

## UKUTSHALA

ngu Joe Nkala (Umeluleki Wezomoba: SASRI)



### YISIPHI ISIKHATHI ESIKAHLE SOKUTSHALA

Ukutshala kwehluka ngokwezindawo njengoba imboni kaShukela izehlukanise ngokwesimo semvelo ikakhulukazi kubhekwa isimo sokushisa nokubanda kanye nomswakama okhona.

#### a) Izindawo zaseNyakatho

Ngenxa yokunisela, kujwayeleke ukuthi umswakama ungasweleki kanti ngokunjalo isimo sokushisa nesokubanda sivame ukuvumela ukuthi kungatshalwa kusuka ekuqala konyaka kuze kube uyophele, mhlawumbe ungagwema izinyanga ezimbili okunguNhlaba(May) kanye noNtulikazi(July) ngoba zibanda kakhulu. Indlela ekahle ngeyokuthi kuqedwe ukutshala ngasekuqaleni kwehlobo ukuze umoba uthole isikhathi esanele sokukhula kusashisa. Ukutshala maphakathi nehlobo kungaba nobungozi ngoba amasimu atshalwe ngelesisikhathi avame ukuba nesiwumba(Smut), ngaleyondlela kunconywa ukuthi kutshalwe eNtwasahlobo kanye naseKwindla.

#### b) Izindawo eziphakeme ezimaphakathi nezwe

Ubude besikhathi sokutshala silawulwa isimo sokubanda nesokushisa kanye nesifo umabalabala/umbandamu esihlasela amakhasi omoba. Umoba olitshalo osuke usunamakhasi embozile ukwazi ukwedlula kalula ebusika bokuqala utshaliwe, nokusho ukuthi ukutshala makuphela ngenyanga uMfumu (October), ngoba

umhlabathi usuke usabanda kakhulu. Akusibona ubuhlakani ukutshala ngaphambi kukaMandulo (September). Masingakuthatha njengomthetho, singathi ukutshala makuqale maphakathi nenyanga uMandulo kuya ekupheleni kukaMfumu. Ukunqanda isifo umabalabala, makungatshalwa kusuka ekupheleni kukaMfumu kuya kuNhlolanga, njengoba lokhu kuzosiza ukunciphisa ubukhona balesifo. Kungatshalwa eKwindla kodwa lokhu kuncike ekutheni isimo sikahle yini ukuthi umoba ungaqhuma kahle, njengokuthi:

- Umhlabathi osemiseleni ekuzotshalwa kuyo ucoliseke kahle
- Kunomswakama owenele emhlabathini
- Imisele yokutshala mayingajuli kakhulu. Imbewu mayigqitshwe okungenani ngomhlabathi onga 30 cm.

Isikhathi sokutshala sifushane kakhulu, ngakho kubalulekile ukuthi uhlelo lokutshala lwenziwe kusenesikhathi ikakhulukazi ezindaweni ezimaphakathi nezwe. Ukusetshenziswa kwezinsiza kutshala, njengamanzi noma amadaka emiseleni, kwehlisa ubungozi bokutshala masinyane kakhulu noma isikhathi sesihambile.

#### c) Izindawo eziseningizimu

Lesisifunda siphakathi kwalezindawo ezimbili ezibalwe ngenhla. Ukutshala kungaqala kuqala uNcwaba kuqhubeka njalo kuze kube sekupheleni kukaMfumu. Kungatshalwa futhi eKwindla,

kodwa ukutshala ehlobo kumele kugwenywe ngenxa yobungozi bokuguguleka komhlabathi kanye nesifo umabalabala.

### UKUTSHALA NGOKWEZIKHATHI ZONYAKA

#### a) Ukutshala entwasahlobo kanye nasehlobo

Amasimu ahlonzwe njengazotshalwa kufanele kuhlelwe ukumbiwa kweziqu ngoNhlaba, ngoNhlanguvana(June) kanye noNtulikazi (July) njengoba amathuba okufa kwesitshalo esidala emakhulu kakhulu ngesikhathi sasebusika. Lokhu kusho ukuthi amasimu alala isikhathi eside, kodwa kubalulekile ukuqinisekisa ukuthi awekho amahlumela amadala(amavolontiya). Uma ngabe izimvula ezikahle zokuqala zitholakala, nezingalinganiselwa emamilimitheni angama-50 ngesonto elilodwa, insimu kumele idatshulwe, kutshalwe ngokushesha.

#### b) Ukutshala ekwindla

Izizathu ezifana nokuba khona kakhulu kwesihlava somoba, ukungabibikho kwabasebenzi noma isidingo sokuthi kutshalwe kakhulu kungenza kube nesidingo sokuthi ukutshala kuqhubekile nasekwindla.

#### c) Ububi bokutshala ekwindla:

Imvula nokushisi kusuke kungenele, kunobungozi bokuguguleka komhlabathi kanye nokungabikho komoba ngesikhathi sokukhula kusezingeni eliphezulu.

#### d) Ubuhle bokutshala ekwindla

- Isitshalo simboza ekuqaleni kwehlobo silwe nokhula, abasebenzi basuke bekhona ukubhekana nenkinga yokhula.
- Amasimu atshalwe ngalesi sikhathi awavamile ukuba nesifo umabalabala kanye nesiwumba.
- Ezindaweni okuhlahlwa minyaka yonke umoba olitshalo ungabekelwa ukuthi uhlahlwe ngonyaka olandelayo ukunqanda isihlava.

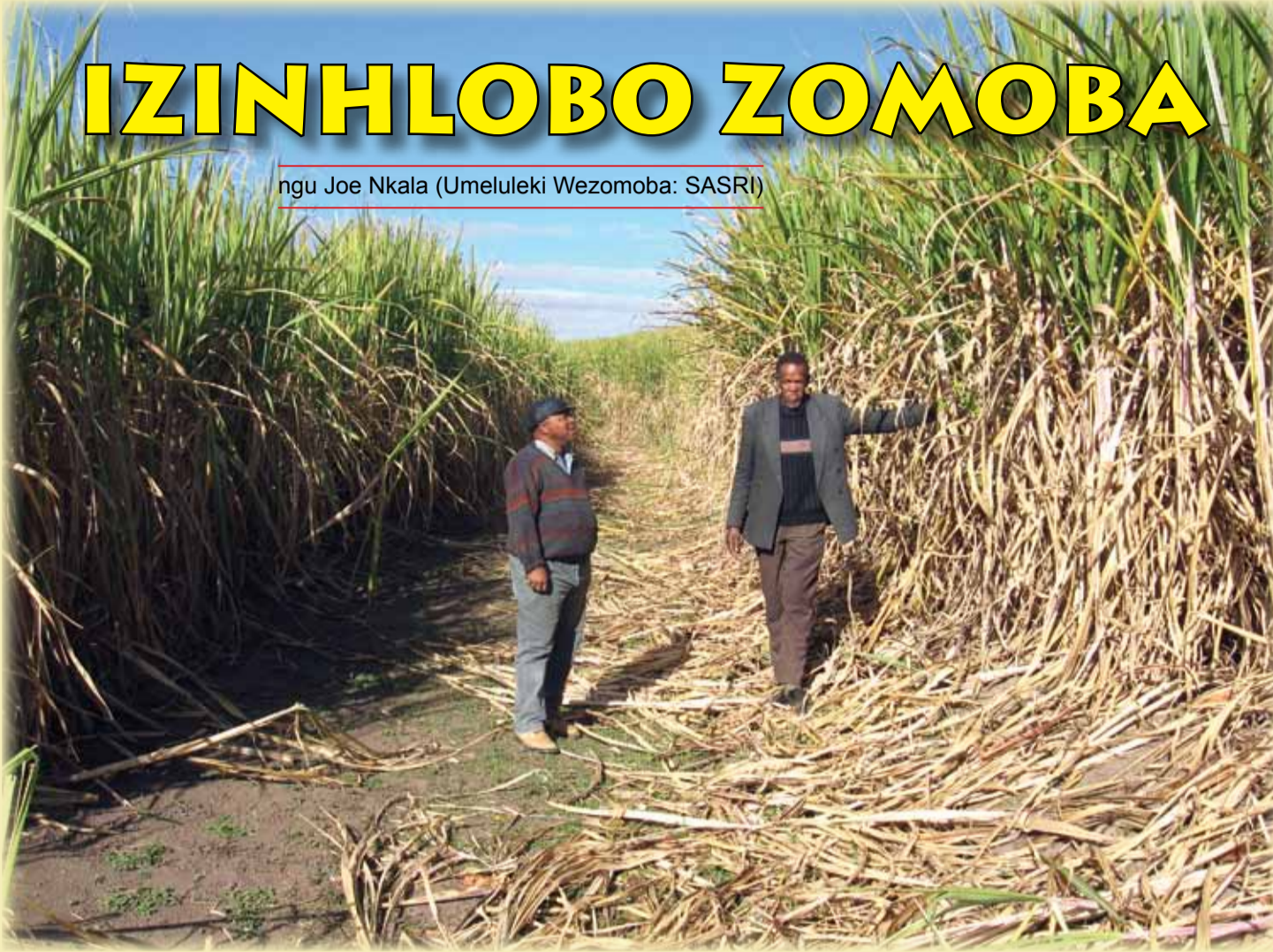
Ngenxa yebungozi besomiso esiba khona, ukutshala ekwindla kufanele kwenziwe kuphela ezindaweni ezithola izimvula ezinhle, noma lapho kuniselwa khona. Njengoba impumelelo yokutshala ekwindla incike ekuqhumeni ngokushesha komoba. Kufanele kwenziwe zonke izaba ukuqinisekisa ukuthi akukho okuzokhinyabeza ukuqhuma komoba. Isibonelo, umhlabathi emiseleni kufanele ucoliseke, imbewu kufanele ibe ngesencane nesheshayo ukuqhuma (ungasebenzisi u-N12 kanye no-N17), kufanele kube nomswakama futhi imbewu ingambozwa ngomhlabathi ongaphezu kwamasantimithi angama-30. Ukufaka amadaka phezu kwembewu esisemiseleni kungenza amathuba okuqhuma abe phezulu ngesikhathi lomisele ngengoba ingabamba umswakama, nokuyinto edingwa amehlo aqhumayo. Ukutshala usebenzisa amanzi nakho kungasiza kakhulu ukuthi umoba uqhume masinyane.

### AMAQINISO NGESIFO UMABALABALA (Mosaic)

- Uma ngabe lesifo sesidlanga kakhulu isivuno singehla ngezinga elifinyelela emaphesentinti angama-30 ezinhlobeni zomoba ezingakwazi ukumelelelana naso.
- Umabalabala ungesinye sezifo okunzima kakhulu ukusilawula uma sesihlasele ngoba sinohla lwezitshalo esingacasha kuzo njengotshani basendle nombila futhi lesifo sisaphazwa izinambuzane (intwala zamaqabunga).
- Uma nje umoba sewungenwe umabalabala, ngeke UWELAPHE ngokuphekwa emanzini ashisayo noma ngemithi.
- Izithombo zeNovacane® ziwumthombo/msuka obaluleke kakhulu wembewu engenasifo/ehlazekile.
- Isixazululo sesikhathi eside kumabalabala ukutshala uhlobo lomoba olukwazi ukumelana nawo.

# IZINHLOBO ZOMOBA

ngu Joe Nkala (Umeluleki Wezomoba: SASRI)



ukuthi usheshe uzihlahla kanti ezinye zidinga ukuthi wephuze ukuzihlahla.

Isibonelo: Uma umlimi enepulazi endaweni enganiselwa njengasoGwini oluseNingizimu angeke kube umqondo ophusile ukuthi akhethe ukutshala uhlobo lomoba olubizwa nge-N25, kodwa kungafanele atshale u-N39 noma N41.

## Uhlobo lomoba olukhethayo maluhambisane nomhlabathi

Kubalulekile ukuthi uhlobo lomoba luhambisane nohlobo lomhlabathi njengalokhu kungenza omkhulu umehluko. Lokhu kuvame kakhulu ezindaweni ezitsekile/qethukile nokulapho umhlabathi wehluka kaningi.

Ekugcineni ukukhetha uhlobo lomoba kuyisinqumo somlimi. Uhlobo lomhlabathi, nokuthi ubheke kuphi, imvula ukuphathwa kwahlukene ngokwamapulazi. ISikhungo sezoCwaningo loMoba saseNingizimu ne-Afrika (SASRI) sikhona ukukusiza njengomlimi ukuze wenze isinqumo esifanele (*Buka isithombe esingezansi*)

## Izinhlolo ezifanele zikamoba

Ukukhetha uhlobo lukamoba kuncike eku-theni kuvumelekile yini ukuthi lungatshala waleyo ndawo yesifundamshini. Zonke izinhlobo zikamoba ezivumelekile zishicilelwa kusomqulu kaHulumeni.

## Izinhlolo zikamoba ezivumelekile

Zibuyekwezwa minyaka yonke kanti futhi ubungako bezinhlobo ezivumelekile ziyehluka ngokwezindawo zezifundamshini. Lokhu kuncike kakhulu ekutheni lolohlobo lomoba lokwazi ukumelana kangakanani nezifo kanye nezinambuzane ezitholakala endaweni yesifundamshini.

Ukumelana nezifo kuyehluka ngokwezinhlobo zomoba. Ngaleyo ndlela kubalulekile ukuthi umlimi angathathi uhlobo lomoba lwakwenye indawo alutshale kwenye indawo nokungenziwa ukuthi uwubona ukhula kahle kuleyondawo.

## Izincomo

Ziningi kakhulu izinhlobo zomoba ezikhona abalimi abangazitshala. AbeSikhungo seZocwaningo lukaMoba benza izoncomo ogazithola:

- kuBeluleki beSikhungo ebasezindaweni zangakini
- Ngezinsuku zaBalimi nezikunikeza ithuba lokuthi ubone izinhlobo ezintsha zikamoba endaweni yangakini
- Kwincwajana ebizwa nge-Link, aMabhukwana oLwazi, amaBhuku anezithombe zezinhlobo zomoba, usomqulu obizwa nge-Sugar Journal
- Kanye naku-Internet ekhelini elithi: <http://www.sasa.org.za/sasri/varieties/index.htm>

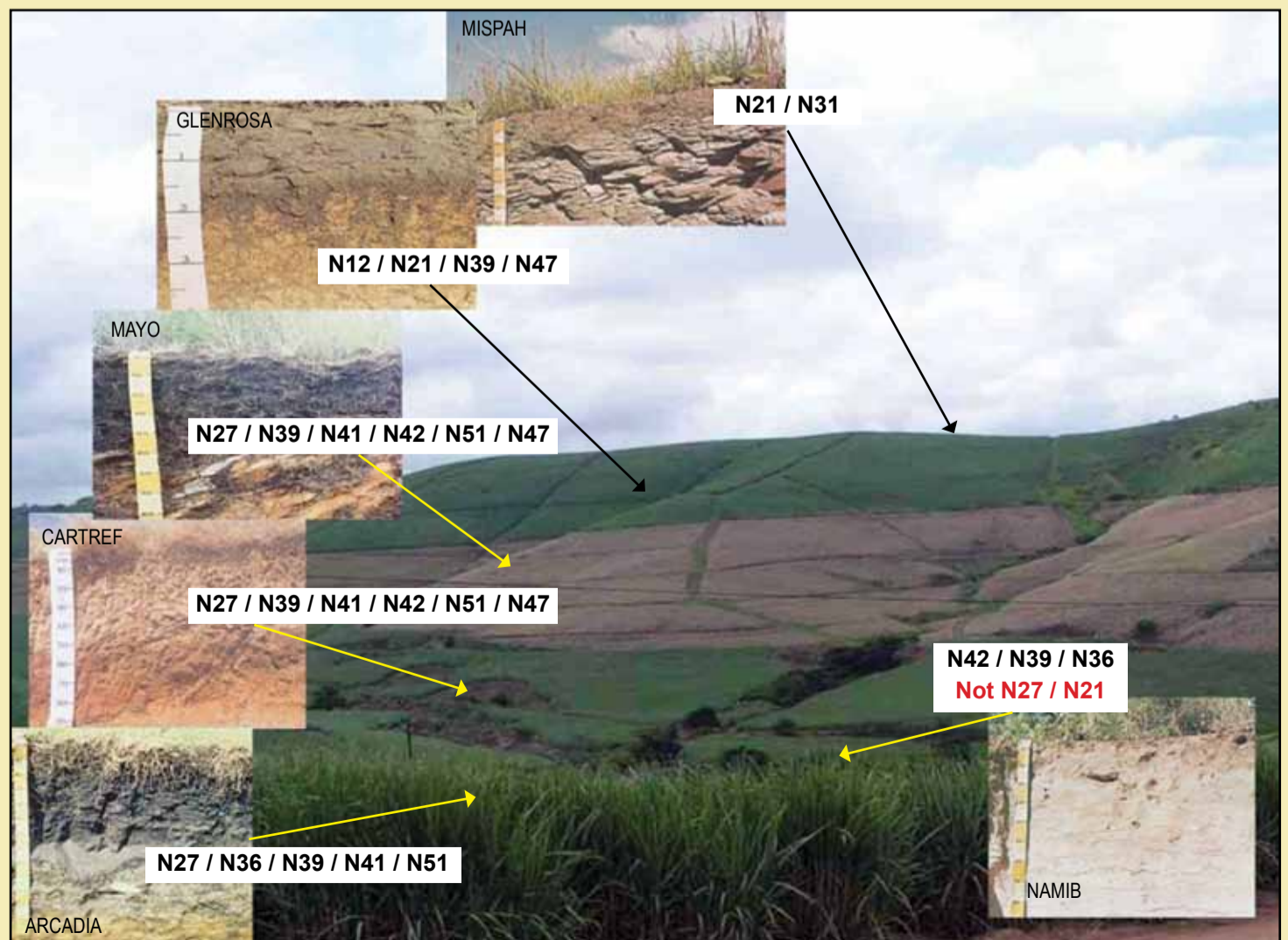
## Khetha uhlobo lomoba okuyilona nolufanele

Kubalulekile ukuthi umlimi akhethe uhlobo olufanele lomoba azolutshala

njengoba izinhlobo zehluka ngokwezindawo njengoba ezinye zidinga ukuniselwa ukuze zikhule kahle kanti futhi ubude besikhathi sokuvuthwa kuyehluka. Kunezinhlolo othi uma uzitshalile ukwazi

## Ukukhetha uhlobo lomoba ngokwezifunda.

Izindawo	Uhlobo lomoba olejwayelekile	Izinhlolo ezintsha	Ezesheshe zivuthwe	Eziphuza ukuvuthwa
EziseNyakatho eziniselayo	N14, N19, 25	N36, N40, N46		
Inyakatho kanye nezisoGwini oluseNingizimu	NCo376, N12, N16, N17, N27, N29	N35, N41, N42, N45, N33, N39, N47	N35, N41, N42, N45	N33, N39, N47
EziMaphakathi nezwe neziphakeme	NCo376, N12, N16	N31, N37, N44, N48		
eziMaphakathi nezwe eziphakeme neziniselayo	NCo376, N12, N16	N23, N25, N26, N36		





## IZINHLOBO ZIKAMOBBA ZIVUMELEKILE NEZISHICILELWE NGONYAKA KA-2011

	CP66/ 1043	N55/ 805	NCo 376	NCo 382	N 12	N 14	N 16	N 17	N 18	N 19	N 21	N 22	N 23	N 24	N 25	N 26	N 27	N 28	N 29	N 30	N 31	N 33	N 35	N 36	N 37	N 39	N 40	N 41	N 42	N 43	N 45	N 46	N 47	N 48	N 49	N 50	N 51	N 52	N 53	
Malelane	*				*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	18
Komati	*				*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	18
Pongola	*				*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	18
Umfoloji N.	*				*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	18
Umfoloji S.			*		*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	26
Entumeni			*		*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	26
Felixton			*		*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	21
Amatikulu			*		*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	21
Darnall			*		*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	29
Gledhow			*		*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	29
Maidstone			*		*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	29
Midlands North					*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	23
Midlands South					*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	24
Sezela		*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	30
Umzimkulu			*		*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	23

Bonisana nomeluleki wakho ngaphambi kokukhetha uhlobo lomoba oluhambelane nendawo okuyona.

# ISIFO SOMOBBA ISIWUMBA

ngu Joy Mgadi  
(Umeluleki Wezomoba: SASRI)



Isiwumba esesivuthiwe esesingapheshulwa (sisaphazeke)

### SIDALWA YINI LESI SIFO?

Isiwumba (Smut) isifo esiyinkinga kakhulu emobeni lapha e Ningizimu Afrika, uhlobo lwesifo oludalwa i-fungus. Lesi sifo sihlupha kakhulu ezindaweni eziniselayo zaseMpumalanga kanye nasenhla KwaZulu, kanti kwezinye izindawo ezitshala umoba ngokujwayelekile sitholakala kuhlobo lomoba olungakwazi ukumelana naso.

### SIBONAKALA KANJANI LESI SIFO?

Sithi masifane kancane nawo umoba uma sisesincane, bese kuthi uma sesikhulile sikhipe okusatshakazi elinombala onsundu kakhulu onempushana ngaphezulu kwezinhlanga neziqu ezinesifo. Iziphunzi ziba nezidleke zeziqo ezisatshani.

### YINI EYANDISA LESI SIFO?

- Ukutshala imbewu enalesifo
  - Umoya uphephula lokhu okusampushana okuyimbewu yaso
  - Ukutshala endaweni esithelelekile
- ### SINGAVINJWA KANJANI LESI SIFO?
- Ukutshala imbewu ehloliwe
  - Ukutshala uhlobo lwembewu ekwaziyo ukumelelana naso
  - Susa umoba ozimilele ngaphambi kokutshala(amavolontiya)
  - Susa iziphunzi ezinesiwumba noma ulime ukhiphe umoba emasimini anesiwumba
  - Umlimi kumele asihlole emva kwezinyanga ezintathu (3) etshalile noma ehlahile umoba wakhe, aphinde alandalise ngokusihlola njalo emva kwamaviki amane (4) kuya kwayisithupha (6) kuze kube umoba ukhula uba nobude obungamamithitha amabili (2)

### INDLELA YOKUSIKHIPHA ENSIMINI UMA SESIKHONA

Isiwumba (Smut) sinempushana esiyikhiqizayo ngakho kubalulekile ukuthi umlimi uma esikhipha asebenzise isikhwama ebesinomanyolo.

- Uqala usike isiswebhu esisuke sakhiwe yilesifo usifake esikhwameni sikamanyolo
- Mboza sonke isixhanti ngesikhwama sikamanyolo
- Yimba sonke lesosixhanti esinesiwumba ngegeja
- Thatha lesosixhanti ngesikhwama sikamanyolo uyosishisa ngaphandle kwensimi

### UMONAKALO ODALWA YILESI SIFO

Lesisifo sidala umonakalo omkhulu kangokuba uma izinga laso se-

liphezulu umlimi uyaphoqwa umthetho wasemobeni ukuthi abulale insimu yakhe ngaphambi kokuba ayise umoba wakhe esigayweni (immediate plough out order), ngenxa yalokubulala umlimi akatholi nzuzo kodwa uhlalelwa izikwel-etu kanye nezindleko zokubulala kanye nokulima kabusha insimu yakhe.

### UKWAZI KANGCONO NGALESIFO

Ithimba elibhekene neZifo kanye neZinambuzane kanye naBeluleki bomoba bakhona zonke izindawo ezinomoba ukufundisa nokukhombisa ukuthi sibukeka kanjani, kunezinhlalo zokukhumbuzana umlimi ngamunye ukuthi akwazi ukuthi sekufanele ahlole amasimu akhe. Isiwumba (Smut) siyanqobeka kuphela uma umlimi ewukhuthalele umsebenzi wakhe ngokuba ahambe ahlole insimi yakhe ukubona ukuthi akunasifo noma yini engajwayelekile ayibonayo ensimini yakhe.



# AMASU ASEMQOKA

**Qikelela ukuthi lemisebenzi elandelayo uyenza ngesikhathi okuyiso nangendlela okuyiyo esimobeni sakho ukuze uzuze ekugcineni.**

## Ngo-Mandulo

• Lesi isikhathi esifanele noma okuyiso sokufaka Izibulala-khula ezinqanda ukhula isikhathi eside. Lezibulala-khula zigcina isimoba sakho singenakhula okungaze kufike la isimoba sakho simboza noma sihlanganisa khona ngaleyondlela kuncipha izindleko zokuhlakula. Khumbula ukusebenzisa izingubo ezikuvikelayo uma usebenzisa Izibulala-khula futhi ulahle izitsha zezibulala-khula esezisebenzile ngokuphephile.

• Qala ukufaka isikhuthaza emobeni wakho ohlahlwe ebusika.

• Khumbula ukuthi sibulala ukhula kuqala ngaphambi kokuba sifake isikhuthaza ngoba uma sifaka umanyolo kuqala, ukhula luzodla umsoco wesitshalo sethu bese lukhuthazeka lubebhetheke ludlondobale. Faka isikhuthaza ezinsukwini ezimbalwa uhlahlile uma sezikhona izimvula, asikho isidingo sokulinda uze uhlume umoba.



• Faka isikhuthaza ngokulandela izincomo zika-manyolo zakwa-SASRI (FAS) ukuqinisekisa ukuthi isitshalo sakho sithola esikudingayo.

• Qala ukutshala kwakho kwase-Ntwasahlobo uma izimvula seziqalile.

• Loku kuqinisekisa ukuthi isitshalo sakho sikuthola konke ukufudumala nezimvula zasehlobo ngaleyondlela siyosimama kahle futhi sibe nomkhiqizo omuhle. Sebenzisa imbewu ehloliwe futhi qinisekisa ukuthi umoba omdala ufuthiwe ngophoyizeni wafa ukuze kungabi nama-volontiya.

## Ngo-Mfumfu

• Hlola amasimu abefakwe Izibulala-khula ngenyanga edlule ukubona ukuthi ukhula lufe kahle yini. Uma kunezindawana la lungafanga khona, futha ukhethhe lezozindawana kuphela ungaziyeki ngoba uthi zincane.

• Bheka amasimu anokhula oluyinkinga bese uqala ukulwa nalo.

• Ezindaweni ezimaphakathi nezwe (Midlands) – qala ukufaka umanyolo emasimini akho.

## Ngo-Lwezi

• Sika/hlanza imingcele yamasimu namabhande omlilo.



• Ezindaweni ezinokuhlaselwa kakhulu isifo umabala-bala (mosaic), ungatshali phakathi kuka Lwezi no Nhlolanja ngenhloso yokugwema lesisifo.

• Ezindaweni ezimaphakathi nezwe (Midlands) – qapha noma lawula ukhula lwasebusika emobeni we sizini edlule.

## Ngo-Zibandlela

• Qhubeka nokubulala ukhula emasimini akho, ikakhulukazi lolo oluyinkinga, wenze isiqiniseko sokuthi makube sekuphuthuliwe ukuhlakula ngaphambi kokufika kwamaholide amakhulu noma kokuvala kwabasebenzi bakho.

• Ngalesikhathi, kumele ngabe ukutshala kwakho sekuya ngasekupheleni ikakhulukazi ezindaweni ezingenankasa. Gwema ukutshala ngo Masingana, Nhlolanja nango Ndasas.



ngu Bongani Phewa  
(Umeluleki Wezomoba: SASRI)

## ILEBULA / ITHIKITHI ELITHOLAKALA ESIGUBHINI SEZIBULALA KHULA

Lemidwebo engezansi ichaza izakhi zelebula lomkhiqizo.

Yonke imithi ebhaliselwe ukusetshenziswa emobeni ngoko-Mthetho 36 ka-1947: Izikhuthazi, Ukudla Kwezitshalo, namakhambi Ezolimo namakhambi Ezemfuyo (Fertilizers, Farm Feeds, Agricultural and Stock Remedies Act No. 36 ka-1947), anokubizwa ngethikithi/lebula. Ithikithi, elinamathiselwe esigubhini somuthi, linikeza ulwazi olubalulekile ngomkhiqizo. Linika izindlela eziphephile zokusebenzisa umkhiqizo, ulwazi ngenqube okumele ukuqaphele nezixwayiso okumele uzilandele ekusebenziseni umkhiqizo. Iyona ndlela esemqoka yokwazisa umsebenzisi ngenhloso kanye nokusetshenziswa okuphephile nokuphumelelayo kwekhambi.

Lendawo inikeza ulwazi ngokuphathwa komkhiqizo.

Lendawo inikeza ulwazi ngomkhiqizo nobuthi bawo, inombolo ekubhaliswe ngayo umuthi kanye nosuku lokukhiqizwa.

Lendawo ikuhlolela ekusetshenziseni komkhiqizo (iziphi izinambuzane ezivikelekayo nesilinganiso okumele sisetshenziswe)

Leli bhokisi eliwumbala likwazisa ukuthi umkhiqizo uyisibulala khula.

Leli bhendi eliwumbala likhombisa iqoqo lobungozi bomkhiqizo

### Ingxenye eyisisekelo sethikithi lesibulala khula

Umbala webhendi otholakali maphansi kwilebula uveza iqoqo eliwubungozi bomuthi (Umfanekise 2). Izinga lobungozi buhambisana namandla umkhiqizo onawo ukulimaza umsebenzisi kanye nemvelo. Imikhiqizo yebhendi ebomvu inobungozi kakhulu, bese kuthi eyebhendi eluhlaza inobungozi obuncane. Ngokwemboni kashukela, sinezibulala zinambuzane ezingama-46 ezisemthethweni. Kulemikhiqizo engamaphesenti angu-87 ase-qoqweni lobungozi II, III noIV.

Izithombe zokuphathwa komkhiqizo (Kumele zifundwe kusukela phakathi nendawo)

Uphawu lobungozi

Izithombe zokusetshenziswa komkhiqizo (Kumele zifundwe kusekela phakathi nendawo)