

PULA INVULA

Incwadi yeGrain SA
yabalimi abasakhulayo

FUNDA NGAPHAKATHI:

- 4 > Iphrogramu Lo-
kuthuthukisa Abalimi
lippiwe ikheshi lokuli-
vusa liphile
- 8 > Usoya – isitshalo som-
hlaba esimangalisayo
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longwe basesibayeni
njengomanyolo



Abasizayo ngokuqhubeka ngale phrogramu: Abahlezi phambili ngokusuka ngobunxele kukhona uLawrence Luthango noJerry Mthombothi noJane McPherson. Emuva ngokusuka ngunxele kukhona uJohan Kriel, uJurie Mentz, uDanie van den Berg, uJan Househam, uToni Loots noWillie Kotzé.

Abalimi abasakhulayo bathola ukubongwa ngoba basebenze kahle kakhulu

EKUSENI NGOSUKU OLUCISHE LUBHEKEKA NGATHI INTWASAHLOBO IFIKILE EBLOEMFONTEIN, ABALIMI ABASAKHULAYO BATHOLE UKUBONGA NGOBA BANIKEZE UKULIMA KWEZWE LETHU UKUTHUTHUKA. "USUKU LOMVUNO" ABANYE ABAKULEPHROGRAMU BEBATHANDA UKUBIZA LOKU SUKU KWAKUNGU-SUKU LAPHO IGrain SA, ABASEBENZISA IPHROGRAMU LOKUTHUTHUKISA ABALIMI BACABANGE UKUMA KANCANE UKUBONGA ABAKHIQIZI ABASEBENZA NABO NOKUGUBHA UMKHOSI NGOMSEBENZI WABO OMUHLE.

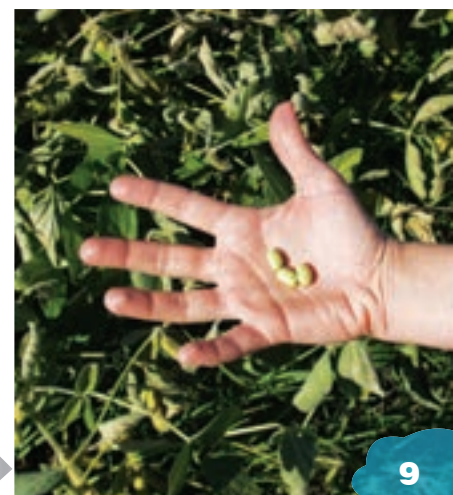
UJannie De Villiers (CEO-Grain SA) wathi umgomo wabalimi abasakhulayo kufanele uqonde ukungena emnothweni wesizwe. "Badinga ukuba aba-

limi bezomnotho ukuze bazokwazi ukukhiqizela izwe namanye amazwe ngebhaji eliqhubekayo". Wavuma futhi wababonga futhi ngoba bayaqhubeka kodwa bayazi kukhona izinkinga kule bhizinisi. "Ubuhle bomsebenzi wabo buphakamisa bunikeza abantu amandla futhi buhlonipha Unkulunkulu. Laba abalimi banikeze izwe amandla ngoba bakhombisile ukuthi ukusebenza emasimini ngokukhuthala kuzoletha inzuzo". Washo futhi ukuthi udabukile ngoba emva kweminyaka engu-17 umsebenzi wokulima awuzange uhlanganise. Wathi, "IGrain SA lizosebenza kakhulu ukuze lokhu kwenzeke".

UJenny Matthews (weGrain SA) wavuma ukuthi kukhona izinto ezinzima ezibalandele, "Yebo,



4



9



Unkz Jane uthi...

Akwenzeki kaningi ukuthi singathi izinto zihamba kahle! Siyababula ngoba sikwazi ukutshela bonke abafunda lokhu ukuthi siphumelele ukuthola imali elingana ngamamiliyoni anguR35 kuMnyango Wezokuthuthukisa Okwezimaphandleni Nokuguquka Komhlaba (DRDLR) ukunikeza izimali kubakhigizi abangu-16 eFreyistata.

Ngo-2010, sixoxe kaningi ngoMyango Wezokulima, besikholwa ukuthi sizothola usizo kubo ukuze abalimi bethu bazokwazi ukuqala ukulima. Akuzange kwenzeke lutho. Kodwa kukhona into enhle evele lapho: abaseDRDLR bazwile ngenkinga nemizamo ngenkinga nemizamo yethu basebathi bona bazosizisa.

Ngalo nyaka sihlale kahle sihlale kahle amapulazi angu-16, abakhigizi abengamalunga ephrogramu yethi iminyaka neminyaka, amalungu eziqumbi zokufunda, izinsuku zabalimi, amaphrogramu zabalimi aphezulu nezinye izifundo zokuqeqeshwa. Sibalungisele amasu ebhizinisi analokhu okulandelayo: okwezimishini (ukuthenga nokulungisa ogandaganda nemishini), uthango nokwakha izinto zokunikeza amanzi, izindlu, izimfuyo nezindlela zokuqala ukukhigiza. Siwanikezile lawo masu, manje lonke ibhajeti lifakwe ebhange ku-akhawunti leGrain SA.

Zonke izinto zilungisiwe, izinto zokubala nohlelo lwama-akhawunti nezindlela zokuqala ukusebenza. Ngokwamanje sesizise abakhigizi ngokuqala imisebenzi ukuthola nokulungisa ugandaganda nemishini futhi konke okuhambelana nokuqala ukukhigiza kuqhubeka kahle.

Sifisa ukubonga bonke abaseDRDLR ngoba basithembile futhi sifisa ukubatshelela ukuthi thina nabakhigizi sizozama ngawo onke amandla ethu ukuphumelela phambili. Sikholwa ukuthi sizokwazi ukusiza abanye abakhigizi nakusasa.



Abalimi abasakhulayo bathola ukubongwa ngoba basebenze kahle kakhulu

kukhona izinsuku lapho kungathi siyahluleka ukuwina, kodwa bese kufika usuku njenganamuhla lapho sikwazi ukuthokoza. Ezinye izindawo kukhona umphumelelo, kukhona amapulazi asuke ukukhigiza ithani elilodwa ehekthelini kodwa manje lelo pulazi likhigiza amathani amane ehekthelini, sibona ukuthi impilo yabantu iyaphenduka ngenxa ukulima kahle nabanye abantu bayasizakala".

UJane McPherson (Umphathi Wephrogramu Lokuthuthukisa Abalimi leGrain SA) wathi iNingizimu Afrika idinga isigaba sokulima esinamandla futhi bafanele baxoxe ngezwi linye. "Asikwazi ukuxoxa ngendlela ehlukene ekulimeni. Sidinga ukuba nokudla namuhla nakusasa; abekho abanye abazosinika ukudla ngaphandle kwabakhigizi bethu. Ukulima kuyisisekelo sezinto zomnotho, kunikeza umsebenzi kubantu abanengi". UJane wathi futhi ukuthuthuka ekulimeni kubalulekile esigatsheni sokulima. Waphinda futhi ukusho ukuthi kubalulekile ukuthuthukisa abakhigizi. "Ukuze sithole isigaba sezomnotho, sixoxe ngezwi elilodwa kufanele sibheke kahle ukuthuthukisa umuntu. Lapha asikhulimi ngemali nangezinye izinto, sikhuluma ngani. Sonke sinazo izidingo kodwa mhlawumbe ukulima kungasisiza lapho". Waphinda wathi bafuna ukwakha umoya othi sinendawo yethu lapha. "Kuyinto njengokwakha ukushintsha impilo yomuntu ibe ngcono. Sifuna ukuthola ukuzibheka lapho kukhona izidingo nokuthuthukisa ikhwalithi lempilo".

UJane McPherson watshela ababakhigizi ukuthi ukusherisa amaphutha abo. "Emvukwamaphutha kukhona izinto ezinhle ezifundisayo. Lapho senza amaphutha kodwa asitsheli muntu sizogcina siphinde ukwenza lawo maphutha

futhi – uma utshela abanye wena nabo bazofunda".

IGrain SA lizama ukwenzani kule phrogramu labo?

Umgomo ekugcineni kungukuthuthukisa abalimi abanamandla, abaqhubekayo ukuzisebenzela ukuze babe abakhigizi bezomnotho.

Bafuna ukuthuthukisa abakhigizi bezomnotho abakhigiza ukudla okuzinhlamvu nokusekela ukuthola ukudla nakusasa ezweni lethu. "Lapho ukwazi ukusebenzisa umhlaba (ipulazi) wakho ngendlela efanelekile nawe ungasekela umsebenzi wokuthola ukudla nakusasa ezweni lethu. Lapha asikhulumi ngomhlaba kuphela, ngemishini, imakethe, imali noma amakhono, sikhuluma ngokuhlanganisa konke lokhu. Kuthatha isikhathi, aweqi nje bese uba umkhigizi, uyakhula kuze ube umkhigizi", washo uMcPherson.

Abakhigizi abathole umklomelo lo nyaka bafakwe ezigatsheni ezilandelayo:

- Abakhigizi Abazilimelayo endaweni encane (abalimi abalima amahektheli angu-1-10);
- Abalimi abalima ezindaweni ezincane (labo abasuka kulima amahektheli ayishumi (10) baze bakhigize bafike kumathani angu-250).

Amalunga e250 club (abakhigiza ukudla okuzinhlamvu okungaphezu kwamathani angu-250 ngonyaka) namalunga e500 club (abakhigiza ukudla okuzinhlamvu okungaphezu kwamathani angu-500 ngonyaka) babongwa futhi kulo mhlango.



UEL MARIE SCHOEMAN, WEPULA/IMVULA



Abasponsori bale phrogramu: UDiale Mokgojwa (Standard Bank), uDudu Mashile (Monsanto) noRudy Mostert (Profert).



Abaphakanyisiwe: uhlobo lwabalimi abakhiqiza ukudla endaweni encane: UWilson Tyelaphantsi, uSandisile Colbert Timakhwe, uCaledon Quta (Ogcinayo), uElijah Tefelo Mohapi, uThulane Mduduzi Mbele (Owinileyo), uBen Saul Gininda, uElmon William Mthombothi noSehere Daniel Makgoana (Ogcinayo).



Abaphakanyisiwe: uhlobo lwabalimi abazilimelayo (abathengisi): UMzoliswa Benedict Gxiva, uMbuzeli Spondo (Ogcinayo), uMfaniseni Alpheus Mnculwane (Owinileyo), uBhekithemba Bethuel Mtshali (Ogcinayo), uBilly Essential Mthimkhulu noClinton Mbongiseni.



Amalunga e250 Ton club: UMponeng Lidia Lentoro (eFreyistata), uMoleleko Jacob Mthimkulu (eFreyistata), uLerato Modise umukela umklomelo endaweni ka-Siphiwo Gift Mafuleka (eMpumalanga) noSempe Lucas Mokgethi (eNorthWest).



Umlimi wonyaka okhiqiza endaweni encane: UThulane Mduduzi Mbele.



Amalunga e500 Ton club: UJohn Mpau Dipali (eFreyistata), uRuben Moiloa Maphira (eFreyistata), uThemba Johannes Congwane (eMpumalanga) noLerato Modise umukela umklomelo endaweni kaZodiwe Paul Motshwene.



Umlimi ozilimelayo wonyaka: UMfaniseni Alpheus Mnculwane.

Iphrogramu lokuthuthukisa abalimi liphewe ikheshi lokulivusa liphile

UMGOMO WEPHROGRAMU LETHU LOKUTHUTHUKISA ABAKHIQIZI ABASAKHULAYO UTHI: “UKUKHULISA ABAKHIQIZI BEZOMNOTHO ABAMNYAMA NOKUNIKEZA UMNDENI NEZWE UKULONDEKA KOKUDLA NAKUSASA”. SIYAZAZI IZIKINGA ABAKHIQIZI BEBHEKENE NAZO. UKUSEBENZISA UMGOMO WETHU SIDING UKUTHI ABAKHIQIZI BATHOLE ULWAZI NAMAKHONO, UMHLABA, IMISHINI NEZIMALI ZOKUQALA UKUKHIQIZA. NGEMINYAKA EDLULEZE INTENGISO YOKUDLA OKUZINHLAMVU KWENZE UKUTHI KUBENZIMA UKUTHUTHUKISA ABALIMI BOKUDLA OKUZINHLAMVUKUBE – IZINDLEKO ZOKUQALA UKUKHIQIZA BEZIKHUPHUKA NJALO KODWA INANI LENTENGISO LISEPHANSI.

Nokho siqonda kahle ukuthi ukulima kuyibhizinisi, futhi ibhizinisi lifanele lithole inzuzo ukuze likwazi ukuqhubeka kodwa sibhekene nenkinga – kufanele umlimi aqhubeke ukutshala izitshalo ukuze athuthukise ikhono lakhe ukuba umkhiqizi. Awukwazi ukutshela umlimi “Qala ukulima”, bese uthi “Khawula ukulima”. Uzokwenzani ngamasimu ake ngesikhathi thina silinda kuze isimo sezulu nezemali ziba ngcono?

Ngonyaka odlule sizame ngawo onke amandla ethu ukuthola Umnyango Wezokulima Wezwe ukusiza 152 abakhiqizi bethu ngegranti leR1 500 ehektheleni ukunciphisa inani lezindleko ezikhuphukayo ekulimeni. Ngokwaleka sithole ukuthi abazange benze lutho maqondana ngesicelo sethu. Siyazi ukuthi uMnyango unemali evela kuLima Letsema efanele inekwezwe kubalimi abasakhulayo, kodwa bona bayisebenzise ngendlela efanele bona kuphela. (Thina siyazi ukuthi Umnyango Wezokulima WaseGauteng unikeze izinto zo-

kuqala ukulima ngo-11 Mashi 2011, kodwa lezo zitshalo bezifanele zitshalwe ngo-Novemba 2010. Sizwile futhi ukuthi iNorth West neFreyistata babuyisile ibhaji labo – abazange balisebenzise. Lokhu singaphinde sixoxe ngakho ngesinye isikhathi.

Sixoxe kaningi noMnyango Othuthukisa Okwasemaphandleni noMnyango Oguqula Umhlaba. Bona bathi ikhona imali engaya kubalimi abathole umhlaba maqondana nomthetho wokuguquka umhlaba. Lezo zimali zingatholwa abalimi beSLAG, iLRAD nePLAS, kodwa abalimi abalima umhlaba olinywa ngumuzi wonke abakwazi ukuyithola leyo mali (kodwa thina sicabanga ukuthi ukuthuthukisa abilimi basemaphandleni nabo bafanele bathole leyo mali njen- gabalimi abalima umhlaba olinywa ngumuzi wonke).

Emva kokuxoxa isikhathi eside neminyango yesizwe neyamaphrovinci, si- vumelene ukuqala iphrojekthi elisha eFreyistata. Ngokwamanje sesiqhubeka ngendlela elandelayo:

1. UMnyango Othuthukisa Okwasemaphandleni noMnyango Oguqula Umhlaba (DRDLR) bakhombisile ukuthi banalo ilisti labakhiqizi abazokwazi ukuphinda ukuthola imali.
2. Kule Phrogramu lethu leGrain SA Lokuthuthukisa Abakhiqizi nathi be- sinalo ilisti labakhiqizi abangamalunga baleli phrogramu lokuthuthuka im- inyaka eminingi.
3. Sithole abakhiqizi abaselistini loMnyango naselistini lethu, sase saca- banga ukuqhubeka nabo ngale phrojekthi lethu. Sibakhethe ngendlela elandelayo: umkhiqizi kufanele abe ilunga lale phrogramu lethu lo- kuthuthuka okungabi ngaphansi konyaka owodwa. Futhi kufanele aye





kuzifundo zethu ezintathu zokuqeqesha, kufanele ahlale kulo lelo pulazi noma eduze nalo, futhi abe ngumlimi oqobo.

4. Siye kuwo wonke amapulazi sabheka konke okudingekayo ukuguqula umlimi othile abe ngumkhiqizi okhiqiza ngendlela efanelekile, futhi besifuna nokumsiza asebenzise izingcebo zemvelo ezikhona ngendlela efanelekile. Sibalungiselele isu lebhizinisi elinalokhu okulandelayo: ukuthenga ogandaganda nemishini okusha noma okusasebenza, ukuthenga kwezimfuyo, ukumisa uthango, izidingo zamanzi, amathulusi, ukuthatha amasampula omhlabathi nayo yonke imali (100%) edingekayo yokuqala ukulima noktshala ngonyaka wokuqala.
5. Sihlanganisa isivumelwano ngaphakathi kwethu neDRDLR esikhombisa ngokukhanya ukuthi uyini umsebenzi nezibopho zethu sonke. Isivumelwano sisayinwe yithina neDRDLR.
6. Sivule i-akhawunti elisha lalezi zimali kuphela – kufanele nje ukuthi omunye walabo ozosizakala ngalezi zimali asayine futhi.
7. Isu lebhizinisi elilungisiwe lixoxiswe nabo bonke abakhiqizi. Ekugcineni siqinisele ukuthi umkhiqizi uyazi ukuthi isu lithini futhi uyalemukela.
8. Umkhiqizi ngamunye usayine isu lebhizinisi lakhe.
9. Lawo masu ahanjise Mnyango weDRDLR.
10. Zonke lezo zimali zingeniswe ku-akhawunti ebhange (amamiliyoni angu-R29 258).
11. Ngokwamanje sisasebenza ukuhlanganisa isu lokusebenzisa konke lokhu ngendlela elandelayo:
 - a. Umkhiqizi ngamunye unomaluleki othembekileyo.
 - b. Umkhiqizi ngamunye wabuzwa ukuthi anikeze amagama nezindlela

zokuthintana nalabo abamthengisela izinto azidingayo (ukuze akwazi ukuqinisa nokwakha ukuhlangana nabo ukuze akhulise ibhizinisi lakhe).

- c. Umphumela wamasampula omhlabathi ufakwe kule phrogramu lethu ukuze sizokwazi ukubona ukuthi umkhiqizi uhambelana nomlayezo lapho elima.
- d. Kuzotholwa inani lezimali elibizwayo lapho kungenzeka (ngaphandle kwemishini ezake zasebenza, ukulungisa ugandaganda nemishini nedizili).
- e. Ukhiqizi ngamunye uzorejestiwa ohlelweni olibizwa ngokuthi "Cash Focus". Uku-oda nokukhokhelwa kuzokwenziwa ngaphakathi kohlelo lweGSA.

Izinhliziyo zethu zivuswa le phrojekthi lethu ngoba laba abalimi baqeqeshwe kahle futhi bajwayelele ukutshala ukudla okuzinhlamvu; banohlelo oluzobasekela lapho banenkinga; siyakwazi ukubsiza ukuthenga ogandaganda nemishini okudingekayo ukulima ngendlela efanelekile; bazothola 100% yezimali ezidingekayo ukuqala ukulima ngonyaka wokuqala, futhi kungathi intengiso yokudla okuzinhlamvu nezimbewu zikawoyela (ubhontshisi namantongomane) izokhuphuka ngalo nyaka ozayo.

Uma konke lokhu kuhamba kahle sizosondela kumgomo wethu othi: "Ukukhulisa abakhiqizi bezomnotho abamnyama nokunikeza umndeneni nezwe ukulondeka kokudla nakusasa".

**UJANE MCPHERSON, UMPHATHI WEPHROGRAMU
LEGRAIN SA LOKUTHUTHUKISA ABAKHIQIZI ABASAKHULAYO**

Kuwayilense

Ungawadlulisi amaphrogramu alandelayo athintana neminingwane eminingi efanele inakwe abakhiqizi abasakhulayo. Qinisa ukuthi uzolalela.

IRediyo	Usuku lweviki	Kuzonikezwa ngubani	Isikhathi
IRediyo Qwaqwa	Ngolwesine	UJohan Kriel	19:00 - 20:00
IRediyo Mafikeng	Ngolwesine	UTonie Loots	19:30
Zululand FM	Ngomgqibelo	UJurie Mentz	06:10
Ligwalagwala FM	Ngolwesine	UJerry Mthombathi	05:10
Umhlobo Wenene FM	Ngolwesibili	ULawrence Luthango	04:30
Alfred Nzo FM	Ngomsombuluko	Ulan Househam	19:00 - 20:00



Izimbewu zikawoyela nezamaphrotheni

Kungani sitshale usoya?

IZIMBEWU ZIKASOYA ZINGAPHEZU KWAZO ZONKE EZINYE IZIMBEWU ZIKAWOYELA. USOYA OTHENGISWA EMAKHETHINI EMHLABENI JIKELELE UNGAPHEZULU KABILI NAKWEZINYE IZINHLOBO ZEZIMBEWU ZIKAWOYELA. IZINHLOBO ZEZIMBEWU ZIKAWOYELA EZITHENGISWAYO YILEZI: IZIMBEWU ZIKASOYA, IZIMBEWU ZIKAKOTINI, IZIMBEWU ZAMANTONGOMANE, IZIMBEWU ZIKABHEKILANGA, IZIMBEWU ZIKAREYIPU (RAPE), IZIMBEWU ZEFULEKISI (FLAX), I'COPRA' NE'PALM'.

Ubhekilanga nosoya yizitshalo ezikhiqiza izimbewu zikawoyela ezitshalwa kakhulu lapha eNingizimu Afrika. Izimbewu zikakotini nekanola azitshalwa kakhulu. Izimbewu zikakotini zikhiqizwa ngokusuka kumathani angu-15 000 kuya ku-32 000 ngonyaka. Umkhiqizo kakotini ungaphansi kwa-4,7% uma siwulinganisa nosoya. Umkhiqizo wekanola (izimbewu) ungaphakathi kwamathani angu-31 000 namathani angu-40 000 ngonyaka. Uma silinganisa ikanola nosoya sizobona ukuthi ikanola beyifika ku-30%, kodwa manje sekwehlile kufika ku-5% kuphela.

Inkambiso yokukhiqiza nobukhulu bezindawo lapho kutshalwe khona ubhekilanga, usoya namatongomane kukhonjiswa kulamashadi alandelayo.



Umkhiqizo ngamathani wezimbewu zikawoyela njalo ngonyaka eSouth Africa

	Oluqobo	Oluqobo	Oluqobo	Oluqobo	Ngaphambili
ISITSHALO	2007/2008	2008/2009	2009/2010	2010/2011	2011/2011
Ubhekilanga	872,000	801,000	516,265	861,770	
USoya	282,000	516,000	566,000	708,750	
Amantongomane	88,800	99,500	88,000	69,420	

Amasimu atshalwa ngezitshalo zikawoyela (amahektheli) njalo ngonyaka eSouth Africa

	Aluqobo	Aluqobo	Aluqobo	Aluqobo	Ngaphambili
ISITSHALO	2007/2008	2008/2009	2009/2010	2010/2011	2011/2011
Ubhekilanga	564,300	635,800	397,700	642,700	
USoya	165,400	237,750	311,450	418,000	

Isilinganiso somvuno ongatholakala njalo ngonyaka, amathani ehektheleni (nokulinganisa okungaphezulu – 'extra')

	Esiqobo	Esiqobo	Esiqobo	Esiqobo	Ngaphambili
ISITSHALO	2007/2008	2008/2009	2009/2010	2010/2011	2011/2011
Ubhekilanga	1,54	1,25	1,29	1,34	1,35
USoya	1,70	2,17	1,81	1,69	1,84
% Extra	10%	73%	40%	26%	36%

Lokhu okuphezulu kukhombisa kahle inkambiso yokukhiqiza eyandayo ngoba nokudinga kwalo kudla nakho kuyanda. Lokhu kukhombisa ukuthi imakethe litshela abalimi ukuthi bangaqhubeka ukuqala ukutshala usoya noma ukwandisa umvuno wakhe.

Ngaphezulu singabona ukuthi umvuno kabhekilanga nosoya unjani. Ngeminyaka emine usoya wayengaphezu kwabhekilanga nge-36%.

Uma nawe uthole umehluko ofana nalokhu epulazini lakho bese uzokwazi ukubala inzuzo engenayo. Sebenzisa umvuno ovamekile njalo ebhizinisini lakho epulazini uma unazo lezi zinombolo.

Izintengiso zokuvala ngoMeyi 2012 zamankotilaka angavela ngakusasa ku- JSE zibekelwe usoya ku-R3 600 ngethani futhi ubhekilanga ubekwe ku-R4 080 ngethani. Lezi zintengiso zibheka futhi ezinye izinto njengezimbewu zikawoyela ezikhona (*stock*), ukushintshana kwerandi nedola, isimo sezulu, isidingo emakhethini sokudla namanye amabhizinisi asebenzisa amakhekhe kawoyela enziwe ngosoya.

Ukusetshenziswa kwamakhekhe kawoyela enziwe ngosoya kucishe kufike kumathani angu-958 000 ngonyaka, futhi kufika ku-14,75% kokudla okwenziwa lapha eSouth Africa. Ngokwamanje kukhiqizwa amakhekhe kawoyela lapha afika kumathani angu-152 000 kodwa kukhiqizwa amathani angu-387 360. Amathani alahlekayo akhuphukile – bekulahleka amathani angu-103 520 ngonyaka odlule. Amakhekhe kasoya avela phe- sheya angamathani angu-989 558. Uma ebiza R3 200 ngethani izwe lifanele likhokhe amabiliyoni angu-R3,1.

Ngakho-ke kukhona ithuba elihle elikhulu lokwandisa umkhiqizo wosoya. Inkinga kodwa ikhona: ukukhiqiza amakhekhe kawoyela kudingeka imishini ekwazi ukusebenzisa i'hexane' ukukhipha uwoyela ezimbewini zikasoya. Manje ubukhulu bemakhethe elifuna uwoyela namakhekhe ukusebenzisa uwoyela ekudleni akulingani.

Singathi inhlanganiso yezimbewu zikasoya ifana nalokhu: amaphrotiyini 40%, uwoyela 21%, amakhabohayidrethi 34% nomlotha 5%. Imphuphu kasoya inosoya elingana ne60% - 70%, okusele kutholakala kuwoyela.

Amakhekhe kasoya asetshenziswa ekudleni kwezinkukhu, izingulube nokukhuluphalisa izinkomo.

Ukulinganisa inzuzo engenayo

Uma sisebenzisa umvuno ojweyile ezweni lethu imali engenayo ngokutshala ubhekilanga ingabalwa kanje (kungene futhi indleko yen-tilansipoti: R200):

Amathani angu-1,35 ehektheleni x R3 880 ngethani = R5 238 imali engenayo ehektheleni.

Izintengiso zikasoya zibalwa ngokubheka umvuno ojweyile ezweni kanje:

Amathani angu-1,84 ehektheleni x R3 600 ngethani = R6 624 imali engenayo ehektheleni.

Kanjalo imali engenayo lapho kuthengiswa usoya ingaphezu kwe- mali kabhekilanga, ingaphezu nge-R1 386 noma nge-26%.



Umlimi ngamunye kufanele abale kahle umvuno ongathokala emva kokubheka umhlabathi wakhe, isimo sezulu nohlelo lwakhe lokukhiqiza. Isayilo likabhekilanga eliduze nawe lingakusiza ukubala kahle inzuzo engatholakala ehektheleni epulazini lakho.

Izinsizakalo zokukhiqiza usoya

Ezinye izenzelelo lapho kukhiqizwa khona usoya epulazini lakho futhi kushintshwa izinhlobo zezitshalo njengokolo, ummbila, ubhekilanga nosoya. Lokhu kuzosiza ukuphatha ukhula nokuphakamisa isimo somhlabathi.

Izitshalo zika soya zinezimpande ezingamila 25 mm ukuya ku-50 mm ngosuku. Lezo zimpande zingafika ku-1,8 metres ngonyaka. Ngakho-ke isitshalo singasiza ukuvimba ukuqina kwezimpande emhlabathini noku- lethu ukudla okunamandla ngaphezulu lapho kuzodliwa ezinye izitshalo.

Izitshalo zikasoya zinokuhlangana namabhakteria abizwa ngokuthi 'rhizobium' bese kubumbeka isigaxana ezimpandeni. Lezi zigaxana zi- bamba inayithrojeni emoyeni futhi zikwazi ukufaka inayithrojeni engax- ubene elingana ne-20 kg okuya ku-70 kg emhlabathini. Le nayithrojeni lemvelo bese lingadliwa izitshalo ezinye ngonyaka ozayo.

Lokhu ukuqongelela kwenayithrojeni lapho sibheka umlayezo wom- anyolo wezitshalo wonyaka ozayo kuzonciphisa izindleko zenayithro-jeni. Umanyolo wenayithrojeni ubiza ± R9,50 kg. Lokhu kusho ukuthi ehektheleni elilodwa lizodinga inayithrojeni elilingana ne-50 kg uzonci- phisa izindleko ezilingana ne-R475 lapho uthenga umanyolo nakusasa. Abakhiqizi bazothola futhi ukuthi umvuno wezitshalo ezilandela usoya uyanda njalo.

KUBHALWE UMKHIQIZI OTHATHE UMHLALAPHANSI

Kukhona ithuba elithi ubocabanga kahle ngokukhiqiza usoya epulazini lakho.

Usoya

IZIMBEWU ZIKASOYA ZINAMAPHROTHIYINI ANGU-38%, UWOYELA ONGU-18%, AMAKHABOHAYIDRETHI ANGU-15%, UZI ONGU-15%, NE-14% YOMSWAKAMO NAMAMINIRALI. NGOBA KUHLANGANE AMAPHROTHIYINI AMANINGI NOWOYELA USOYA UBIZWA NGOKUTHI ISITSHALO SOMHLABA ESIMANGALISAYO. INAYITHROJENI IBALULEKILE UKWAKHA AMAPHROTHIYINI, NGAkho-KE USOYA UTINGWA KAKHULU UMA SIWULINGANISA NEZINYE IZITSHALO.

Ukujiyisa inayithrojeni

Usoya unenhlanya ngoba kukhona ukuhlanganisa amabhaktheriya nezimpande zalo. Lawo mabhaktheriya athanda ukuhlala kusoya bese anekhono lokubutha (ukumunca) inayithrojeni elisemoyeni likuqongelele, emva kwesikhathi inayithrojeni linganikezwa ezitshalweni ezinsha. Izitshalo ezikwazi ukubamba inayithrojeni emhlabathini zibizwa ngokuthi 'legumes'.

Umoya owungaphandle unenayithrojeni elingu-78% kodwa izitshalo azikwazi ukusebenzisa lokhu lapho zimila. Izitshalo zingasebenzisa inayithrojeni kuphela lishintshwa libe i-amoniya noma i-nayithrethi. Amabhaktheriya akwazi ukubamba inayithrojeni emoyeni asebenzisa ngokuthi 'rhizobium' futhi asizwa amabhaktheriya abizwa ngokuthi 'Bradyrhizobium Japonicum'. Isitshalo sinikeza amabhaktheriya anemakabohayidreyithi namaminirali bese amabhaktheriya ashintsha inayithrojeni elisemoyeni ngendlela ezokwazi ukusebenziswa ezinye izitshalo.

Amabhaktheriya aphila ezindaweni ezibizwa ngokuthi 'bacteroids', kudingeka 10 000 ukwakha isigaxana. Lokhu kufana nobhontshisi omncane omhloshana onamathele ezimpandweni.

Izimbewu zikasoya zidinga 85 kg zenayithrojeni ukukhiqiza ithani lezimbewu. Umvuno ovama ukufika kumathani amabili uzodinga inayithrojeni elizofika ku-170 kg. Ukujiyisa kwenayithrojeni kungafika ku-

50% - 80% okudingekayo izimbewu zikasoya.

Okunezigaxana nokunomgcwabo

Into ebalulekile kakhulu ukukhiqiza usoya kuqinisa ukuthi izigaxana ziyamila.

Ukunomgcabo kungungenisa amabhaktheriya abizwa ngokuthi 'rhizobia' ezimbewini zikasoya ngaphambi kokutshala noma ngesikhathi sokutshala. Umgcabo ungathengwa, ungafana namanzi, okubanda kakhulu (njengesithwathwa), uphuyela noma okuyimbudumbudu. Okunye okufanele sikukhumbule yilokhu:

- Landela imilayezo womenzi ukuhlanganisa konke.
- Ungaboshiya izimbewu ezinomgcabo elangeni ngaphambi kuzitshala, hlanganisa izimbewu ezimbewu ezizodingeka ngalolu suku kuphela. Beka umgcabo nezimbewu ezinomgcabo endaweni lapho kungekhona ilanga, indawo epholile enomthunzi.
- Ezinye izinto ezisetshenziswa ukuvimba izifo ezimbewini zingabulala amabhaktheriya. Qinisa ukuthi lapho uthenga khona izimbewu abazange basebenzise Captan noma PCNB.
- Cabanga ukushintsha ipulanta lakho ngendlela lizokwazi ukufafaza umgcwabo phezu kwezimbewu phakathi emhlabathini omanzana. Lezo zinto zingatholakala ngentengo ephansi ezindaweni eziningi.
- Ungahlanyeli lapho kushisa noma kubanda kakhulu. Ukushisa komhlabathi okufanelekile kungaphakathi kwa-15°C - 27°C. Esihlabathini ezindaweni zaseWestern Freyistata umgcabo awungeke usebenze kahle ngenxa ukushisa ngoOkthoba kuya kuDisemba ngesikhathi esisuka ku-10h00 siya ku-14h00 ngoba kushisa kakhulu ngaleso sikhathi.
- Faka umgcabo ezimbewini njalo ngonyaka nalapho utshale khona usoya ngonyaka odlule.



– isitshalo somhlaba esimangalisayo

Ukuhlola ukuthi izigaxana zisebenza kahle

Kufanele umlimi ahlole kahle ngesikhathi sokutshala aphinde futhi emva kwamaviki. Emva kwamaviki amahlanu noma ayisithupha isigaxana si-fanele sibe khulu sisebenze. Lapho ukukhula kwesigaxana akuqhubeki kahle singabuyela siyobheka ukuthi konke kuhambe kahle ngesikha-thi sokutshala, mhlawumbe bekukhona inkinga lapho esingazange siyibone. Lokho esikufunda ngale ndlela kungasisiza nakusasa lapho siphinda ukufaka umgcabo ngonyaka ozayo.

Uma kungekho izigaxana ezikwanele kuzodingeka ukuthi kufakwe futhi inayithrojeni ukuze sithole umvuno omuhle. Sebenza ngefosholo ususe zonke izimpande nezigaxana ezisamila kanyekanye. Izigaxana zingasala kalula emhlabathini lapho sidonsa nje isitshalo ukusikhipha.

Kufanele kube khona 8 - 20 izigaxana ezinkulu (2 mm – 4 mm) esitshalweni esisodwa ngaphambi kokuphuma kwezimbali. Impande egxumekeke ifanele ibenezigaxana, lezi zigaxana zimila ngoba kufakwe umgcabo ezimbewini; izigaxana ezimila kwezinye izimpande emaceleni zimila ngenxa yamabaktheriya akhona emhlabathini.

Izigaxana ezincane ezimhlophe aziqalanga ukubamba inayithrojeni. Thatha ummese uzisike uzivule. Izigaxana eziqale ukubutha inayithro-jeni zibomvana phakathi. Lezo eziluhlaza noma ezinsundu azibophi in-ayithrojeni.

Izigaxana ezingakhuli kahle zenza ukuthi kusweleke inayithrojeni, lokhu kuzobonakala lapho izitshalo zinamakhosi aliphuzi noma ezinye

izitshalo ezinamakhosi amabi.

Amasimu afanele ahlolwe sonke isikhathi ukubona ukuthi izigaxana zimila kanjani futhi izitshalo zinjani. Izitshalo zikasoya eziphilile zizok-hombisa ukumila okunamandla namakhosi aluhlaza kahle.

Lapho ucabanga ukuthi kukhona inkinga, cela usizo kumkhulumeli wenkampani lapho uthenge khona izimbewu. Hlola futhi ukuthi awun-geke uthole izinto ezidale inkinga kulezi zinto ezibhalwe lapha phansi.

Ukumila kwezigaxana okungahambi kahle kuzodala ukungabophi inayithrojeni ngokwanele kungadalwa yizinto ezilandelayo:

- Amasimu amasha angenawo amabaktheriya amaningi.
- Amasimu anenayithrojeni eningi esale lapho bekutshalwa ezinye iz-itshalo ezifana ne'legume' njengelusene noma kufakwe ubulongwe obuningi kakhulu ngonyaka odlule.
- Umhlabathi ome kakhulu ukuphilisa amabaktheriya.
- Umhlabathi omanzi kakhulu ngesikhathi esifika kwezinsuku eziyisik-hombisa noma ngaphezulu. Lawo manzi azovimba umoya ukungena emhlabathini kakhulukazi i-oksijini eliphilisa umhlabathi nezigaxana ezimpandeni.
- Umhlabathi onepH ngaphansi kwa-5,7 noma ngaphezu kwa-7,3.
- Umhlabathi oqinile ozovimba futhi ukungena nokuphuma komoya emhlabathini nasezimpandeni.

KUBHALWE UMKHIQIZI OTATHE UMHLALAPHANSI



Lo mbhalo okhethekile ubekhona ngenxa yomnikelo ovela ku-Oil and Protein Seeds Development Trust.

Ukusebenzisa ubulongwe basesibayeni njengomanyolo

NGEMINYAKA NEMINYAKA EDULE ABAKHQIZI BEBASAKAZA UBULONGWE BEZIMFUZA EMASIMINI UKWANDISA AMANDLA OMHLABATHI NOKWANDISA UBUKHULU BOMVUNO. NGESIKHATHI ESIDLULE UMANYOLO LO WAYE ISISUSA ESODWA SOKUTHOLELA IZITSHALO UKUDLA EMHLABATHINI UKUZE ZINIKEZE ABANTU UKUDLA LAPHO ZITSHALWA. KODWA INKINGA ILAPHA: NGOBA UMANYOLO WEZEMVELO NJENGOBULONGWE AWUNAKHO UKUSHUQISA OKU-NAMANDLA KAKHULU FUTHI UDINGA UMSEBENZI OMNINGI UKUWUSAKAZA EMASIMINI, NGOKWAMANJE SEKUNGENE UMANYOLO ONGASIWO WEMVELO KODWA OWENZIWA NGAMAKHEMIKHELI UKUMILISA IZITSHALO ZABALIMI.

Uma sibala inani lezimali elihambelana nobulongwe, kufanele futhi sibale ukuthi kuzobiza malini ukufaka umanyolo omusha endaweni yobulongwe, kufanele sibheke ukuthi lingakanani inani lezinto zemvelo ezikhona kulowo manyolo, amandla alowo manyolo ukuthuthukisa isimo somhlabathi nokukhulisa inani lomvuno ozotholakala lapho kukhiqizwa.

Ubulongwe unemiphumulelo emibili lapho usakazwa emhlabathini (ushintsha lokho okuvezwa umhlabathi – isimo somhlabathi):

1. Bunikeza ukudla emhlabathini.
2. Buvundisa umhlabathi ngezinto zemvelo ezake zaphila (zemvelo). Lokhu kwenza ukuthi izimpawu zomhlabathi zibe ngcono, isakhiwo somhlabathi siba ngcono, amanzi angena kangcono, amanzi abanjwa kangcono nomoya ungena kangcono.

Kutholakala umphumelelo omuhle uma sisakaza umanyolo onezinto ezake zaphila lapho sebheka isimo somhlabathi, sihle kakhulu lapho sisilinganisa nomhlabathi lapho kuthelwa khona umanyolo owenziwa ngamakhemikheli. Lokhu kukhombisa ukuthi kufanele sisebenzise ubulongwe obutholakala ezibayeni zezimfuyo ezingadini nasemasimini.

Kukhona eziningi izinto ezingashintsha inanini lenhlangano yokudla ebulongweni. Isimo senhlangano sobulongwe sihambelana nekhwalithi lokudla okudliwa imfuyo, uma kukhona amaphrothiyini amaningi ubulongwe uzoba nenayithrojini eliningi. Kanjalo-ke uma kukhona iphothasiyumi nefosforasi okuningi ekudleni, kuzobakhona futhi ebulongweni. Ubulongwe uqala ukubola (ukubhucuka) masinya emva kokuchithwa izimfuyo. Lapho ubulongwe ushiywa uvulekile uzokoma masinya bese inayithrojini eliningi

lizolahlekelwa emoyeni. Iphothasiyumi lingalahleka lapho ubulongwe bunethwa kakhulu yimvula.

Singathi ukuthi $\pm 70\% - 80\%$ yeN, $60\% - 65\%$ yeP ne $80\% - 90\%$ yeK, okusekudleni kwezimfuyo kungatholakala ebulongweni balezo zimfuyo. Ukudla kwezitshalo okusebulongweni kungajikiswa bese izitshalo zidliwa izimfuyo, zona zenza ubulongwe obuzodliwa izitshalo lapho zimila futhi. Ukwenza ukuthi kungalahleki kakhulu okunikayo amandla ezitshalweni lapho umanyolo ubekwa, yakha ingqumbi yobulongwe bese wembese leyo ngqumbi. Akufanele ukuthi ubulongwe bubekwe isikhathi eside, bufake masinya emhlabathini lapho isikhathi sikhona.

Izikhombiso ezingaba liqiniso (mhlawumbe zishaya khona) zeN (inayithrojini), zeP (ifosforasi) nezeK (iphothasiyumi) ebulongweni bezinkomo: N - 1% , P - 0.5% nezeK - 1.0% .

Kodwa kukhona izinto eziningi ezingashintsha isimo sezinto ezihlanganiswe ebulongweni, ngakho-ke sithi 'mhlawumbe zishaya khona', kuyisilinganiso sokuqagela. Inani lokunikayo izitshalo amandla okumila elikhona ebulongweni nenani lalokho okuzodliwa izitshalo kuzokwehluka ezindaweni ezahlukene. Izinto ezingashintsha inani lalokho okunikayo amandla ebulongweni:

1. Inhlanganiso yokudla okudliwa yizimfuyo.
2. Indlela yokubutha ubulongwe.
3. Indlela yokubeka ubulongwe.
4. Indlela yokusakaza nesikhathi sokusakaza ubulongwe.
5. Isiko somhlabathi neseshintsho lapho kuzosakazwa khona ubulongwe.
6. Isimo sezulu.

Ngokwejoyelekile isidingo sezitshalo ezifana nommbila (ukudla okuzinhlamvu) ukuthola amathani angu-4 (4T) silingana nalokhu: 50 N, 22P, 120 K.

Onke amandla anikwayo ubulongwe awatholakali (awudliwa) masinya izitshalo. Okuningi kwenayithrojini nokwefosforasi kubanjwa izinto zemvelo emhlabathini, zingadliwa izitshalo kuphela lapho zibola. Kodwa lonke iphothasiyumi elisebulongweni lizodliwa kalula yisitshalo.

Ubulongwe wezinkomo bunenayithrojini elingatholakala emhlabathini elifika kuphela ku- 20% masihlanganisa lonke inani lenathrojini, futhi kuzotholakala 40% wefosforasi ngonyaka lapho busakazwe khona. Lapho

Ukudla okunikeza amandla okutholakala ebulongweni: kg/ha

T/ha	N	P	K
5	10	10	50
20	40	40	200

sisebenzisa ubulongwe wezinkomo mhlawumbe singathi kuzolunga uma sisakaza ubulongwe obulingana ne20T/ha noma 20 kg/10 m². Lokhu kulingana nebhakethe elithatha amalitha angu-5/sq/m. Inani elilingana nalokhu lizonikeza iP neK eliningi elizokwanele, kodwa kusazodingeka umanyolo wangaphezulu njengeLAN.

Isaka le-50 kg eliphethe 2:3:2 (38) lizoba nalokhu: 5,4 kg N, 8,14 kg P ne-5,4 kg K.

Kanjalo-ke lapho sisebenzisa ithebula eliphezulu singathola ukuthi kudingeka ubulongwe obungakanani ukuthola umvuno esifuna ukuwuthola. Kukhona yinye indle kuphela ukuthola ukuthi sinjani isimo sokudla okusemhlabathini: thatha amasampula omhlabathi okuzokhombisa ukuthi kudingeka inani elingakanani leN, P neK.

Ukusebenza kahle kobulongwe njengomanyolo kuhambelana namandla anikwayo angekho ngokwanele emhlabathini. Ngakho-ke inani lemali elizokhishwa ukusebenzisa ubulongwe obusetshenziswa ngesikhathi esimfushane sizothola ukuthi kuzolingana nezindleko uma sithenga umanyolo ukuvala isikhala lapho bekungekho ubulongwe. Emasimini lapho izimo zeP naK emhlabathini zingathi zikwanele, singabanga ukufaka kancane inayithrojeni.

Amasimu akhombisa ukuthi kukhona P naK okwanele ngokwamanje azodinga P naK okudlulayo emva kwesikhathi uma kungasakazwa ubulongwe. Ubulongwe bungasiza futhi ukulungisa isimo sobumuncu emhlabathini, ukulungisa futhi izimphawu zomhlabathi onamagade lapho amanzi angeke akwazi ukungena.

Indleko ebonakalayo ezwakalayo esikhwameni masinya yilokhu okwenza lokhu okujikisa ukudla kwemvelo okusemhlabathini kuphinde kusetshenziswe kukhombisa ukuthi awuzange ulahle imali yakho.

Ngokwejoyalekile ukulinganisa kweN, P neK ebulongweni akul-

ingani nalokhu okudingwa izitshalo, ngakho-ke akufanelekile konke ukudla kusetshenziswe. Umgomo womvuno ophathwa kahle ngulokhu: ukuhlanganisa iphogramu elizovundisa umhlabathi futhi elizonikeza izitshalo amandla adingekayo atholakala ebulongweni bese kuzodingeka ukuthenga umanyolo kuphela ukuvala isikhala lapho ubulongwe buhluleke khona.

Kufanele kuhlanganiswe amasu ukuthola inani lokudla okudingwa isitshalo esithile. Bheka izinto ezilandelayo:

1. Okunikayo amandla kuleso sitshalo (isidingo saso).
2. Amandla akhona kulobu bulongwe.
3. Inani lokusakaza ubulongwe.
4. Inani likamanyolo othengwayo ngaphezu kobulongwe.

Isikhathi nendlela yokufafaza ubulongwe kuhambelana nokusebenzisa kahle ukuphinda nokuphinda ukunika amandla. Cabanga ngalokhu okulandelayo lapho usakaza ubulongwe:

1. Ukusakaza ubulongwe masinya kuvimba ukuthi kulahleke i-amoniya.
2. Ukusakaza ubulongwe eduze nesikhathi sokutshala ukuze kungalahleki amandla amaning.
3. Ubulongwe bufanele busakazwe bgokufana kuzo zonke izindawo.
4. Ungatheli kakhulu umanyolo othengwayo.
5. Landela umlayezo ohambelana namasampula omhlabathi ukuze ufake ukudla okufanelekile.
6. Bhala amarekhodi akhombisa inani lalokhu okunikayo amandla emasimini bese uzokwazi ukusebenza ngakho uma ushintsha iphogramu lokuvundisa umhlabathi.

UIAN HOUSEHAM, UMQONDANISI WEPHROVINSI OBHEKA IPHROGRAMU LOKUTHUTHUKISA ABALIMI ABASAKHULAYO LEGRIN SA

Ukuvimba ukushushumba komuthi kwezinye izitshalo lapho ufafaza

ABAKHIQIZI ABANINGI NGOKWAMANJE BATSHALA IZITSHALO EZAHLUKENE EMAPULAZINI ABO. LAPHO KUSHINTSHA KHONA IZINHLONGO ZEZITSHALO NJENGOKOLO, UBHEKILANGA, USOYA, AMABELE, UMMBILA, AMAZAMBANE NAMADLELO KUSHO UKUTHI KUZOSETSHENZISWA AMAKHEMIKHELI AZINHLONHLOBO NGESIKHATHI LEZO ZITSHALO ZIMILA NGALOWO NYAKA.

Amapulazi aseduze namadolobha lapho kuniselwa khona nalapho kutshiswa khona ngaphansi koseyili njengemithi yezithelo, amaveji, umvini nokunye abalimibafanele baqaphele kahle uma befafaza umuthi ngoba amakhemikheli avama ukuhamba emoyeni. Qaphela futhi ungalimazi izitshalo zakho noma izitshalo zomakhelwane. Yena ungabiza imali eningi uma eya ehhovisi lomthetho lapho ulimaze izitshalo zakhe.

Isimo sezulu lapho kufafazwa

Abakhiqizi bafanele babheke njalo ukuthi kuthiwani ngesimo sezulu ngaphambi kokufafaza nangesikhathi sokufafaza. Umoya onamandla, umpompi ocindezela kakhulu, amanozili angafanelekile nokuphakama kakhulu kwebhumi kungenza ukuthi umuthi uhambe emoyeni udale ink-ing kumanye amasimu noma kumakhelane. Bheka lokhu okulandelayo:

- Ukufafaza lapho kukhona umoya onamandla noma isimo sezulu esishintshayo.
- Ukufafaza amaconsi amancane kakhulu.
- Ukuphakama kwebhumi okungalungile.
- Ukugijimisa kakhulu komshini ensimini.
- Amakhemikheli nezinhlanganiselo ezikhothwa ngumoya kalula ngesikhathi sokufafaza nangemuva kokufafaza.
- Izitshalo ezahlukeni ezitshalwe eduze kakhulu nezinye izitshalo.
- Ukucindezela okuphezulu kakhulu kwenza ukuthi amaconsi abe mancane bese ukushushumba komuthi kuyanda.
- Lapho kufafazwa kancane ngamanozili amancane kungandisa uku-shushumba komuthi.

Ngezinye izikhathi zonyaka isimo sezulu singalunga kuphela ngezikhathi ezithile emini noma ebusuku. Abankontilaki abaneGPS neGIS emishinini yabo bazokwazi ukufafaza indawo enkulu lapho kuthulile ebusuku.

Kufanele wena wazi izindawo ezingalimala uzikhombise kumkontilaki futhi azisa umakhelwane ukuthi uzofafaza ziphi izitshalo nango-muthi onjani. Omakhelwane banethuba ukusho ukuthi kukhona izitshalo ezingalimala.

Phinda njalo ubheke isimo sezulu njengemvula, amafu nokushisa emini nasebusuku.

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IsiSuthu saseNyakatho, IsiXhosa.

**Sizimisele ukukhipha incwadi enhle
kakhulu. Uma ufisa ukuxoxa ngokuphakathi
noma ngendlela kubhaliwe ungathintana
noJane McPherson.**

Ukuvimba ukushushumba komuthi kwezinye izitshalo lapho ufafaza

Ukushisa kufanele kube njani lapho ufafaza?

Kukhona imishini alinganisa isimo sezulu, imitha ebizwa ngokuthi 'digital'. Lo mshini ulinganisa umehluko ngaphakathi kwethemomitha elisebenza ngebhalbu elimanzi nethemomitha elisebenza ngebhalbu elomile. Ukushisa kwebhalbu elimanzi kususwa ekushisweni kwebhalbu elomile bese kuzotholakala ukufudumala ngesilinganiso seCentigrade. Lokhu ukulinganisa kwesimo sezulu kwaziwa ngokuthi 'Delta T'.

Leyo mishini ikwazi futhi ukulinganisa ijubane lomoya. Lokhu kuhambelana nokukhothwa komoya noma ukuhlala kweconsi esitshalweni. Uma lokhu ukulinganisa kufika ngaphakathi kwa-2 na-8 kuzobangcono ukuma ngokufafaza. Lapho kufudumele kakhulu futhi awekho amanzana emoyeni iconsi lomuthi lizonyamalala ngaphambi kokungena esitshalweni. Lapho kushisa kakhulu futhi komile mhlawumbe iconsi alingeke lifike emakhasini esitshalo. Uma kukhona nomoya ovunguzayo futhi ukufafaza ngendlela efanelekile akungeke kwenzeke.

Ukulinganisa kwe'Delta T' okuphansi kungenza ukuthi amaconsi ahlale emoyeni, awayi phansi lapho kukhona ukhula. Uma kushisa futhi komile izitshalo zokhula azingeke zikwazi ukumunca umuthi kahle. Inani lokhula olubulala kanjalo luzobaphansi.

Ukushisa okuhle okungaphakathi kwa-2 na-8 lapho kulinganiswe ngamabanga eCen-

tigrade kungenzeka ngokufudumala kwebhalbu elomile kungaba amabanga eCentigrade angaphakathi kwa-0 - 50 nobumanzi emoyeni obusuka ku-10% obuya ku-80%. Ngamanye amazwi singasho ukuthi kungenzeka kahle lapho kubanda nobumanzana obuphansi noma lapho kushisa kabi futhi ubumanzi obuphezulu.

Uma sibheka konke lokhu kuyakhanya ukuthi kunzima kakhulu ukuhlenganisa konke lokhu – kufanele sisebenzise konke lokhu isikhathi eside ngaphambi sizokwazi ukubona ukuthi isimo sinjani sokufafaza. Kungaba ngcono ukuthenga i-'Delta T' ukuze uzokwazi ukulinganisa konke lapho kufafazwa nalapho kuthelwa umuthi omusha. Kanjalo uzokwazi ukuqhubeka noma ukuma sonke isikhathi, emini nasebusuku.

Uma sibheka ukufudumala okukhona sibolandela imithetho elandelayo:

- Ungafafazi emini lapho umoya ushisa kodwa awuhambi ngejubane ngoba kuzoba khona ukuphakama (ukuya phezulu) komoya. Uzo-kwazi ukubona lokhu uma kukhona umlilo onentuthu.
- Ungafafazi ebusuku lapho umoya unga-hambi ngejubane noma lapho ilanga lishona ngoba ungafafaza ezinye zindawo, hhayi lapho ufanele ufafaze khona.
- Fafaza ekuseni noma ebusuku lapho kukhona umoya opholile ngoba kanjalo uzofafaza ngendlela efanelekile.

**KUBHALWE UMKHIQIZI OTHATHE
UMHLALAPHANSI**

