

# PULA IMVULA

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INCWADI YEPGP YABALIMI ABASAKHULAYO



Isithombe: U-Tiani Claassen

## Ukulawula I-CUTWORM kubalulekile

**M**ANINGI AMA-AGROTIS CUTWORM SPECIES (LEPIDOPTERA: NOCTUIDAE) AKHONA ENINGIZIMU AFRIKA, ABIZWA NGE-BLACK CUTWORM (AGROTIS IPSILON), I-CUTWORM EMPUNGA (I-AGROTIS SUBALBA), I-CUTWORM EMPUNGA (AGROTIS SUBALBA), I-CUTWORM ENSUNDU (AGROTIS LONGIDENTIFERA), I-SPINY CUTWORM (I-AGROTIS SPINIFERA) KANYE NE-CUTWORM EJWAYELEKILE (AGROTIS SEGETUM). I-CUTWORM EJWAYELEKILE YI-SPECIES EGQAME KAKHULU FUTHI IYI-SPECIES ESIBALULEKE KAKHULU KWEZOMNOTHO ESIKHONA ENINGIZIMU AFRIKA.

### UKUBALULEKA KOKULAWULA I-CUTWORM

- Ukudliwa yizibungu kungadala umonakalo omkhulu ezilimeni kudala omkhulu umonakalo esigabeni sezithombo.
- Isibungu sisuka kwesinye isithombo siye kwesinye, sinquma sibulale izinqu zezithombo kuze kuyofinyelele enhlabathini, ngokuvamile kuphetha ngokufa.
- Isibungu esisodwa singadala omonakalo ezitshalweni eziningi ngobusuku obubodwa.

- Uma zibheduka, ngokuvamile kufanele kuqalwe phansi kutshalwe kabusha.
- Lezi zibungu zikhuthala kakhulu ebusuku futhi ebusuku zingatholakala eduze kwenhlabathi ephezulu eduze kwezithombo ezifile.
- Umonakalo odalwa yizibungu awenzeki kuphela ezithonjeni. Izitshalo ezisesigabeni samahlamvu amane noma ezindala nazo zingalimala.
- Lo monakalo ezitshalweni ezindala ungabonakala njengezimbobo eziyidingilizi eziqwini, kodwa ngaphansi komhlabathi okusafesi.

### UKUHLOLA KUYADINGEKA

- Ukuhlola ngesinye sezikhali ezinkulu abanazo abalimi zokunqoba i-cutworm.
- Izithombo zezilimo ezimilayo kufanele zihlolwe njalo izimpawu ze-cutworm, okungenani kabili ngeviki, futhi zilashwe uma kwenzeka.
- Ukuhlola emva kokufutha kubalulekile ukubona ukuthi ngabe ukufutha kwasekuqaleni kwaba yimpumelelo noma mhlawumbe ukufaka kwesibili (kuya ngelebuli yomkhiqizo) kuyadingeka.
- Abalimi abafaka ama-secticides ngesikhathi kutshalwa kufanele bahlole futhi ukuze babone ukuthi kulawuleke ngempumelelo.

## Ukulawula i-cutworm...

- Imingcele engasezifundeni ezivulekile kufanele zihlolwe ngabalimi kamuva 'ukunqunywa' kwezitshalo. Ukwengeza kulokho, umhlabathi ongaphezulu ongu-5 cm kufanele uphenywe ngesineke kubhekwe izibungu.
- Lapho noma yiluphi ukhula olunesifaxa olubunile olunfile/olunqunywe noma izithombo zesitshalo ezibonakale, kufanele uqale ukugubha eduze kwezimpande zezitshalo ukuhlonza izibungu i-cutworm larvae.

Ukuhlola emva kokufutha kubalulekile ukubona ukuthi ngabe ukufutha kwasekuqaleni kwaba yimpumelelo noma mhlawumbe ukufaka kwesibili.

### AMAQHINGA OKULAWULA

#### I-Genetically modified maize (i-Bt)

Ngenkathi i-genetically modified (Bt) ummbila uyasebenza ukulwa ne-stalk borers, akusebenzi kuma-cutworm. Isizathu silula – i-cutworm ne-stalk borers ngama-species ahlukeni. I-Cry proteins embileni oyi-Bt ethile. Ukungeza, njengama-insecticides, usayizi wesibungu ukulapha kubalulekile. Ngakho ke, uma isibungu sisikhulu, ayibi nawo amandla i-cry protein.

I-Cutworm larvae eqonde izithombo zombila inkulu ngokujwayelekile, i-late-instar larvae. Abalimi kufanele baqaphele noma iyiphi inkampani yembewu ethi i-Bt gene izolawula isibungu i-cutworm larvae – lokhu akulona iqiniso ngenxa yezizathu eziphakanyisiwe, kanye neqiniso lokuthi ayibhaliselwe lesi sizathu ngokomthetho.

#### Kubalulekile ukulawula ukhula

Umsebenzi wokuthila ngokwemvelo ngendlela yokulima, ngaphambi kokutshala, kuhlose ukubulala ukhula lwasebusika noma kube khona isitshalo esiyivolontiya ensimini yesilimo. Isibungu esigqitshwe phansi noma isobala enhlabathini kusafesi singabulawa, singalinyazwa, noma sizingelwe.

Ukhula lulawuleka ngokufaka ngendlela izibulala-khula phecelezi herbicides ezirejistiwe ngaphambi kokutshala yiyo indlela evamise ukulawula izibungu i-cutworm larvae kuma-no-tillage systems ancishisiwe.

Ukulawula ukhula kulokhu kubalulekile ekuncisheni izibungu ezisanda kuchamsela ukudla ngokungabi khona kwesilimo. Ngokujwayelekile, isilinganiso sezinsuku ezingama-35 zokungabikho kokhula ngaphambi kokutshala (lapho kungenzeka khona) kuyadingeka ukulambisa izibungu. Nakuba abalimi ngesikhathi betshale belungekho ukhula, ukuba khona kokhula emavikini amane kuya kwayisihlanu ngaphambili kuzobhebhethekisa izinkinga ze-cutworm. Ngakho ke, kuzo zonke izinkinga, izibulali-zinambuzane phecelezi insecticides nazo kufanele zisetshenziswe ukulawula ngempumelelo i-cutworm.

Abalimi abatshala ama-cultivar ommbila abekezela i-herbicide, mhlawumbe kyfanele alindele ukumila kwezithombo ngaphambi kokufaka i-herbicide. Lokhu futhi kuyiqiniso kuma-insecticide.

#### Isibulali-zinambuzane

Ukufakwa kwama-pyrethroids arejistiwe nama-organophosphates kuthathwa ngokuthi kubalulekile ekulawuleni ukubheduka kwezibungu i-cutworm. Uma ifakwe ukuba izovikela ngesikhathi sokutshala, kubalulekile ukubheka ngemuva kokufutha, ikakhulukazi ngesikhathi sokumila nesesigabeni sonke sezithombo ukuze kubonakale ukuthi ngabe sikhona yini isidingo sokuba kuphinde kufakwe okwesibili.

Okubalulekile, izibulali-zinambuzane eziningi ezirejistelwe ukusetshenziswa ukubulala i-cutworm kusobala ukuthi lapho kuncishiswe khona



**Izimpawu zesibungu i-cutworm larva idala umonakalo ezithonjeni.**  
Isithombe: e-Clemson University – USDA Cooperative Extension Slide Series, Bugwood.org



**Izibungu zimpunga okujiyile phecelezi dirty-grey noma zinsundu ngokombala, sibukeka sibushelwezi, nokusangcino phecelezi waxy.**  
Isithombe: [http://www.pyrgus.de/Agrotis\\_segetum\\_en.html](http://www.pyrgus.de/Agrotis_segetum_en.html)

noma kuyi-nothili, ikakhulukazi embileni, inani le-cutworm kungalindleka ukuba libe phezulu lapho ukuhlola emva kokufutha kubalulekile ukuze kubonakale uma sikhona isidingo sokuphinda kufakwe okwesibili.

Uma usebenzisa ama-insecticide ezibungwini i-cutworm khumbula lokhu:

- Uma kwenzeka, yifake ntambama – lokhu kwenzelwa ukunciphisa ucekelwa phansi ukushisa kanye nokushiswa yilanga ngqo komkhqizo, futhi kuqinisekisa ukuthi isibungu, esihamba ebusuku, sithola ukuvuleleka okukhulo kuyo.
- Izikhali nezingubo zokuzivikela phecelezi (PPE) kufanele bazisebenzise ngokufanele abasebenzi njalo uma bethinta imikhqizo yokubulala izinambuzane phecelezi pesticides. Ubungozi obuhambisana nezibulala zinambuzane pesticides bungagwemeka ngokusebenzisa umkhqizo ngendlela.





## ISIPHETHO

Izibungu *i-cutworms* zilawulwe ngendlela namuhla ezweni futhi akungabazeki ukuthi lokhu kuzoqhubeka. Nakuba bekunezindaba lapha nalaphaya kamuva, *i-Insecticide Resistance Action Committee (IRAC)* imile nse kwelokuthi azikho izinkinga zokuzimelela kwe-*pyrethroids*, ngokolwazi olukhona.

Abalimi kufanele balandela imibandela ebhalwe kulebuli yomkhiqizo bengasuki kuyo noma kunjani uma befaka *i-pesticide*, noma *i-herbicide* noma *i-insecticide*. Ilebulo yomkhiqizo wama-*pesticide* ingumthetho ngokwemigomo ye- *Fertilisers, Farm Feeds, Agricultural Remedies and Stock Remedies Act 1947, (uMthetho No. 36 ka-1947)*. Kubalulekile ukufunda ilebulo yemilayezo ngokucophelela.

Abaphathi bokurejistwa kwemkhiqizo benze ucwaningo oluningi lokwenza imilayezo yelebulo futhi uma engalandelwanga ngokufanele, ukusebenza kwayo ekubulaleni izinambuzane ezizondwe, kulesi simo *i-cutworm*, ngeke kuqinisekiswa. Okunye futhi, qaphela ukungaxutshwa ngokufanele ethangini futhi ubheke isimo samanzi okufutha ngokwemigomo yokuqina ne-*pH* mayelana nemilayezo ebhalwe kulebuli yomkhiqizo.

Okokugcina, abalimi bayakhuthazwa ukuba bagcine amarekhodi ezinambuzane abazaziyo ezihambisana nesimo seklayimethi, ngenxa yokuthi uthelala womswakama wenhlabathi ngokwamafektha empilo anjenge-*cutworm* kanye nokuziphatha akuvamile ukunakwa. Lokhu kuzokwenza abalimi bahlinzeke futhi balungiselele amandla ezinto ezizokwenzeka ngesizini elandelayo.

Uma ufuna imininingwane, thumela i-imeyili ku-CropLife ku-[info@croplife.co.za](mailto:info@croplife.co.za). ■

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YAQALA UKUSHICILELWA KWI-  
SA GRAAN/GRAIN, MAY 2023.



## IZWI LIKA...

Eric Wiggill



**E**MPUMALANGA NEKAPA, IZIMVULA ZOKUQALA KUFANELE ZIQALE UKUNA MAPHAKATHI NOSEPTHEMBA, KODWA NJENGOBA KWAZIWA, KWEZOLIMO AYIKHO INTO EQINISEKISIWE. AMALUNGISELELO ENHLABATHI NOKUTSHALA NGEZINYE ZEZINTO EZIMQOKA NGALE SIKHATHI.

Izimvula zokuqala kufanele zithambise inhlabathi ngokwanele ukuze iripha izokwazi ukungena enhlabathini izonciphisa ukugqishelana kwemikhakha okudalwe yizinkomo nemishini futhi kunciphise amanzi amaningi. Lokhu kuzoqinisekisa ukuthi abalimi inhlabathi yabo iwahambisa kahle amanzi nezimpande zezilimo zizokwazi ukusebenzisa ngokuphelele ukudepha kwenhlabathi.

Amasampuli enhlabathi kufanele enziwe ukuze kuqondisiseke *i-pH* yenhlabathi futhi ukwazi ukubona ukuthi ngabe yini eyentulekayo enhlabathini. Lokhu kubonisa ukuthi yini okufanele ilungiswe ngomcako nomanoyolo. Izimvithi zezilimo kufanele zihlanganiswe nenhlabathi nomcako. Uma umquba owenziwa ngamahlamvu abolileyo noma umnyolo ovundiswe kahle ukhona, wusabalalise ngokulingene enhlabathini futhi udiske masinyane ukuze ugweme ukuhamba kwamaminali abalulekile kanye nokulahleka kwenayithrojini emoyeni phecelezi (*nitrification*).

Onke ama-*input* esizini kufanele ngabe ase-odiwe futhi agcinwa ngokufanele. Izikhali zokusebenza ezidingekayo uma kutshalwa kufanele ziseviswe ebusika futhi kufanele sesimeni esihle sokusebenza. Khumbula ukugcoba ama-*bearing* ngogilisi, hhayi ama-niphuli. Isikhathi sokutshala empeleni yizinsuku ezingama-30, ngakho ke ukuplana kubaluleke kakhulu nomshini ongasebenzi ngokufanele uzoba nomthelela omubi esivunweni, inzuzo namazinga engcindezi.

Khumbula ngokwenyuka kwentengo yama-*input*, *i-margin* yokwenza amaphutha incane kakhulu. Ama-*planter*, ama-*boom-sprayer* nama-*spreader* kufanele akhalibhethwe ngokufanelekile futhi avivinywe kabili ukuze kugwemeke izindleko ngokwenza amaphutha. Khumbula ukuthi okukhulu kakhulu noma okuncane kakhulu kungaba nomphumela oyingozi emkhiqizweni. Umlimi futhi kufanele awubheke umshini wosonkontileka – ngoba uma umsebenzi ungenziwanga ngokufanele, inkinga yezindleko isala nomlimi.

Izindawo ezisemapulazini ezingazange zakhiqiza ngenxa yokugcina amanzi, inhlabathi encane noma *i-marginal land* kufanele kulungiswe noma kutshalwe izilimo ezizokhiqiza. Ngakho ke inhlabathi kufanele isetshenziswe ngokufanelekile, kuye ngendlele owenze ngayo nezivuno zesizini edlule.

Umshwalense wesilimo yinto okufanele ibe seqhulwini ohlwini lo mlimi. Izinkampani eziningi zomshwalense ziyakwazi ukulungisela isilimo ngaphambi kokuba sitshalwe ngokuhambisana nolwazi olunikeziwe ngesikhathi sesigaba sokuhlela. Susa ubungozi ngokuthumela amahektha aqondile atshaliwe namamephu kwabomshwalene ukuze ugweme amaphutha ngokuhamba kwesikhathi.

– U-Eric Wiggill uyi-PGP imenenja yokuthuthukisa izifunda eMpumalanga neKapa. ■

# Gcina izikhali zokulima zisesimeni esihle kakhulu



**U**KULIMA KUNCIKE EMISHININI NASEZIKHALINI EZIGCINA UMKHIQIZO UNYAKAZA. INHLANGANI-SELE EVAMISE UKUNGANAKWA EYENZA IZILIMO ZITSHALWE FUTHI ZIKHULE NGESIKHATHI ESITHILE ESIFANELE, UKUNAKEKELWA KWEZIKHALI ZOKUFUTHA NEZOKUTSHALA. NANKA AMANYE AMATHIPHU OKUNAKEKELA UKUGCINA IZIKHALI ZEPULAZI ZISESIMENI ESIHLE KAKHULU.

## UHLA LWE-'PRE-FLIGHT' PLANTER

Ngaphambi kokuba uqonde emasimini kule sizini, ezinye izinto kufanele zilungiswe ku-*planter* yakho. Okunye kufanele kulungiswe emva kwesizini, kanti ezinye izinto kufanele zenziwe ngezandla ngenkathi umlimi engena okokuqala ensimini. Kuhlale njalo kubalulekile ukufunda i-manyuwali ye-*operator* ngaphambi kokusebenzisa izikhali.

**1** Qinisekisa ukuthi i-*planter* ihlala ikulayini ngokuhlola noma ngayiphi indlela yokusonteka ngokweqile ku-*drawbar* noma u-*three-point arms* kagandaganda, njengoba ukudleka kwensimbi kungenzeka ngokuhamba kwesikhathi.



**2** Hlola okushiwo umkhiqizi mayelana nomoya wethaya elithile. Uphinde ubheke i-*hydraulic lines* namasilinda ukuthi awadlekile, izimfa noma ukuhhdana. Naka kakhulu i-*high-flex points* ezifana ne-*fold joints*, kanye ne-*wing pivot*, lapho olayini bengancinzeka noma banwetshwe. Hlola umonakalo noma izimpawu zokudleka ezingxenyeni ezihlangeneyo ze-*planter*.

**3** Susa ikhava ye-*vacuum* bese uhlola izincezwana noma izimfa ku-*impeller vanes*. Lokhu kungadala izinkinga ekudaleni umoya owanele emamitheni. Khumbula ukukhipha onke ama-*frame plugs* ngaphambi kokulibangisa ensimini.



**4** Qinisekisa ukuthi iketango liqine ngokufanele nokuthi amaketango ayapeteka. Gcoba amaketango ngokufanelekile. Hlola amaketango amaklashi, lubhrikhetha futhi ubheke nokudlela kwensimbi. Hlola inhlanganisela yamayunithi olayini aqhelelane ngokufanele. Sebenzisa ithephu yokulinganisa ukuqinisekisa ukuthi yonke imigqa yamayunithi kuhlukaniswe ngendlela. I-*offset* encane ingaholela ezinkingeni ezinkulu ngesikhathi sokusebenza emasimini emva kwesikhathi futhi ngesikhathi sokuvuna, ikakhulukazi ngokobanzi bobukhulu be-*planter*.



**5** Hlola ukuthi ngabe ama-*double disk openers* asebukhali futhi asephakathi kokubezezelela idayamekha ngokuchaza komkhiqizi. Lungisa lapho kuxhumana khona amajoyinti e-*disk openers* usebenzisa ukuhlola ngekhadi lebhizinisi – ngokujwayelekile lokhu kufanele kube u-40 mm kuye ku-50 mm.



**6** Lungisa ukuthintana phakathi kwamasondo egeji nama-*disk openers* ukuze amasondo egeji athintana nama-*disks* kodwa asengafaswa ngesandla ngokufaka umfutho kancane. Hlola amabheringi asemasondweni. Hlola i-*alignment* yokusondelana kwamasondo ngokusetha i-*planter* uyehlise kokhonkolo noku-yidonsela phambili 5 m. Qinisekisa ukuthi ukuvala isistimu yamasondo kusenkabeni kolayini akhiwa ngama-*double disk openers*.



**7** Hlola ama-seal e-*vacuum* namabhulashi kumamitha. Hlo-lisisa ukuthi i-*disc* yembewu ilungele, ama-*knockout* ne-*double eliminators* afakiwe aleso silimo ozosithala.





**8** Hlanza ama-*tube sensors* embewu uphinde uhlole isimo seshubhu eliqathaza imbewu.

**9** Uma i-*planter* ihhukiwe futhi isensimini itshala ngokudepha okufanele, qinisekisa ukuthi igijima ngokusezingeni.

### ISIFAFAZI SIKAGANDAGANDA

Ngaphambi kokuba usebenzise umshini wokufutha kwezolimo, kubalulekile ukuba wenze uhlolo ngaphambi kokuwusebenzisa. Lokhu kuhlola kuzokusiza ekuhlonzeni izinkinga ezinamandla ngaphambi kokuba zibe yizinkinga ezibalulekile.

**1** Hlola ithange ubheke izimpawu, izimfa noma ukuvuza. Qinisekisa ukuthi ithangi lisekeleke kahle nokuthi onke amafithingi nokuxhumana kuqine kakhulu. Qinisekisa ukuthi ithangi lihlanzwa kahle nokuthi zonke izinsalela zamakhemikhali ayagezwa ashiywe.



**2** Hlola iphampu ubheke izimpawu zomonakalo, ukudleka noma ukuvuza. Qinisekisa ukuthi iphampu ulubhrikhethwe ngokufanele nokuthi onke amafithingi nokuxhumana kuqinile. Uma isifutho siphelilewa amandla, bheka iphampu ukuthi azikho yini izimpawu zokonakala noma ukudleka. Khalibhretha isifutho ngokuhlola i-*flow rates*, amazinga omfutho namaphethini e-*nozzle*.



**3** Bheka ama-*nozzles* ukuthi azikho izimpawu zokulimala, ukudleka noma ukuvaleka. Uma ama-*nozzle* evalekile, wahlanze noma uwashintshe masinyane ukuvikela umonakalo ezilimeni. Uma isifutho sehlelwa amandla noma iphethini yesifutho ephumile elayinini, hlanza noma ushintshe onke ama-*nozzle* avalekile namoshakele nama-*filters*. Qinisekisa ukuthi amaphethini e-*nozzle* ahlanzekile noma ashintshwe.



**4** Hlola amaphayipi ukuthi azikho yini izimpawu zomonakalo, ukudleka nokuvuza. Qinisekisa ukuthi amapayipi axhumeke ngokuyikho nokuthi futhi onke amafithingi aqinile. Shintsha wonke umonakalo noma amapayipi agugile noma amafithingi. Shintsha konke okonakele noma amapayipi adlekile noma amafithingi. Kubalulekile ukuhlanza amapayipi ngaphakathi kanye ne-*spray-body fittings*.

**5** Hlola ama-*filters* kunoma yiziphi izimpawu, ukudleka noma ukuvimbeka. Hlanza noma ushintshe okuvalekile noma ama-*filter* alimele. Okubaluleke kakhulu, qinisekisa ukuthi isifutho sikhalibhrethe sifake ama-*nozzle* ombala owodwa.




PIETMAN BOTHA, UMELELEKI OZIMELE KWEZOLIMO



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# Izimakethe ezingakhethwa abalimi abancane

**U**KUMAKETHA INQUBO EHLELEKILE EKHOMBISA UKUTHI ABALIMI BEDLULA OCHUNGECHUNGENI LWEZINYATHELO OLUBANDAKANYA ABABI PHECELEZI *DISTRIBUTORS*, ABAHWEBI, ABATHE-NGISI KANYE NABADAYISI BEMPAHLA ENHLOBONHLOBO KWEZOLIMO (YONKE IMISEBENZI YEBHIZINISI) NGAPHAMBI KOKUBA UMKHIQIZO UFINEYELELE KUMTHENGI WOKUGCINA. KUBALIMI ABANCANE PHECELEZI *SMALL-SCALE FARMERS*, UKUMAKETHA NGOKUVAMILE KUSHO UKUDAYISA NOMA UKUSHINTSHISANA NGALOKHO ABAKUKHIQIZA EPULAZINI KUYE KWABANYE ABALIMI, OMAKHE-*LWANE* KANYE NOMA EPHAKATHINI WENDAWO.

Abalimi abancane phecelezi *Small-scale farmers* bahlangabezana nezinselole ezihlukene zokuthola imakethe okubandakanya ulwazi olungaphelele lwezimakethe, amazanga anzima okungena ezimakethe ezifomali, ingqalazinda enganele yemigwaqo, izimakethe ezikude, ukulethwa kwezidingo okunganele komasipala, izithuthi ezimbalwa kanye nesistimu enganele yokubeka. Lokhu kuphinde kube nomthelela emandleni abo kuba babababise ngenzuzo yezimakethe.

Ngaphandle kwalezi zinselelo, abalimi abancane bahlale bebambe iqhaza emnothweni wasemakhaya futhi banendima enkulu abayidlalayo ekunciphiseni ukwesweleka komsebenzi. Ukubheka kulezi zinkinga, kudingeka basebenzise amasu ahlukene okumaketha.

Ukwakhiwa nokuthola uhlelo lokumaketha olwahlukene kubalulekile ekukhandeni ibhizinisi lezolimo eliyimpumelelo. Iqhinga elinjalo lidala ukukhetha okunohlonze ezimakethe, okusiza ekulawulweni kokungaqondakali kwamanani nokuqinisa inzuzo yezimakethe. Le athikhili ibheka ukusebenza kwamasu ezimakethe aqondene nomkhqizo wommbila ezingeni labalimi abancane.

## EZINYE IZINDLELA ZAMASU OKUMAKETHA

**Amakhopholethivi:** Ukukhula nozinzo kwemboni yokusahlamvu kunge-*nele* kakhulu kwi-*business model* yamakhophalethivi. Lendlela yenza abalimi babe nethuba lokudonsa izinsiza, banakekele okungena ezimakethe, babelane ngobungozi futhi bathathe ithuba lesikali somnotho. Lezi zibalulekile ekulondolozeni umnotho wezindawo ezisemakhaya namandla okuthengisa. Okunye futhi, uma abalimi abasebencane bedonsa izinsiza nesipiliyoni kanyekanye, bengasiza umlimi ngamunye ukuphumelela isivuno esiphezulu sezilimo kanye namanani angcono emakethe.

**Amaphrosesa/nezigayo:** Ukusungula ubudlelwano nabagayi (abezigayo) bangaqinisa kakhulu i-aksesi yabalimi abancane bokusahlamvu emakethe. Abagayi banikeza imakethe ezinzile nethembekile yokusahlamvu okuhlaza, ukuqinisekisa idimandi engaguquki, okunciphisa ubungozi bomkhqizo ongadayisiwe futhi kuzinzise imali engenayo. Ngokwejoyalekile bakhanda inethiwekhi yabadayi kanye nomqondo wemakethe abalimi abancane abangazisebenzisa ukuze bafinyelele ezimakethe ezintsha futhi bakhulise isizinda samakhasimende abo. Ukwengeza kulokho, abagayi banganikeza ukweseka ngobuxhakaxhaka, ukuqeqeshwa nomhlahlandlela ngokwenzeka kwezolimo nokwenza ngcono ikhwalithi, okusiza abalimi bahlangabezane nezidingo zemakethe futhi baqinise umnikelo wabo womkhqizo.

**I-Feedlots:** I-Feedlots inikeza idimandi ezinzile nengaguquki yokusahlamvu njengokudla kwezinkomo, okuqinisekisa ukudayisa okuthembekile kanye nokuzinza kwemali engenayo kubalimi. Lokhu kwenziwa ukuthi i-*feedlots* ngokujwayelekile ithenga okusahlamvu ngobuningi, okungaholela ekuzinzeni kwamanani entengo namandla okuxoxisana kubalimi uma kuqhathaniswa nokudayiswa ikhwantithi encane ezimakethe ezivulekile. Ukwengeza kulokho, ukuhlanguka nama-*feedlots* kunikeza abalimi umqondo ojulile ngezimakethe, ukungena emathubeni amasha omkhqizo *one-value* eyengeziwe efana nokudla okuxutshiwe okuyisipesheli noma *i-by-products*, kanye namandla ezinkontilaki zesikhathi eside ezeseka ukukhula kwebhizinisi nozinzo.

**Imfuyo:** Ngokondla imfuyo ngommbila, abalimi bangazinciphisa izindleko zabo zokondla futhi benze inzuzo engcono ngesilwane ngasinye. Lokhu kongiwa kwezindleko kungaba yinzuzo enkulu, ikakhulukazi ngesikhathi lapho amanani entengo yokudla eguquguquka. Ukusebenzisa ummbila njengokudla kwemfuyo kungadala ukwanda kwemithombo yemali kubalimi, okuthinta izimakethe zokusahlamvu nemfuyo. Le nhlanganisela futhi iphromotha izindlela ezinzile zokulima, njengoba izimvithi zommbila nama-*by-product* okondla imfuyo imfuyo engaphinde esetshenziswe abuyiselwe aphindiselwe enhlabathini njenge-*organic matter*, ukusekela impilo yenhlabathi isikhathi eside nokuvunda.

**Izimakethe zendawo:** Ukudayisela abathengi abasemphakathini yabalimi kungabasiza abalimi ekutheni bagcine inzuzo eningi yesivuno sabo, ngokukhulisa i-*income margins*. Ukudayisela izimakethe zendawo nakho kuyabuqinisa ubudlelwano namalungu omphakathi, kwakhe ithemba nokwethemba. Abalimi bengayiguqula iphakhejini yabo namasu okumaketha ukuhlangubezana nezidingo zendawo nedimandi, namandla okukhomanda intengo ephezulu emikhqizweni eyisipesheli nebhrendiwe. Okunye futhi, ukubamba iqhaza ezimakethe zendawo kuqinisa ukubonakala nokwaziwa emphakathini, kwenze umhlahlandlela wokuphindwa kwebhizinisi nokulayelana ngamazwi omlomo.

## ISIPHETHO

Ukuqinisa izimakethe kubalimi abancane bokusahlamvu akuqinisi kuphela umnotho wabo kodwa kuphinde kwandise intuthuko emakhaya. Uku-*khuthala* kwabalimi emisebenzini yemakethe kufanele kufinyelele ngale komkhqizo wezolimo ngokuthola amathuba okubambisana nabezigayo, i-*feedlots* nokudayisa ezimakethe zendawo, okuyinto ebalulekile kubalimi abancane bokusahlamvu.

Amandla obudlelwano namaphrosesa nokufuna amathuba azokwengeza i-*value* phecelezi *value-added*, abalimi abancane bengaphinde bazigqamise ubukhona babo ezimakethe, baqinise inzuzo yabo futhi benze impumelelo yokukhula nokuqina kwebhizinisi emkhakheni wezolimo. Ukuqalisa ukuguqula ukusebenza kwesistimu yemakethe, ukuzinza kwemali engenayo futhi beseke ukuqhubekela kwezindlela zezolimo phakathi kwabalimi abancane, lokhu kubandakanya kakhulu ekuthuthukisweni ezomnotho ezindaweni ezisemakhaya. ■



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## INGXENYE 3

# Ukwethula kwe-business plan KWABABAMBE IQHAZA

**U**MA UMLIMI ENQUMA UKUZIKHANDLA NGOKWAKHE I-BUSINESS PLAN NOMA AKHOKHELE OMUNYE UMUNTU UKUZE AMENZELE, UZOHLALA EZIBOPHEZELE KWINQUBO NOKUQUKETHWE KU-BUSINESS PLAN. UMLIMI NGUYE OZOQALISA UKUSEBENZA KWE-BUSINESS PLAN EPULAZINI LAKHE FUTHI AHOLELE IBHIZINISI LAKHE ESIKHATHINI SALO ESIZAYO.

Ukukhandwa kwe-business plan akuyona idokhumenti ebhalwa kanye uyihambise kube kuphelile uqede ukhohlwe ngayo. Kuma-athikhile adlule, incazelo ye-business plan nezizathu zokuthi kungani umlimi eyidinga kwakhulunywa ngakho. I-athekhile yesibili ichaza ukuthi yini okufanele kufakwe ku-business plan yanikeza nohlaka olusetshenziswayo.

Khumbula, i-business plan imele indlela yekusasa eya empumelelweni noma ukukhulisa ibhizinisi lepulazi. Ichaza lapho ipulazi liphokophelele khona iphinde ichane nokuthi lizofinyelela kanjani lapho liya khona. Umlimi kufanele azi ngakho konke okuqukethwe yindlela yemephu yakhe futhi akhululeke ngokuthi uzokwazi ukukwenza lokho.

Emuva kokuhanjiswa kwe-business plan, izikhungo zezezimali noma izikhungo zikahulumeni zizokwenza ucwaningo lokuqala zibone ukuthi ngabe le-plan iyahlangabezana yini nezidingo zabo nokuthi bayathanda yini ukulixhasa lelo bhizinisi. Uma belithanda lelo bhizinisi, umlimi bayamema ukuba eze emhlanganweni ezoletshula yena uqobo, futhi babuze imibuzo kabanzi.

## ZILUNGISELELE

Kubalulekile ukuthi umlimi awulungiselele kahle lo mhlango ngoba umqondo awethulayo uzoba nomthelela ekutheni bangathanda ukulixhasa ibhizinisi.

Kungenziwa nakhu okulandelayo kulungiselela kahle ukwethula izinto ezinjalo:

- Funda i-business plan futhi uqinisekise ukuthi uyakwazi okubhaliwe kuyo ukuze ukwazi ukuphendula noma yimuphi umbuzo ongabuzwa nge-plan eyethuliwe.
- Uma ukhetha umuntu ukuba akubhalele i-plan, bameme emhlanganweni ukuze bakusize ekuphenduleni imibuzo, ikakhulukazi uma imayelana nolwazi losebenzi noma imayelana nezezimali.
- Qinisekisa futhi uzethembe ukuthi uzokwazi ukuliqalisa i-business plan futhi yisitshuwadi sezinsiza zokusebenza onikezwe zona.
- Akube nguwe othatha izinqumo unganciki kwabanye abantu ukuba bakuthathele ezinqumo. Yiba yingxenyane yenqubo, ubuze imibuzo futhi uzibandakanye engxoxweni. Uma i-business plan/i-aplikheshini ichithwa, cela ababambe iqhaza ukuba bakunike umbiko ngezizathu ezimayelana nokuthi kungani beyichithile ukuze uzoyenza kangcono ngesikhathi esizayo.

Ungadumali uma i-aplikheshini yokuqala ingaphumelelanga, qhubeka nokusebenza ebhizinisini futhi wenze ngcono ukuze ufaneleke ukuba uphathini nalabo ababambe iqhaza abangaphandle.

Ungadangali uma isicelo sokuqala singaphumeleli, qhubeka nokusebenza ebhizinisini futhi uthuthuke ukuze ube uzakwethu ofanelekayo wababambe iqhaza bangaphandle. ■

**YOLANDI KRUGER,  
UMELULEKI WEZOLIMO  
EDUNAMUS**



# Iphrogramu egugqula izimpilo



**PGP**  
PHAHAMA GRAIN PHAKAMA

Farmer  
Development  
Programme

Umbiko

## Imiphumela yokuvuna ingenile

**AMAHHOVISI** ePhahama Grain Phakama (PGP) amatasatasa ahlelela isizini elandelayo. Njengoba ithimu ihlonza abalimi abasha nabamanje bamaphrojekthi esizini elandelayo, ukuvakashelwa kwamapulazi kusazokwenziswa. Isamba samapulazi angama-73 avakashelwe phakathi komhla ka-12 Juni no-8 Julayi kulezi zifunda ezilandelayo. I-Dundee, Impumalanga naseNtshonalanga yeFreystata, e-Kokstad, e-Louwsburg naseMbombela.



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I-Manthole Study Group namaphepha-bhuku abo ePula!



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