeze emesebenzi bazibophezele, baqeqeshe futhi ubanike umvuzo ngokufanelekile. Khuluma nabasebenzi bakho njalo mayelana nombono wakho nokuhlolile nezinjongo zebhizinisi nendima yabo ukuze ukufezekise lokhu. Ungakhohlwa ukukhuluma nabasebenzi bakho ngendlela abasebenza ngayo futhi ubancome futhi ubabonge uma isidingo sikhona ngokwenza kwabo umsebenzi omuhle. Ungabakhulumi kabi abasebenzi bakho. Kodwa futhi, uqinise futhi uqine ngalokho okulindele kubona. Uma umsebenzi ephambukile, thatha izinyathelo ezifanele ngokwenqubo yakho nangendlela yokumqondisa izigwegwe nangokuziphatha. Ngaleyondlela baphathe ngokungenzeleli nangokuba nomthetho oqinile.

Uma welulekwa ngokuthi kufanele abasebenzi bakho ubaphathe njengabantu, asisho ukuthi kufanele ubaphathe 'njengabangani bakho' kukude kakhulu kunalokho.

Ukuze uthole umkhiqizo omningi uphinde uqinisekise ukuthi ibhizinisi lihamba phambili, kufanele lokho ukuthole kubasebenzi bakho. Udinga abasebenzi abazinikele nabankamunkamu. Ukuze uphumelele kulokhu, kufanele futhi ucabange indlela oqasha ngayo abantu. Qinisekisa ukuthi yimaphi amakhwalithi owafunayo. Ngabe ukutholile ukuhlaziwa komsebenzi ngokulungile? Ngabe uyabaqeqesha emsebenzini abawenzayo? Ngabe uyawazi amandla nobuthakathaka bomsebenzi ngamunye futhi ukusebenzisa ngendlela lokho? Iqiniso nanti, Ungabaphatha kanjani abasebenzi bakho uma ungabazi bonke ngamunye? Ukuze ube umuntu okhizayayo kufanele ukhuthazeke futhi ube nomqondo omuhle namandla namakhono adingekayo.

Abasebenzi bakhe ubaphathe ngobuhlakani ukuze ukhulise ukukhiqiza futhi ukhulise nephrofithi yakho. Umkhiqizo ophezulu ungasadala ukuncipha kwezindleko na/noma ukhulise imali engenayo, lokho kuzoletha iphrofithi engcono ezohlomulisa bonke ababandakanyeka ebhizinisini – umqashi nabasebenzi. ■

Okungenzeka emakethe yombila ngesizini ezayo

KULE ATHIKHILI SIZONIKEZA INCAZELO JIKELELE YESIZINI YOKUMAKETHA KA-2020/2021, NGO-KWEMIGOMO YESAPLAYI NEDIMANDI KANYE NAMANANI ENTENGO.



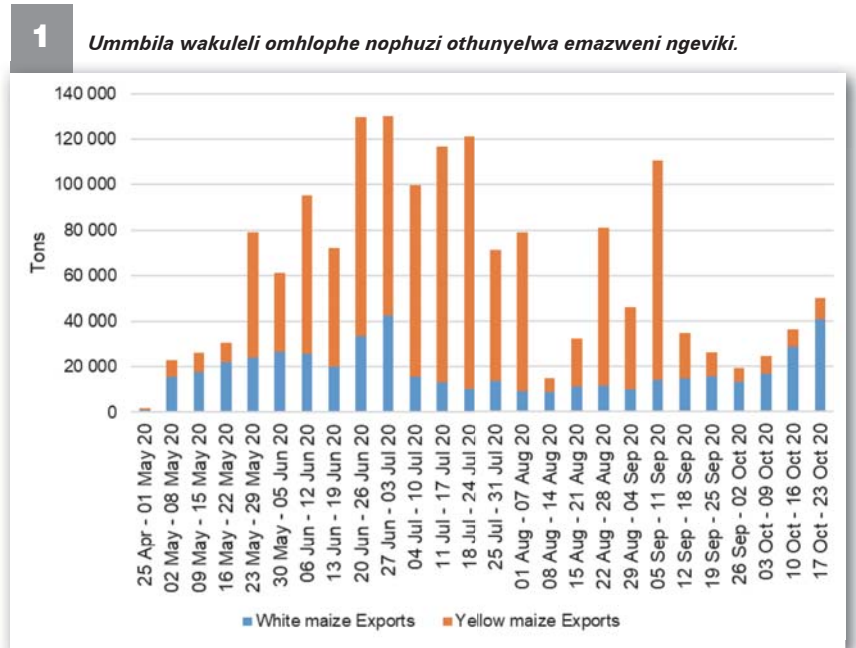
U-Ikageng Maluleke, uSomnotho wezoLimo, kwa-Grain SA. Thumela i-imeyili ku-Ikageng@grainsa.co.za

IZIMO ZEZIMAKETHE ZAMAZWE

Kubukeka kuzokwenzeka okuhle ngesizini entsha yombila emhlabeni jikelele, nomkhiqizo olindelekile ozokwedlula wangesizini edlule ngo-2,8%. Kodwa, izimo ezinhle zezulu ziphansi kwezinye izingxenywe zamazwe akhiqiza kakhulu kubambezela ukuvuna kanye nokutshala, lokhu kuhambisana nedimandi enamandla, ikakhulukazi esuka e-China. Umthelela ubonakala ngokwenyuka kwamanani entengo kubakhiqizi abakhulu abafana ne-USA, i-Ukraine, i-Brazil ne-Argentina; ngenxa yalokho, sibone amanani entengo ekhuphuka nase Ningizimu Afrika, ngenxa yomthelela wesimo sokukhiqiza kanye ne-exchange rate yalawo mazwe anakho ezimakethe zethu zasekhaya.

IZIMO ZEZIMAKETHE ZAKULELI

Ngokwama figa akamuva e-SAGIS, amadilivari omkhiqizi wommbila ngasekupheleni kuka-Okthoba isamba sawo sibe ku-13,8 wezigidi zamathani, u-7,9 wezigidi zamathani kube ummbila omhlophe kanti u-5,9 wezigidi zamathani kwaba ummbila ophuzi, kwafinyelela ku-93,6% ngokombiko wokhiqizo okhishwe yi-Crop Estimates Committee (CEC) (Ithebula 1).



Umthombo: SAGIS

1 Isaplayi yakuleli nedimandi.

	2019/2020	2020/2021
Isaplayi	Amathani	Amathani
Isitoko sokuvula	2 663 086	1 000 601
Okudilivwa ngumkhiqizi	10 887 053	14 750 220
Okuthengwa emazweni	509 684	0
Amadilivari okuqala	15 057	-1 241
Okusele	22 336	28 000
Isamba sesaplayi	14 082 159	15 777 580
Idimandi		
Idimandi yakuleli	11 106 412	11 269 000
Ochwepheshe	1 745 000	2 560 000
• Imikhiqizo	360 812	300 000
• I-Whole maize	1 448 761	2 150 000
Isamba sedimandi	13 081 558	13 890 500
Izitoko zokuvala (30 Ephreli)	1 00 601	1 887 080

Akumangalisi ukuthi asinawo ummbila esiwuthenga emazweni angaphandle, ngenxa yesilimo esikhulu sale sizini. Isitoko sokuvala esilindelekile sokuphela kwesizini (30 Ephreli 2021) silinganiselwa kuba ku- 1,887 wezigidi zamathani ngenyanga. Uma siphrosesa cishe u-939 083 wamathani ngenyanga ngokwe-avareji, lokhu kusho ukuthi sizoba nesitoko esisemazingeni anele esizosiqhuba izinyanga ezimbili noma izinsuku ezingama-61 ekupheleni kwesizini, ngaphambi kokuba kufike amadilivali amasha noma sizothenga kwamanye amazwe.

Idomestiki dimandi yombila isasesimeni esihle U-5,6 wezigidi zamathani ommbila, waphroseselwa ukudliwa abantu, ukudla kwezilwane kanye ne-gristing, lokhu kwaba ukukhula ngo-4,5% uma kuqhathaniswa ngesikhathi esifanayo ngonyaka odlule. U ma sibheka **uThebula 2**, ukuphroseswa kommbila omhlophe kukhule ngo-25%, ngokudla kwemfuyo okuthatha ummbila omningi omhlophe. Kube khona ukwehla jikele ngo-14% kommbila ophuzi uma kuqhathaniswa ngesikhathi esifanayo ngonyaka odlule, nokwehla kakhulu kwe-gristing.

2 Umbila ophroseselwa ukudayiswa kuleli.

	2019*	2020*	y/y % ushintsho	2019*	2020*	y/y % ushintsho
Uphroseselwe izimakethe zakuleli	Umbila omhlophe	Umbila omhlophe		Umbila ophuzi	Umbila ophuzi	
Abantu	2 322 589	2 655 545	14,34	312 310	311 126	-0,38
Izilwane	206 218	519 948	152,14	2 562 390	2 159 822	-15,71
I-Gristing	5 325	5 664	6,37	5 539	3 224	-41,79
Isamba	2 534 132	3 181 157	25,53	2 880 239	2 474 172	-14,10

Umthombo: SAGIS
*Ephreli - Septhemba

Ngokwezilinganiso zesaplayi nedimandi, ikhwantithi yombila okulindeleke uthunyelwa emazweni u-2,150 wezigidi zamathani ngesizini ka-2020/2021 kanye no-1,613 wezigidi zamathani osewuvele. Umbila omhlophe olinganiselwa ku-475 915 wamathani wathunyelwa emazweni angomakhelwane nokuthe kamuva wayiswa e-Italy. Umbila ophuzi wathunyelwa e-Vietnam, e-Taiwan, e-Japan, e-Korea nasemazweni angomakhelwane bethu (uFiga 1). Futhi kukhona umbila ophrosesiwe ongu-300 000 wamathani omkhizozo wommbila ophrosesiwe okulinganiselwa ukuthi uzothunyelwe emazweni ngesizini yokumaketha ka-2020/2021 kanti u-148 927 wamathani asusevele uthunyelwe.

UKUNYAKAZA KWAMANANI ENTENGO

Amanani entengo abekhuphuka ezinyangeni ezimbalwa ezedlule; into eyenza lokho kube ukwenyuka kwamanani enteno emazweni kanye nobuthakathaka be-exchange rate. Kusukela ngoJuni 2020, uDisemba amanani ommbila omhlophe nangokuzayo asekhuphuke ngo-37,8%

nommbila ophuzi ngoDisemba amanani entengo nanokuzayo akhuphuke ngo-29,5% (uFiga 2).

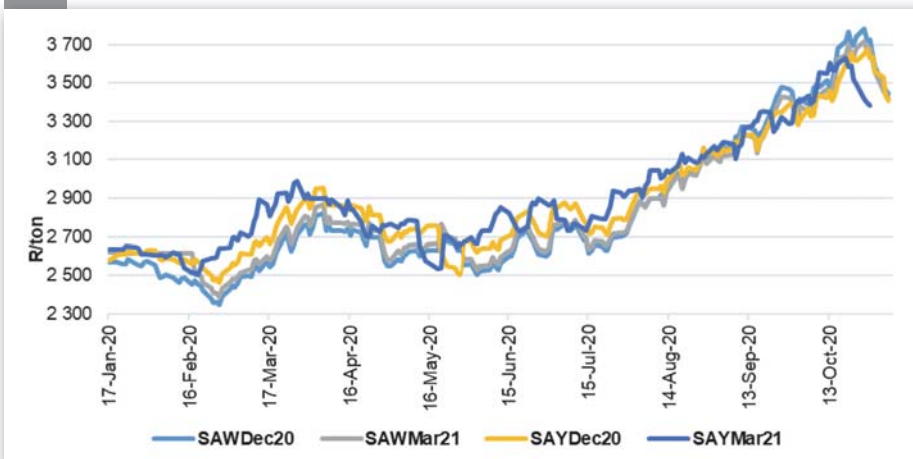
Isibikezelo sesizini entsha ngokwemigomo yezinhlelo zokukhiqiza ibukeka kahle, ngakho ke, kulindeleke ukuthi umkhizozo wakuleli ube muhle ngesizini ka-2020/2021. Ngokombiko wakamuva we-CEC, kuhloswe ukutshalwa u-2,746 wezigidi zama-ha ommbila ka-2021 okungu-135 200 ha ngaphezulu uma kuqhathaniswa nangesizini edlule. Ngesikhathi soku-bhala le athikhili, bekusazotshalwa kakhulu nokho ke busebuningi ubungozi bokukhiqiza, ngakho ke isimo sezulu sisazodlala indima enkulu ezinyaneni ezimbalwa ezizayo.



Idomestiki dimandi yombila isasesimani esihle U-5,6 wezigidi zamathani ommbila, waphroseselwa ukudliwa abantu, ukudla kwezilwane kanye ne-gristing, lokhu kwaba ukukhula ngo-4,5% uma kuqhathaniswa ngesikhathi esifanayo ngonyaka odlule.



2 Ukunyakaza kwamanani entengo yombila omhlophe nophuzi angomuso.



Umthombo: i-Grain SA

Uma sibheka umnyakazo wamanani entengo, uma kutholakale isilimo esihle, amanani entengo kungenzeka asondele emazingeni e-export parity, kodwa amanye amafektha angenza izinqumo kungaba yi-exchange rate namanani entengo akwamanye amazwe. Uma imanani entengo yakwamanye amazwe azohlala ephezulu ne-exchange rate ihlale iphansi njenamazina emali, singabona amanani entengo aphakathi kuka-R2 800 no-R3 400 ngesizini ka-2020/2021.

Uma amanani amazwe ehla ngaleso sikhathi kuthi i-exchange rate iqine, amanani akuleli angehla abe ngaphansi kuka-R2 500. Ngokwesamari, amanani entengo angasuka phakathi kwangaphansi kuka-R2 500/thani anyuke ayofika ku-4 500/thani. Okungenzeka empeleni nokwezimakethe njengamanje. ■



IMIPHUMELA yokungayifaki i-*lime* inhlabathini yakho ene-esidi

SIKE SABHEKA UKUVUNDA KWENHLABATHI, UKUPHATHA IZILIMO ZAKHO KANYE NOKUSHINTSHNISA IZILIMO KUSISTIMU YOMKHIQIZO UKUKHANDA I-HUMUS, AMANYUTHRIYENTI ESITSHALO ABALULEKILE ABANJWE YI-SAND CLAY NE-LOAM COLLOID NOKUKHULISA UKUPHITHANA KWAMA-MICROBES ENHLABATHI NGOKUHLANGANYELA NAMA-APLIKHESHINI KAMANYOLO KWAMANYE AMA-ATHIKHILI ADLULILE EPULA IMVULA. NGICELA UKUBA URIFELE KULOKHU UZIKHUMBUZE FUTHI WENZE NGCONO ISEKELO SOLWAZI LWAKHO.

Isibonakalo esibalulekile sokulima izilimo ezingenisa inzuzo enhlabathini yakho ukwazi nokuqondisisa izinga le-*pH* noma izinga le-esidi yenhlabathi, ezinhlotsheni ezahlukene zenhlabathi, okwenzeka epulazini lakho ngokuwalinganisa ngesikhathi uhlola inhlabathi yakho noma esikhathini esingaphambili koku-plana iphogramu eqinile yokufaka i-*lime*. Uma kunesimuncwana/esidi noma i-*alkaline* eningi kakhulu inhlabathi 'ingalungiswa' ngoku-aplaya ama-*compounds* ahlukene okubalwa kuwo i-*calcitic* noma i-*dolomitic lime* ngokwe-phrogramu ye-aplikheshini ehlelwe ngokucophelela yesikhathi esifushane nesiphakathi emhlabathini ngamunye.



U-Richard McPherson, umbhali wePula Imvula. Thumela i-imeyili ku-richard@agrimetrix.co.za

Uma amandla akho aphezulu nokujula kwenhlabathi kune-esidi kungenzeka ukuthi uyaphuthelwa ekutholeni isivuno esikhulu sesilimo eminyakeni enemvula eningi. Ukungeza ithani noma isivuno esikhulu sommbila ngonyaka eminyakeni eminingi kungafinyelela enanini eliphezulu kokungenayo futhi bese kuba khona ukuqina komnotho isikhathi eside eminyakeni ezayo. Enanini elingu-R2 500 ithani elilodwa eminyakeni eyisihlanu lokhu kuzokuba u-R12 500.

Ukuhlehlisa ukuhlaziywa kwamandla enkinga yesimuncwana kanye noku-implimentwa kwephogramu ye-*lime* efanele kungabiza kakhulu ikakhulukazi uma izilimo ezingenisa inzuzo zidimanda izivuno ezinkulu. Izindleko ngqo zommbila zincike kuthagethi yommbila noma emandleni enhlabathi ebhekekile kungakhava kusukela ku-R7 000 kuya ku-R10 000

ihektha ngalinye emkhiqizweni wenhlabathi eyomile. Lokhu kusho ukuthi isivuno sika-2,8 t/ha kuya ku-4 t/ha siyadingeka ukukhave izindleko ngqo ihektha ngalinye. Njengoba izivuno zalokhu zizokhokhela izindleko ezinqunyiwe ezifana nokukhokhela ibhondi, zikhokhele umhlaba oqashiwe, irenti, ugesi njengokuchaza izindlela ze-akhawunti namaphrogramu. Kubalulekile ukuhlola amandla esivuno sakho eminingwaneni yamarekhodi epulazi. Iningi labalimi lenza isilinganiso esiyihaba ngesivuno sabo sesikhathi eside ngenkathi benza i-*gross margin analysis*.

UKUQONDISISA I-PH

I-*pH* ingalinganiswa ngokwe-*medium* yamanzi noma ngokwe-*chemical buffer* yamanzi

1 Isivuno sesilimo siqathaniswa ne-*pH*.

Isilimo	I- <i>pH</i> yenhlabathi				
	4,7	5	5,7	6,8	7,5
	Okuqondene nesivuno (U-100 muhle kakhulu kodwa u-0 mubi kabi) ireyisho efanele				
Umbila	34	73	83	100	85
Ukolo	68	78	89	100	99
Ubhontshisi isoya	65	79	80	100	93
I-Oats	77	93	99	98	100
Ulusene	2	9	42	100	100
Utshani	31	47	66	100	95

nange-*calcium chloride*. Qinisekisa ukuthi iyiphi oyisebenzisayo. Uhla lwe-*pH* kanye nokukhula kwesitshalo okufanele ne-*pH* (CaCl₂) kubonisiwe ku-**Fig 1**.

Ithebula 1: Inikeza uphawu lwesivuno esi-namandla ku-*pH reading* yehlabathi efanele. Isibonelo, uma utshala umbhala ehlabathini ene-*pH* ka-4,7 uma kuqhathaniswa ne-*pH* ka-6,8 kungenzeka ubone ukuthi u-34% kuphela wesivuno esikhulu esingatholakala kuloyo mhlaba. Ehlabathini ejulile kodwa ene-esidi eningi kakhulu izivuno za-KwaZulu-Natal zinyukile zisuka ku-2,5 *t/ha* ukuye ngaphezulu kuka-8 *t/ha* ngokulungisa i-*pH* yehlabathi ngephrogremu yesikhathi eside yokufaka i-*lime*. Lokhu kungathatha ama-aplikheshini amaningi angafinyelela phakathi kwamathani ayisihlanu nayisikhombisa e-*calcitic* ne-*dolomitic lime* ekhethiwe. I-*dolomitic lime* equkethe i-magneziyamu iyakhethwa uma ikhalsiyamu kumagneziyamu reyisho ehlabathini nayo idinga ukulungiswa.

Lokhu ukubheka nje okukhombisa isimo jikelele. Umlimi ngamunye uba nawo umuzwa wokuthi yini okufanele i-aplaywe kanye nomphumela we-aplikheshini ye-*lime* emhlabeni wakhe eminyakeni eminingi. Umthetho ongangasoze waphikiswa ukuthi uku-aplaywa okuthile kwe-*soil colloid complex* okuthile esikhathini esingaphezulu kwamazini amathathu kuphazamisa uhlelo lokushintsha i-*pH* edingekayo. Uhlolo lwamasizini emhlabeni wakho luzokhombisa inqubekela phambili eyenziwayo efanele ye-*pH* ka- 6,8. Ukwenyuka kwesivuno sesilimo esitholakele nakho kuzokhombisa ukusebenza kwephrogremu yamanje ye-*lime*.

Uma ucabanga ngesamba se-*cation exchange capacity (CEC)* uhlelo lwakho lungabuya lukhombise i-esidi *saturation* ka-30% kuya ku-40% nokuwumhlabathi onesimuncwana esiningi. Ngokwemigomo elula lokhu kusho ukuthi lo-30% kuya ku-40% wezikhala, ku-*soil colloid medium* ukubamba amanyuthriyenti amakhulu afana ne-photheziyamu, salfa, ne-khalsiyamu athathwa ngama-*hydrogen ions*. Ngakho ke inhlabathi ekwaziyo ukubamba noma ukugcina amanyuthriyenti adingekayo ukwenza izilimo zikhule zikhiphe isivuno esikhulu kakhulu. I-*lime* izokwenza ngcono amandla ehlabathi ukuze kubambeke amanyuthriyenti angatholwa yizitshalo angaba ne-akhsesi ngezitshalo kanye nokukhandeka kwezihlamvu.

UHLELO LOKULUNGISA UMHLABA NOMA ICEBO

Isamba secebo lokulungisa singafaka phakathi uku-aplaywa kwe-*calcitic* noma i-*dolomitic lime* ukwenza ngcono i-*pH*, i-*gypsum* ukubhalansisa isalfa, i-MAP yokwenza ngcono isimo sefosfeythi ne-KCL ukulungisa isimo sephotheziyamu. Uma i-aplaywe wosonkontileka le-resiphi



Ukwenza iplane – ukwendla i-lime nge-fertiliser spreader.
Isithombe: NguJenny Mathews

1 I-*pH* yehlabathi ka-5,2 kuya ku-8,0 inikeza izimo eziphezulu sezilimo eziningi ezingenisa inzuzo kwezilimo.

Acidity	Increasingly acid from pH of 6 to 1						Neutral	Increasingly alkaline from pH 8 to 14						
pH	1	2	3	4	5	6	7	8	9	10	11	12	13	14
Soil	No plant growth possible below 3.7													
	ACID							ALKALINE						
	Slightly acid		Ideal pH range for plant growth				Slightly alkaline							

ingabiza phakathi kuka-R1 850 no-R2 500 ihektha ngalinye. Lokhu kungaba yibhuloho eliya kude kwabanye abalimi kanye nenhlabathi efanele okungenani ingakhandwa eminyakeni eminingi.

Ukucabanga nge-*lime* yodwa, izindleko zihambisana nebanga lepulazi kusukela emthonjeni we-*lime* zingaba phakathi kokudliva umkhiqizo kusuka ku-R600 kuya ku-R700 ithani elilodwa kanye nezindleko ze-aplikheshini zika-R200/ha kubalimi abasebenzisa osonkontileka. Abalimi baKwaZulu-Natal ngokuvamile ba-aplaya i-*lime* ngempahla yabo yokusebenza.

Bala izindleko zakho zephrogremu ye-*lime*, ngokuhlanganyela ne-*agronomist* oyithandayo, uphinde uqhathanise izindleko nezimali okubikezelwa ukuthi uzozizuka kusuka esivunweni esandile kumasizini amaningi. Qala ngenhlabathi enamandla aphezulu bese uyahlela ukulungisa umhlaba ngamunye epulazini ngokunjalo eminyakeni eminingi usabalalise izindleko zezimali nobungozi ebhizinisini lokulima.

ISIPHETHO

Abalimi abanolwazi, i-*agronomists*, abadayisi bakamanyolo, abeluleki, nabaye ochwepheshe kulo mkhakha banombono wokuthi 'i-*lime* iyasebenza'. Kodwa cabanga ngemithelela yemali nobungozi ngaphambi kokungena ku-phrogremu egcwele ye-*lime*. Kwenze ngokwesistimu emhlabeni wonke onamandla epulazini lakho. Labo balimi abane-akhsesi emalini yezibonelelo kufanele basebenzise ithuba olinikiwe, masinyane uma kwenzeka ukuba, ufake i-*lime* njenge-siqalo sokusungula inhlabathi efanele ezoqinisekisa isivuno esikhulu esikhathini esizayo. ■



Ukundlalwa kwe-lime. Isithombe: NguJenny Mathews

Ngabe uchazani u-CEC EKUHLOLWENI KWENHLABATHI yakho?

UHLU OLULODWA LOMBIKO WOKUHLOLWA KWENHLABATHI OLUNGAPHANSI KWESIHLOKO ESITHI *CATION EXCHANGE CAPACITY (CEC)* NGOKUVAMILE AYINAKWA NOMA AYIQONDISISWA. LENA YINGXENYE EBALULEKE KAKHULU YENHLABATHI OKUFANELE UYIQAPHELE UKUZE UBHEKE UKUVUNDA KWENHLABATHI, UMPHUMELA WE-APLIKHESINI YE-*LIME* EMINYAKENI EMITHATHU NOMA NGAPHEZULU, IBHALANSI YAMAMINERALI ASE-NHLABATHINI KANYE NOMANYOLO OKHONA OFAKIWE NGOKUNJALO NAMAZINGA OKUVUNDA KWENHLABATHI JIKELELE.

INHLABATHI

Inhlabathi yakhiwe ngemikhakha exubene emine eyisisekelo – ngamaminali, umoya, amanzi kanye ne-*organic matter*. Inhlabathi ejwayelekile ingakhiwa ngo-45% wamaminali, u-25% wamanzi u-25% womoya ne-*organic matter* esukela ku-2% kuye ku-5%. Ingxenyeyeminerali iqukethe izinhlobo ezintathu zezinhlayiya ezingosayizi abangahlukaniswa njengesihlabathi, i-*silt* noma ibumba. Ingxenyeyemele lokhu isetshenziswa ukuhlukanisa inhlabathi njengesihlabathi, i-*loamy sand*, i-*sandy loam*, i-*fine sandy loam*, i-*loam*, i-*silty loam*, i-*silt*, i-*silty clay loam*, i-*clay loam* nebumba.

AMA-ORGANISMS ENHLABATHI

Ngaphakathi kohlaka oluphithene olukhonjiswe ngenhla inhlabathi ihlanganyela nama-organisms amaningi ahlukene okubalwa kuwo ibhaktheriya, i-*actinomyces*, i-*moulds*, i-*algae*, i-*protozoa*, i-*nematodes*, izinambuzane, izibungu, kanye nezimpande zezitshalo. Isisindo sawo onke la ma-organisms singaphezulu kuka-175 milimitha e-*topsoil* engalinganiselwa ku-7 000 kg/ha. Ngakho ke inhlabathi yindawo yokuhlala eguqukayo lapho sitshala khona izilimo zethu kanye noma nyolo abangamakhemikhali.

I-ORGANIC MATTER NENHLABATHI EYENZIWE NGAMAQABUNGA ABOLILE I-HUMUS

I-*organic matter* ingxenyeyencane yenhlabathi eyakhiwe ngakho kokubili ama-organisms ngenhla kanye nezinsalela zezilimo zaphambilini ezake zaphila esikhathini esedlule noma i-*grass ley* ezisezigabeni ezahlukane zokubola. Inhlabathi eyenziwe ngamaqabunga abolile phecelezi i-*humus* uchungechunge olude lwamamolikhuli aphicayo engacubungulwa ngaphansi kwesibonisikhulu phecelezi i-*microscope* okwakhiwa nge-*organic matter* esesigabeni sokugcina sokubola. Inhlabathi yamaqabunga abolile i-*humus* ingakhiwa ngezingxenyeyezinsundu noma ezimpunga futhi ingabonakala enhlabathini emva kwe-minimamu thileji noma kwezindlela ze-*conservation* thileji.

Bheka inhlabathi ehlukunyezwe kakhulu nge-*disc tillage* engezazo izinsalela zezitshalo kanti futhi ine-*organic matter* encane kakhulu bese uyayiqathanisa, uma kungenzeka, nekamakhelwane noma ngenhlabathi ewumakhelwa ngaphansi kwe-*conservation tillage*. Qhathanisa lokhu okubili ngokugubha imigodi yamaphrofayile. Imikhakha ye-*humus* ingabonakala. Ingakhohlwa kuthatha iminyaka eminingi yokwenza i-*conservation tillage* ukuze uphumelele ukuba



U-Richard McPherson, umbhali wePula Imvula. Thumela i-imeyili ku-richard@agrimetrix.co.za

ne-*humus* engapheli. Inhlabathi equkethe u-4% we-*organic matter* kanye ne-*humus* kungasaplaya isikhuthazi/inayithrojini efinyelela ku-200 kg esilimeni. Inamandla okonga izindleko zikamanyolo wenyayithrojini (N).

Uma ungaphenya amaphepha ka-Dr William Albrecht amayelana nenhlabathi kungakukhanyela futhi kube yinzuzo nosizo olwazini lwakho ngendlela yokwenza ngcono inhlabathi epulazini lakho. Inhlabathi nokuphathwa kwenhlabathi ngempela yisihloko esiyindida.



NGABE YINI AMA-CATIONS?

Amanyuthriyenti esitshalo ahlala ku-*soil sand*, *i-clay* naku-*silt* ephithene noma ku-*colloid*. Emhlabathini obhalanse kahle *i-colloid complex* ingabamba ama-elementi abalulekile nezinye izinsalela zihlale endaweni. Izitshalo zingawasebenzisa la manyuthriyenti uma kudingeka ngesikhathi sezimila ezahlukene nasesigabeni sokukhula sokuhluma kwezinhlavu.

Ama-*Cations* ngamakhemikhali *a-positively charged* atholakala njalo ngokuxhumana namanye amakhemikhali noma *i-soil colloid*. Ubunye obahlukene phecelezi *entities* buhlale buhamba njalo, kuyaguquguquka kusuka kwenye inhlangukela kuye kwenye kuso isisekelo sokuguquka kwe-*soil colloid structure* kanye nokuphithana kwe-*microorganism life cycles*.

Inhlabathi ihlolelwa iKhalisiyamu (Ca), iMaganeziyamu (Mg), iPhotheziyamu (K), iSodiyamu (N), i-amoniayamu nayithrojini, amanye ama-*cations* nezinye izinsalelo eziningi zamaminali. La manyuthriyenti *a-positively (+) charged* ngokuvamile abizwa ngokuthi izisekelo phecelezi *bases*. Bangaba



neyodwa noma amabili ama-*positive charges*. Ubunye obu-*Negatively (-) charged* entities aziwa njengama-*anions*.

Uma uxoxa nozibuthe (*magnets*) ezimbili esisodwa sine-*north* ne-*south pole* – uma usondeza ndawonye ama-*north poles* nama-*south poles* lokhu kokubili kuhlukaniswa yi-*magnetic force*. I-*north* ne-*south pole* ehlanganiswe ndawonye azoba yokusondelana futhi abambane ankonkoshelane ndawonye. Kanjalo, kalula nje, amanyuthriyenti ezitshalo *a-positively charged* noma ama-*cations* azodonseleka kusafesi *e-negatively charged*.

Amasafesi *a-negatively charged* atholakala ku-*soil colloid* kanye nezinye ezisipesheli ze-*soil humus*. I-*cation* molekhuli zihlukana ngosayizi nange-*charge*. Ingxube noma amaphesenti ngalinye kuwo onke ama cation anamathele ku-*soil colloid complex* kwaziwa njenge *base saturation*. Noma kalula nje ukuthi angakanani amanyuthriyenti adingwa yisitshalo kuncike emhlabathini ethile.

Ibhalansi ephelele ngokusho kuka-Dr Albrecht nabanye abacwaningi kukanje:

IKhalisiyamu 60% kuya ku-70%, imagneziyamu 10% kuya ku-20%, iphotheziyamu 2% kuya ku-5%, isodiyamu 0,5% kuya ku-3%, amanye ama-*cations* noma izisekelo phecelezi *bases* 5%.

Amazinga esimuncwana noma *e-pH* yenhlabathi kanye nephogramu yokufaka *i-lime* kakhulukazi izonquma kahle ngaphezulu kwebhalansi yamanyuthriyenti kuphemelele. La mabhalansi angenhla manje asekhonjiswa kuma-lebhu amaningi noma kungeze kwabalwa ngokwamanai ahlukene akhonjiswa embikweni womhlaba ohloliwe. Qhathanisa inhlabathi yakho ehloliwe kulokhu okungenhla. Amanani ngokuvamile kubonakala ngokwama miligramu ngenyuthriyenti ngalinye ikhilogramu le nhlabathi.

I-CEC yisilinganiso esibonisa ubuhle benhlabathi yakho ekubambeni amanyuthriyenti abalulekile esitshalo. Amanye amalebhu akhombisa lokhu njenge-*Total Exchange Capacity (TEC)*. I-*sandy soil* yangempela ene-*organic matter* noma *i-humus* encane kakhulu noma engekho izokhombisa i-CEC ephansi kakhulu kanye ne-*organic soil* evunde kakhulu kuzoba ne-CEC ephezulu noma i-TEC.

ISIPHETHO

Bheka imiphumela yenhlabathi yakho iphinde ubheke ukuthi inhlabathi yakho ihambelana kanjani nalokhu. Emva kwalokho usungazenza izinguquko ekulimeni kwakho kanye nasekusebenziseni umanyolo ukwenza ngcono inhlabathi yakho ukuze isebenze kahle isikhathi eside. ■



BHEKANA NEZINKINGA ZEZEZIMALI eNingizimu Afrika

TUKUGQUQUZELEKA KWALE ATHIKHILI KWA-FAKELWA UGQOZI YI-ATHIKHILI EYABHALWA NGU- ANDRIES WIESE – 'IZINKINGA ZEZEZIMALI ENINGIZIMU AFRIKA ZILI-AFEKTHA KANJANI IBHIZINISI LAKHO,' EYASHICILELWA KU-FARMER'S WEEKLY NGOMHLA KA-29 NOVEMBA 2019. IZINKINGA OKWAKUXOXWA NGAZO KWABA UKWEHLA KWAMANDLA EMALI YANGENISWA KUVUBE, UKUBIZA KAKHULU KOKUBOLEKWA IMALI NGENXA YOKUNGENA KUVUBE, ITHEMBA LABATSHALI ZIMALI KANYE NE-CAPITAL OUTFLOWS. OMUNYE ANGAPHINDA ENGEZE NANGEZINGA LOKUKHULA KANCANE NOMA I-GDP NJENGENKINGA.

Kusewunyaka owordwa nje vo, kodwa obekubikezelwa kule-athikhili sekufezekile. Izinga lerandi lehlile okusho ukuthi amandla erandi aphantsi nokwenza amanani entengo yemikhiqizo ethengwa emazweni angaphandle akhula, njengama-*input* ethu amaningi ezokulima. INingizimu Afrika ifakwe esigabeni sikavobe. Lokhu kusho ukuthi abatshalimali emhlabeni wonke jikelele babheka iNingizimu Afrika njengenobungozi ekutshaleni izimali. Lokhu ku-afektha ithemba labatshali zimali, abakuleli nabakwamanye amazwe, eNingizimu Afrika kubi ngoba abatshali zimali abanaso isiqiniseko sokuthi bazoyithola imbuyiselo enhle kwabakutshalile nokuthi kazi bayobuyiselwa imali yabo yini.

Ngasekuqaleni konyaka kwaphinda kwenziwa isimemezelolo sokuthi iNingizimu Afrika isesigabeni sikavobe ngenxa yokuthi i-*Gross Domestic Product* isesimeni esibi. Uma kuqhathaniswa nebhizinisi lokhu kusho ukuthi izwe aliyenzi inzuzo – imali engenayo incane kunaleyo ephumayo. Ngakho ke, iningi imali okudingeka ibolekwe okuze kukhokhelwe zonke izindleko zikahulumeni ezifana namaholo. Ngokwebhizinisi lokhu kuwuphawu lokwehluleka ukuphatha ngokufanelekile.

Ngaphezulu kwalokho, sesiphinde sahlaselwa yilolu bhuhane lwe-*corona* varyasi kanye nomphumela we-*lockdown*. Ngaphandle kwezinselwa ezidalwe umvaelandlini i-*lockdown*, njengoba kubaluliwe ku-athikhili yaphambilini (*Pula Imvula* Septhemba 2020) kanye nezinkinga ezibalulwe endimeni engenhla, isithombe esimfiliba kakhulu sokukhwananisa izimali zokusiza mayelana negciwane le-*corona* zindlaleka. Ukukhwananisa ku-afektha umbono weNingizimu Afrika evela isibukeka kabi mayelana nokutshalwa kwezimali.

Lawa amabhola amagwini ambalwa aphonselwa abalimi bethu abambalwa, amakhulu noma amancane. Mayelana nokuphathwa kwebhizinisi lakho lokulima ubhekana nawo noma ubhekane nala mabhola noma ukugwinja. Inselelo ukuthi onke la mabhola agwinjile angale kokulawuleka kwanoma yimuphi umlimi, angamafektha engaphandle.

Ngokuphathekayo, umthelela walezi zinkinga epulazini kamafushane nje awukuthi ama-*input* athengwa emazweni angaphandle afana nophethiloli, amakhemikhali, omanyolo nemishini sekubiza kakhulu, izimali ezibolekiwe zibiza kakhulu futhi, nezimali okufanele izitshalwe ebhizinisini lakho ziyagqoza. Ngakolunye uhlangothi, kuyiqiniso futhi ukuthi ukwehla kwamandla erandi kuveza ithuba lokuthumela impahla kwamanye amazwe uma kungenzeka.

Asethembe nokho futhi sizilungiselele ukubhekana nala mabhola agwinjile sibheke inhlanhla eza nalokhu. Omunye angalivikela iwikhethi lakho esikhundleni se-*bowled out*. Asikwazi ukungabunaki ubungozi obubandakanyekayo uma ubhekene nobunjalo, kodwa



U-Marius Greyling, umbhali wePula Imvula. Thumela i-imeyili ku-mariusg@mcgacc.co.za

kungaba yinto engasiphaphamisa. Kungaba yinto ewusizo ukubhekana nalamabhola abaziwe ukuze uhlale ungumlimi wesikhathi eside. Abantu kufanele badle.

QINISEKISA UKUTHI IZINYATHELO ZIMI NGOMUMO

Ukubhekana nalezi zingqinamba faka amagilavu nomakalabha bese uthatha i-*bat* yakho:

- Qinisekisa ukuthi **unesistimu efanele yokugcina amarekhodi** ukuze ukwazi ukuhlola izimo zezimali zepulazi lakho ngokufanelekile. Ukusebenzisa umthetho wokucophelela wokulima kuzokusiza ukuqinisekisa amarekhodi nokunikeza ulwazi olungcono.
- Phatha i-*cash-flow* yakho ngokukhuthala ngokusebenzisa **ibhujethi ye-cash-flow** ikakhulukazi mayelana nokuthengwayo. Qaphelisa ngokuthenga e-*spur* sangalesi sikhathi ikakhulukazi uma kuza ezimpahleni ezibizayo (Imishini, ama-implimenti). Isipesheli akosona isipesheli njalo. Ngaphandle kwe-**cash-flow statement** efanele ngeke ukwazi ukulawula i-*cash-flow* ngokufanele.
- Lawula izindleko zakho zangasese noma izindleko zasekhaya – kuyasiza kakhulu futhi uyacebiswa ukuthi ube nebhujethi yakho ehlukile eqondene nalezo zindleko. Ungaphili impilo engale kwemali ongaba nayo.
- Lawula izindleko zakho nama-*input* ngokweplane lebhizinisi lepulazi futhi uthathe izinyathelo zokunciphisa izindleko. Ngokwe-**proper income statement**, ungakwenza. Qinisekisa ukuthi isebenzisa ikhwantithi efanele yama-*input* njengoba uyaliwe/noma kuhleliwe.
- Hlola isimo sezimali zebhizinisi lakho lezolimo ngendlela. Sebenzisa i-**balance sheet** futhi ubhekisise kahle nezikweletu zakho. Isikweletu asiyena umngani wakho futhi izikweletu eziningi zibawisile abalimi abaningi. Njengamanje amazinga enzalo aphantsi ngenxa yalolu bhuhane, kodwa ungakubheki lokhu njengethuba lokuboleka imali eningi. Amareyithi azophinda akhuphuke esikhathini esizayo. Uma kwenzeka uba naso ngempela isidingo sokweboleka imali, xoxisana ngokukhokha inzalo ephantsi kakhulu.
- Hlola izindlela zakho zokukhiqiza. Lima ngemvelo futhi wenze ngcono impilo yenhlabathi yakho. Aplaya imigomo yokulima ngokonga phecelezi *conservation farming*, lokhu kuzokusiza ekunciphiseni izindleko zakho zokukhiqiza.
- Okubaluleke kakhulu – ngabe unayo i-**business plan elungile?**

ISIPHETHO

Ezinye izinyathelo ezibaluliwe kuxoxiwe ngazo kuma-athikhili aphaambilini ngokwama-engela ahlukeno kodwa ukuphindaphinda kugcizelela ukubaluleka kwalezi zinyathelo. Ungakhohlwa ukuthi usizo lokuhlola ibhizinisi lakho kabusha lukhona. Sebenzisa ubuchwepheshe obutholalayo ebhizinisini lezolimo nasezikhungweni ezifana ne-Grain SA. ■

Yazi *ama-threshold* ahambelana nesizini yakho yokutshala

UMA SIKHULUMA NGOKWEMVELO I-*THRESHOLD* YIPHANSI ESEMNYANGO WOKUNGENA EBHILIDINI NOMA EKAMELWENI – UMA UMUNTU ENGENA KULEYO NDAWO, UJOMBA I-*THRESHOLD*. INGAPHINDE ISHO ISIKHATHI ESITHILE, ISIBONELO USUKU OLWANDULELA USUKU LOMCIMBI OTHILE PHECELEZI-EVE EMINYAKENI YAKUDALA NGO-12H00 SISUKE SIMI KWI-*THRESHOLD* YONYAKA OMUSHA, FUTHI UMA UMAKOTI ESEGQOKE INGUBO YAKHE YOMSHADO ESELUNGELE UKUSHADA USUKE EMI KWI-*THRESHOLD* YEMPILO ENTSHA NOMYENI WAKHE.

Ngendlela efanayo singabheka ikhalenda labalimi futhi sibone ukuthi zikhona izikhashi ezimbalwa ngesizini eziyizikhathi ze-*threshold*. Umlimi onolwazi uzozazela nje ukuthi ama-*threshold*, kodwa umlimi osemusha noma osathuthuka kufanele afunde ngama-*threshold* kwezokulima futhi ikakhulukazi, kufanele afunde ukubuza imibuzo mayelana nama-*threshold* athize ngesifunda alima kuso ngokuthatha imibono yabalimi abadala nakochwepheshe bezolimo abanolwazi. Ukwazi izinsuku zama-*threshold* esilimo ngasinye inhlamvu ebalulekile ebhokisini lamathulusi omlimi!

Ngakho-ke ngabe yimaphi ama-*threshold* umlimi okudingeka azi ngawo? Kukhona ama-*threshold* amahle kakhulu okutshala, ukulawula ukhula nokulawula izinambuzane nawokuvuna. Kule athikhili sizobheka ama-*threshold* okutshala.

Lapho kudingeka kube nohlelo olungenziwa engqondweni yomlimi ngamunye njengokuthi ozokulungisa kanjani lokho kuguquguquka kubuyele esimeni esivamile.

IZINSUKU EZILUNGELE UKUTSHALA

Inselele ibhekene nabalimi abasafufusa ukuthola imithombo yezimali yokuthenga ama-*input* ezilimo zabo ngesikhathi esifanele. Abalimi kudingeka baqale ukusebenza kusaqala bahlanganise uhlelo olugculisayo lwepulane



U-Jenny Mathews, umbhali wePula Imvula. Thumela i-imeyili ku-jennymathews@grainsa.co.za

lebhizinisi futhi bayethule kubabolekisi zimali. Futhi ziningi izigigaba esizibonile lapho abalimi beqokwa njengabazohlomula ngephrojekthi enhle – kodwa ngaleso sikhathi mhlambe izimali zikhululwe emva kwesikhathi, noma ama-*input* adilivwe emva kwesikhathi lokhu kuvimbela umlimi ekutheni aqale ukusebenza emasimini ngesikhathi esifanele futhi angeke esakwazi ukulisebenzisa ithuba elihle lezinsuku zokutshala.

Lokhu kudala ukukhathazaka okukhulu ngoba isilimo vele sesidlulelwe yisikhathi ngaphambi kokuba siphume esigabeni sokuqala nesivuno sizophazamiseka. Enye yezinto esizithathe njengezinto ezibalulekile njengezimba eLokuthuthukisa Abalimi beGrain SA ukuthatha iqembu labalimi balifundise ngokubaluleka kwe-*threshold* noma ngezinsuku ezifanele zokutshala ukuze isilimo siphumelele.

Izinyanga ezifudumele

Ngasohlangothile oluphathekayo siyazi ukuthi ummbila yisilimo sesimo sezulu esifudumele. Ummbila udinga inani elithile lamayunithi ashisayo ayigarantiwe ukuze uzokwazi ukukhula uphumelele. Amazinga okushisa alindelekile aphakathi kuka-10°C kuya ku-15°C okutshala ummbila wakho. Ngakho akusizi ukufaka isilimo sakho enhlabathini masinyane futhi.

Imfihlo ukuba ulinde isizini ukuba ifinyelele esimeni esizinzile nesingaguquguquki samazinga okushisa njengoba lokhu kuqinisekisa ukuqhuma okufanayo kwezitshalo ezisencane. Uma izimvula zamuva zikuphoqa ukuba utshala muva kunangesikhathi esifanele, ngakho ke kubalulekile ukwazi ukuthi kufanele ushintshe futhi mhlambe ubheke ukutshale ama-*cultivars* ommbila akhula masinyane noma okungeni ungabe usawutshala ummbila futhi ubheke esinye isilimo esikhula ngesikhathi esifushane. Amaviki okuqala amathathu emva kokutshala abaluleke kakhulu ukubeni isilimo sibe yimpumelelo kanye nezimo ezikhona lapho zizoba nawo umthelela emandleni esilimo.



Success isn't always about greatness. It's about consistency. Consistent hard work leads to success. Greatness will come.

~ DWAYNE "THE ROCK" JOHNSON



Ithimba labahleli

GRAIN SA: PRETORIA

PO Box 74087
Lynnwood Ridge
0040
■ 08600 47246
■ www.grainsa.co.za

UMHLELI UKWABA

Liana Stroebel

■ 084 264 1422 ■ Office: 012 943 8285
■ liana@grainsa.co.za

UMLINGANI WEZOKUSHICILELA

INFOWORKS

Johan Smit ■ Ingrid Bailey ■ Marisa Fourie
■ 018 468 2716 ■ johan@infoworks.biz



Uhlelo lweGrain SA

LokuThuthukisa amaFama

ABAQONDISI BENTUTHUKO

Johan Kriel

Free State (Ladybrand)
■ 079 497 4294 ■ johank@grainsa.co.za

Jerry Mthomboti

Mpumalanga (Nelspruit)
■ 084 604 0549 ■ jerry@grainsa.co.za
■ Office: 012 943 8289 ■ Smangaliso Zimbili

Jurie Mentz

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

Graeme Engelbrecht

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

Luke Collier

Eastern Cape (Kokstad)
■ 083 730 9408 ■ luke@grainsa.co.za
■ Office: 012 943 8280 ■ Luthando Diko

Liana Stroebel

Western Cape (Paarl)
■ 084 264 1422 ■ liana@grainsa.co.za
■ Office: 012 943 8285 ■ Hailey Ehrenreich

Du Toit van der Westhuizen

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

Cwayita Mpotyi

Mthatha
■ 078 187 2752 ■ umthata@grainsa.co.za
■ Office: 012 943 8277

IPULA IMVULA IYATHOLAKALA FUTHI NANGALEZI ZILIMI EZLANDELAYO:

IsiZulu, IsiNgesi, IsiTswana, IsiSuthu, nesiXhosa.

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Yazi ama-*threshold* ahambelana...

Qinisekisa ukuthi uyasazi isikhathi esifanele se-*threshold* yokutshala kanye ne-*threshold* ethi 'isikhathi sesihambe kakhulu ukuba ungatshala'.

Izinyanga zamakhaza

Ngeke sikhohlwe ukuthi okunye ukwesabela isilimo kufika ngasekupheleni komjikelezo wokukhula ngokuqala kokungena kwezinyanga ezibandayo. Isilimo sommbila sidinga phakathi kuka-120 kuye ku-140 wezinsuku ezingenaso esithwathwa nokho kuya nge-*cultivar*. Ngenxa yalesi sizathu awukwazi ukungena engozini ngokutshala imbewu yombila sekwedlule isikhathi ngoba isithwathwa singadala okhulu umonakalo esitshalweni sommbila osengakavuthwa lokho kungadala ukulahlekelwa kakhulu yisivuno.

Kukhona futhi i-*threshold* efanele isikhathi sokuvuna – ngaleso sikhathi izitshalo eziningi zisuke sezivuthwe ngokuphelele. Siyabazi abalimi abasathuthuka abafakelwa ingcindezi abanikazi bemfuyo ukuba bavune izilimo zabo emasimini ukuze abalii befuyo bezodedela izinkomo zabo zidedelwa ziyokudla emasimini ommbila. Ngaso sonke isikhathi lokhu kudala izinkinga. Isikhwebu sommbila esivunwe sinomswakama omningi siyashwabana phecelezi-shrivel, sehlelwe yisisindo futhi lokho kuletha okukhulu ukukhathazeka, kungenzeka wonakale noma kube nezifo. Isivuno

ngeke siphumelele uma isikhathi sikuvuna singanakwa.

Izinsuku ezithile zesifunda

Sikhulumama ngefasitela lamathuba kodwa futhi kubalulekile ukukhumbula lezo zinsuku zokutshala eziqondene ngqo naleso sifunda. Isikhathi esihle sokutshala umbila eMpumalanga sahlukile esikhathi esihle sokutshala umbila eNyakatho neNtshonalanga. Kokubili amazanga omswakama enhlabathini kanye namazinga okushisa kudingeka kube semazingeni afanele e-*threshold* ukuze imbewu iphumelele.

Uma uyazi i-*threshold* yakho efanele futhi ungaxila phakathi kwalezo zinsuku, izilimo zizoba nethuba elihle lokukhiqiza izivuno ezinkulu ngoba yingaleso sikhathi lapho isitshalo sikwazile ukuthola ithuba lokuhluma/khula sifinyelele esigabeni sokukhula nokuvuthwa ngokuphelele ngaphansi kwezimo zeklayimethi ezivumelayo mhlambe nasezimvuleni ezinhle, ilanga elanele namayunithi okushisa anamazanga okushisa akahle ebusuku.

KWAZI ONGAKUKHETHA

Abalimi kudingeka bazi futhi baqaphele. Lapho kudingeka kube nohlelo olungenziwa engqondweni yomlimi ngamunye njengokuthi ozokulungisa kanjani lokho kuguququka kubuyele esimeni esivamile. ■



Khona manje ukwazi ukuqedela I-topdressing. Isithombe: NguJenny Mathews