



agriculture & rural development

Department:
Agriculture and Rural Development
PROVINCE OF KWAZULU-NATAL

UKUKHIQHZWA WAMAKLABISHI

GOKUBAMBISANA SESENZE ISIFUNDAZWE SAKWAZULU-NATALI SABA ESINGCONO UKUPHILA KUSO



www.kzdata.gov.za

UKUKHIQIZWA WAMAKLABISHI

GOKUBAMBISANA SESENZE ISIFUNDAZWE SAKWAZULU-NATALI SABA ESINGCONO UKUPHILA KUSO

Uma unesifiso sokuthola ikhophi yalencwadi xhumana:
nomNyango wezoLimo nezeMvelo kwisakhiwo
sendlu emhlophe
01 Cedara Road, Cedara
Private bag X9059
Pietermaritzburg
3200
Tel: 033 343 8240
Fax: 033 343 8255
www.kzndard.gov.za



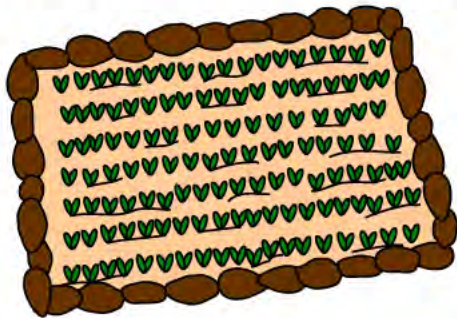
UKUHFLELA

Kutshalwa nini?

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Izindawo Ezipholile:	✓	✓	✓					✓	✓	✓	✓	✓
Izindawo ezifudumele:	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Izindawo ezishisayo:			✓	✓	✓	✓	✓					

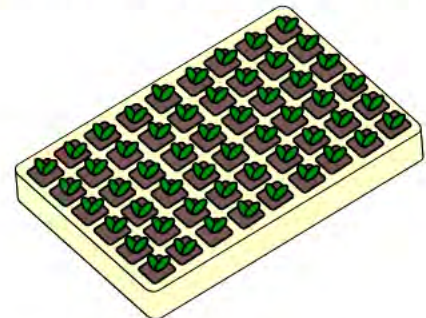
Ungabe:

Uzotshala imbewu
embhedeni wezithombo



Noma

Uzothenga izithombo
kubakhiqizi bezithombo?



Yiziphi izinhlobo ezinconywayo?

EHLOBO



Hercules
Green Star
Centauro
Star 3301
Star 3304
Beverly Hills

EBUSIKA



Green Coronet
Green Crown
Star 3306
Hercules
Conquistador

**Lezi zinhlobo ezingenhla, yizibonelo ezimbalwa-nje
ezinokutholakala.**

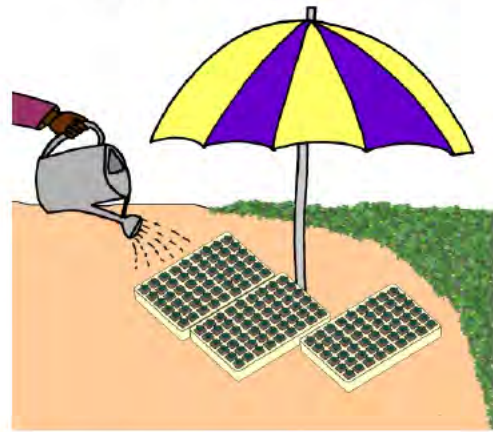


UKUHLELA (Kuyaqhutshwa)

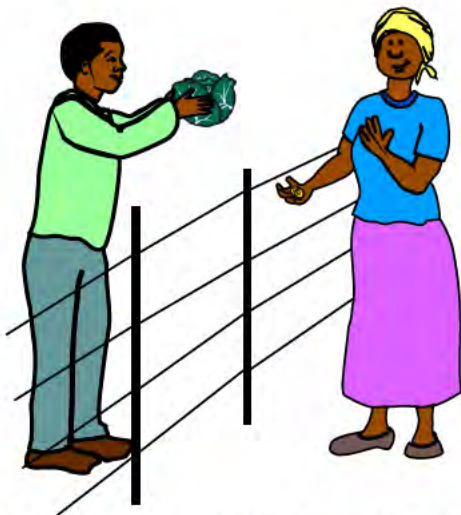
Uma uthenga kubakhiqizi:
Faka isicelo sokudayiselwa
kusasele amasonto
ayisithupha ngaphambi
kokutshala



Zilande izithombo, uzigcine
ethunzini, uzichelele bese
uzitshala ngokushesha
okunokwenzeka



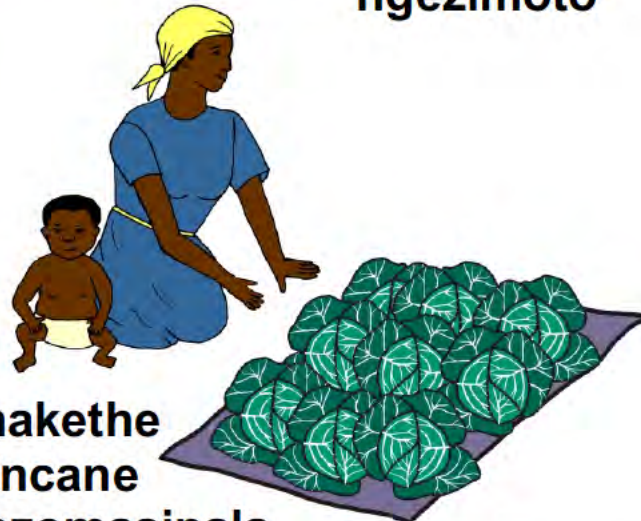
Izimakethe ezingadayiselwa:



Umphakathi oseduze



Abathenga behamba
ngezimoto

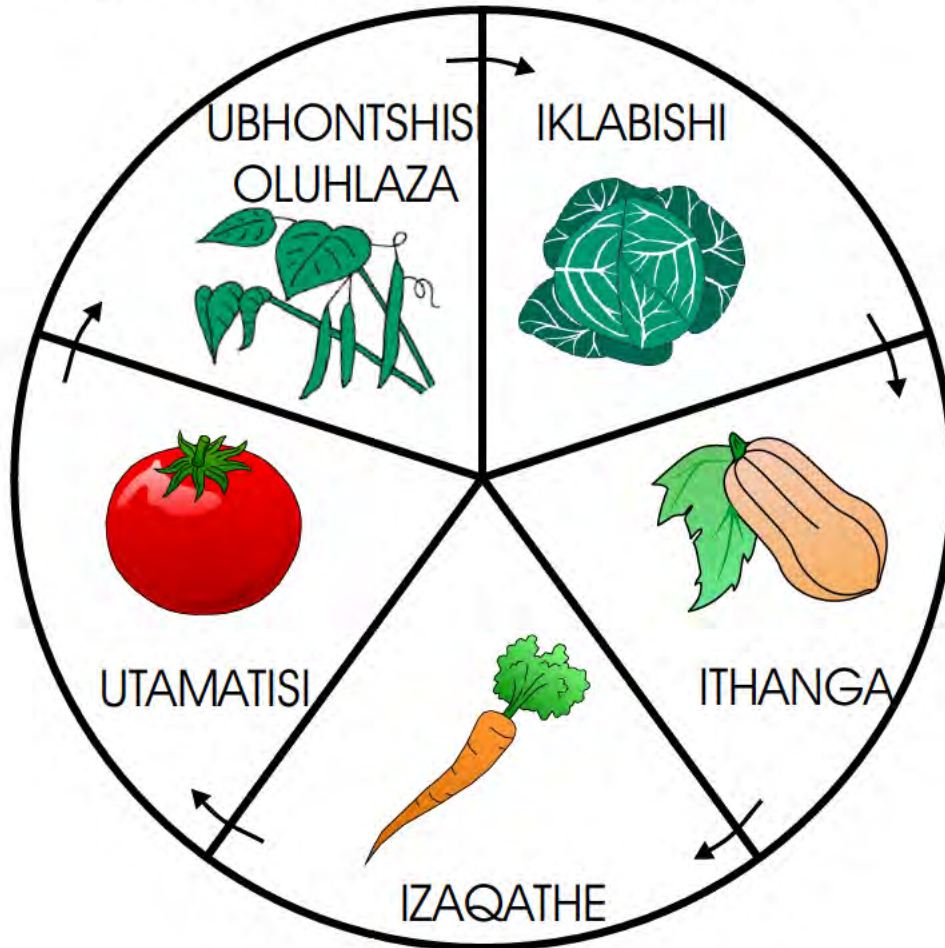


Izimakethe
ezincane
kanye nezomasipala



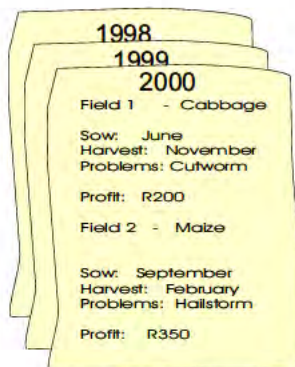
UKUHLLELA (Kuyaqhutshwa)

UKUSHINTSHANISA IZITSHALO



Ukushintshanisa izitshalo kwehlisa izinambuzane ezitshalweni.

Ukugcina amabhuku kahle kukhulisa umkhiqizo kuvimbele nokwenzeka kwamaphutha.



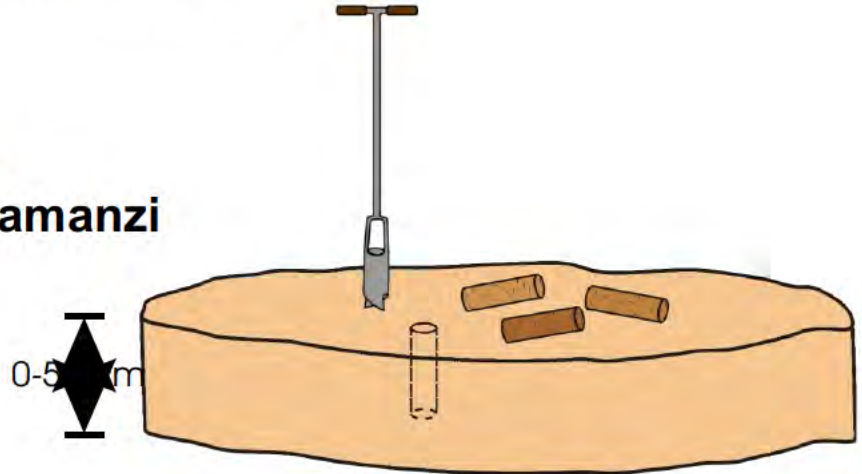


UKULUNGISWA KWENHLABATHI

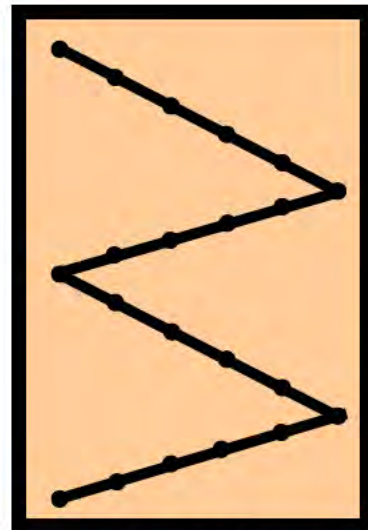
Qiniseka ngokujula kwe nhlabathi

Izinto ezikhubazayo:

- umgubane (idwala)
- umgubane othambile
- ubumba olumumethe amanzi



Thatha imigodi engu 25-30 ngensimu ngayinye



...bese uthumela eCedara ukuze kucwaningwe.

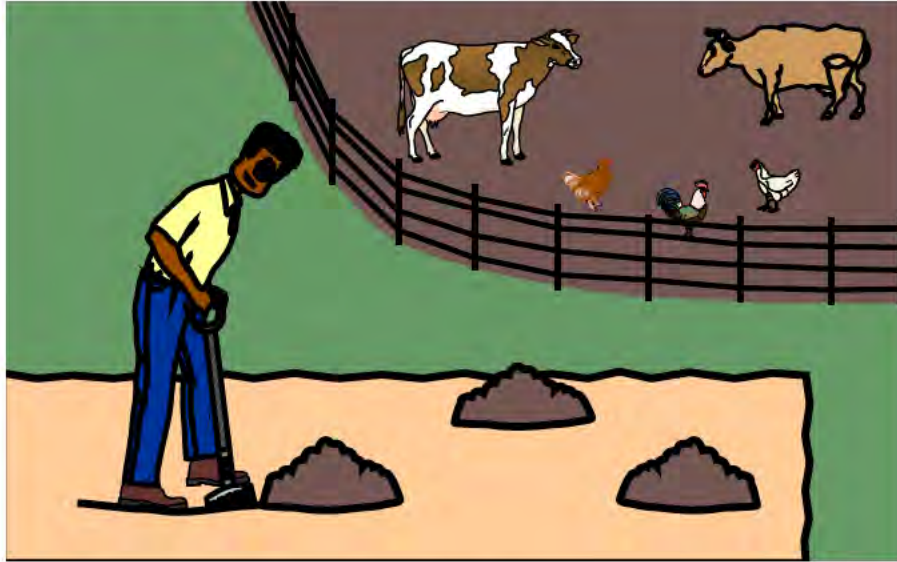
Uma imiphumela yokuhlola incoma umcako wabalimi, umelwe ukuwufaka kusasele inyanga ngaphambili kokutshala.





UKULUNGISWA KWENHLABATHI (Kuyaqhutshwa)

Uma unokutholakala, faka umquba wezinkomo enhlabathini kusasele inyanga ngaphambi kokutshala.



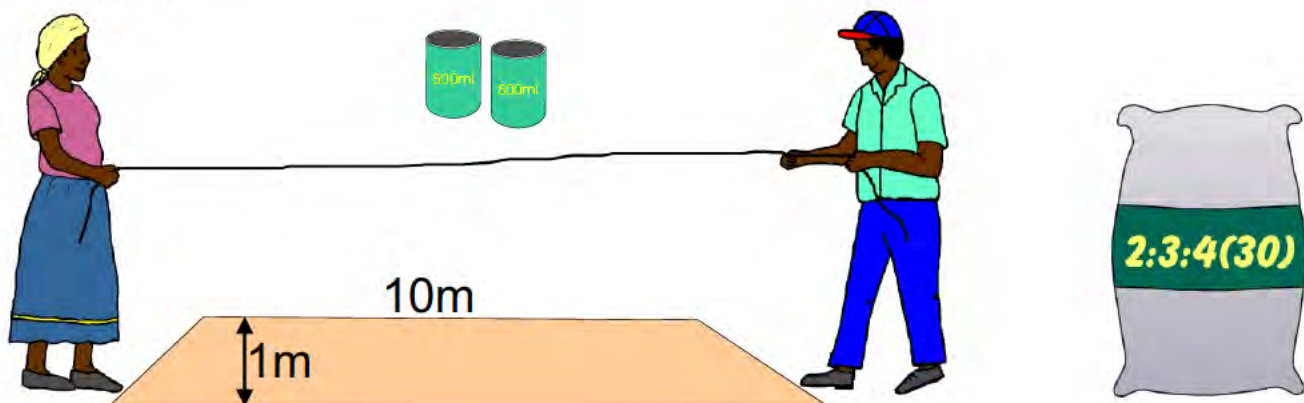
Ukuvundisa ngaphambi kokutshala:

Landela izincomo zase Cedara



noma

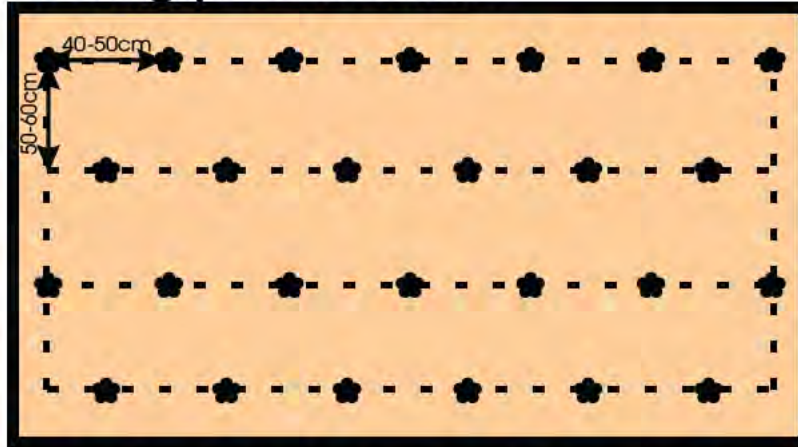
Faka amathini amabili kawoyela awu 500 ml kamanyolo u 2:3:4 (30) endaweni ewu 10m^2 bese uphendula inhlabathi kancane.





UKWEHLUKANISA IZITHOMBO

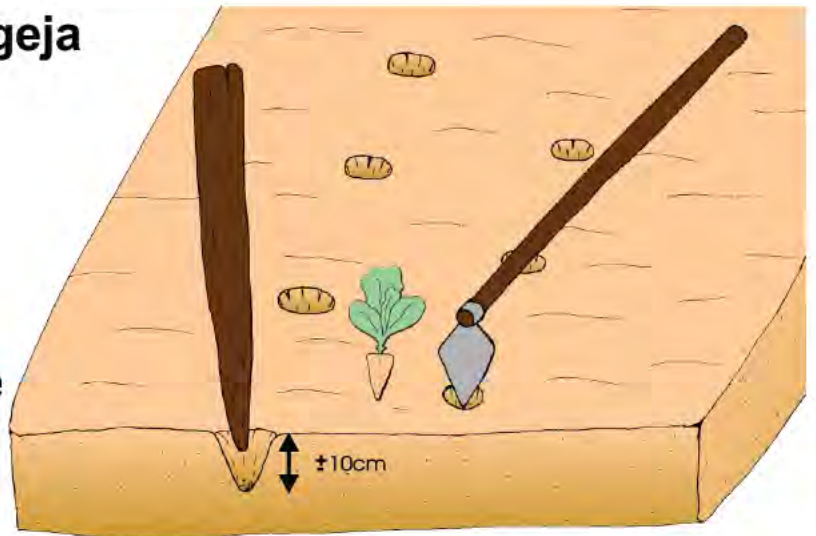
Ukwehlukana kwemigqa nezitshalo:



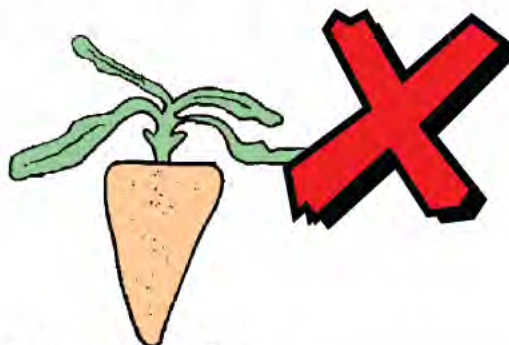
Tshala amazombe ukuze izitshalo zingancintelani ukukhanya, umsoco kanye namanzi.

Sebenzisa ugongolo noma igeja elingucija ukwenza umgodi wokutshala enhlabathini elungisiwe.

Ukushona komgodi kufanele kube cishe u 10cm.



Tshala izithombo ezibukeka ziphile kahle.



Izikhathi ezinhle zokutshala:

- Izinsuku ezipholile noma eziguqubele
- Ekuseni kakhulu noma ntambama.



UKWEHLUKANISWA KWEZITHOMBO

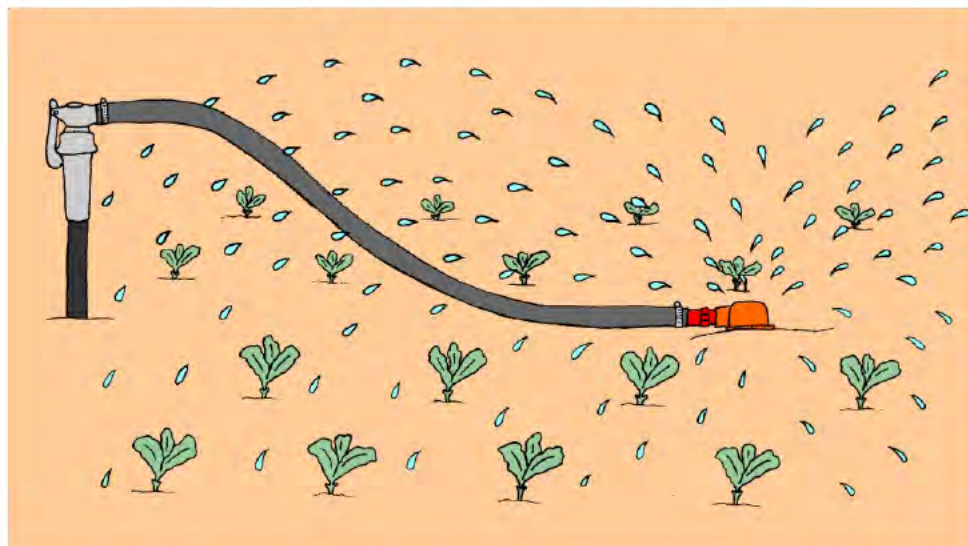
Indlela okuyiyo yokutshala izithombo.



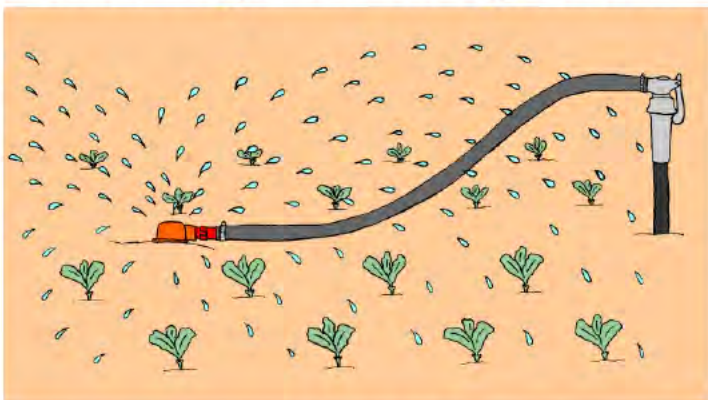
Izimpande ezingu-j



Chelela ngokushesha ngemuva kokutshala.

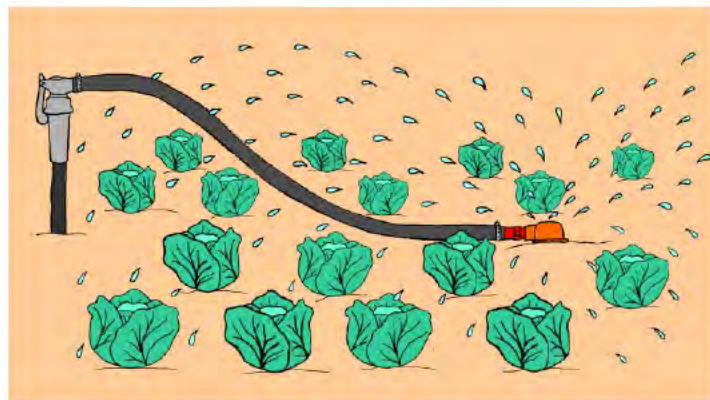


Chelela ngo ± 25 ml ngesonto.



Izithombo:

Chelela kabili noma kathathu
ngesonto emasontwini amathathu
kuyakwamane okuqala.



Eselibumbile:

Chelela kanye ngesonto
kuze kuvunwe.

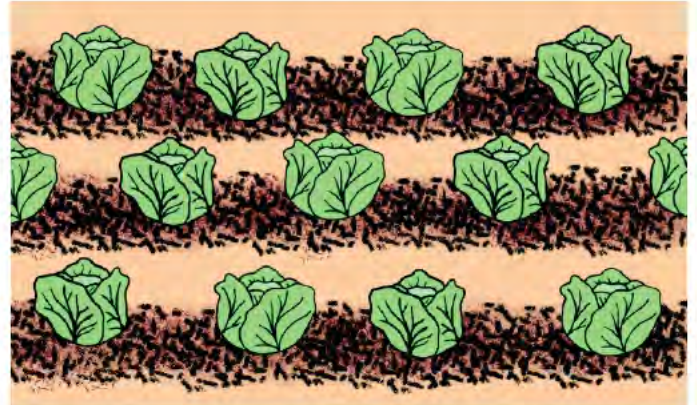


UKUNAKELELWA KWEZITSHALO

Mboza imigqa ngotshani amacembe kanye nezitshalo ezomile.

Loku:

- Kuvikela ukulahleka komswakama
- Kwandisa imvundo enhlabathini
- Kwehlisa izinga lezinambuzane nezifo.



Hlakula lonke ukhula. Ukhula olungenayo imbewu lungasetshenziswa ukwemboza imigqa njengoba kuchaziwe ngenhla.



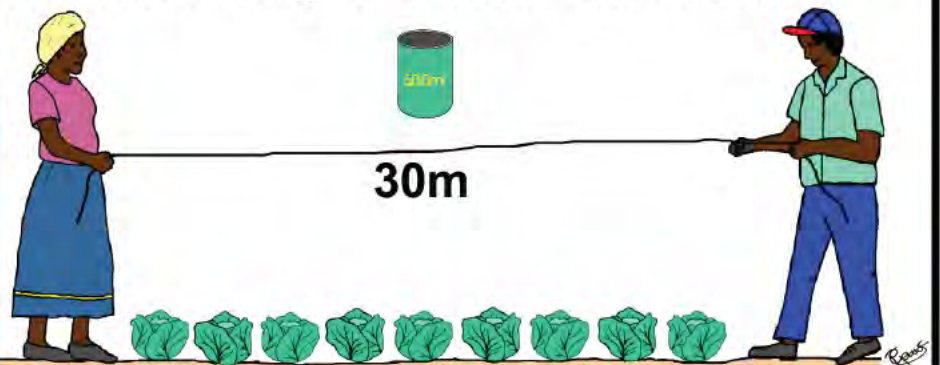
Thela isikhuthaza iLAN emva kwamasonto amathathu kuya kwamahlanu kutshaliwe.



Indlela yokuqala:
Thela ithisipuni le-LAN ($\pm 6g$) kuleso naleso sitshalo.



Indlela yesibili:
Thela ithini elilodwa likawoyela (500ml) le-LAN emigqeni enobude obunga mamitha angamashumi amathathu.





UKULAWULWA KWEZIFO NEZINAMBUZANE

IZINAMBUZANE EZIMQOKA ZEKLABISHI

Izintwala zeklabishi



- Zithwala izifo
- Ehlobo kanye nase kwindla

Ukulawula:

- Chlorpyrifos / mercaptothion

Umswenya



- Unquma iziqu zezitshalo ebusuku
- Ekwindla

Ukulawula:

- Gamma-BHC / Cutworm bait
- Cypermethrin / Deltamethrin

IbHU



(Courtesy: Otto Buhl, Denmark)

- Idla ngaphansi kweqabunga
- Entwasa-hlobo kanye nasehlobo

Ukulawula:

- Chlorpyrifos / mercaptothion
- Cypermethrin / Gamma-BHC

American bollworm



<http://ipm.ncsu.edu>

- Ekuqaleni kwehlobo

Ukulawula:

- Cypermethrin



UKULAWULWA KWEZIFO NEZINAMBUZANE (Kuyaqhutshwa)

IZIFO EZIMQOKA ZEKLABISHI

Downy mildew



- Lapho izulu lipholile, kuswakeme kunomhwamuko
- Isatshalaliswa umoya namanzi
- Icasha ezitshalweni ezifile nokhula
- Idlangile ezithonjeni ezicinene

Ukulawula:

- Hlakula, ususe nezitshalo ezifile
- Ungazi cinanisi izithombo
- Mancozeb
- Copper oxychloride

Ukubola okumnyama



- Isabala kakhulu esimweni esishisayo esinomswakama kanye nomoya
- Isabalaliswa yizinambuzane neminenke
- Ingaphila cise iminyaka emithathu kuya kwemihlanu ezinsaleleni zezitshalo

Ukulawula:

- Gwema ukucinanisa izithombo
- Ukushintshanisa izitshalo
- Hlakula ukhula, unqande nezinambuzane
- Tshala izinhlobo ezisimelayo lesifo

Ukuxabalasa kwezimpande



- Ingaphila iminyaka engamashumi amabili enhlabathini
- Isabalaliswa umoya kanye namanzi enhlabathini
- Iba namandla kakhulu enhlabathini emuncu esalubumba

Ukulawula:

- Umcako wabalimi
- Flusulfamide
- Ukushintshanisa izitshalo

UKULAWULWA KWEZIFO NEZINAMBUZANE (Kuyaqhutshwa)

IZIFO EZIMQOKA ZEKLABISHI

Sclerotinia

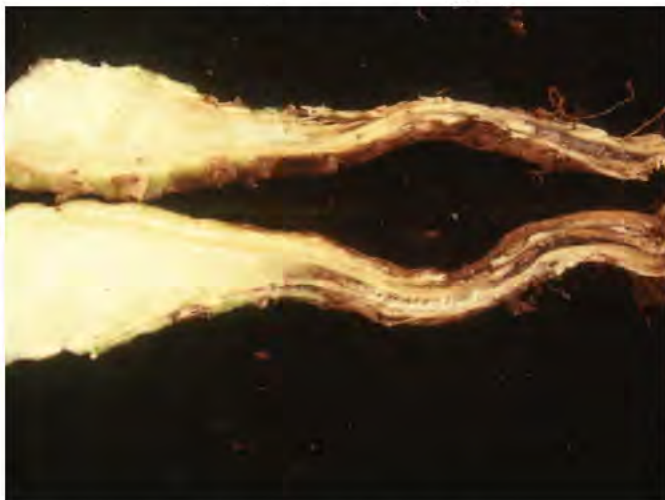


- Ukushisa okukhulu okwelama izimvula ezinkulu
- Yenza amashanda amnyama athi awafane nemisimbane yamagundane

Ukulawula:

- Susa zonke izitshalo esezigula
- Yakha imvunao ngezitshalo ezindala
- Shintshanisa izitshalo

Black leg



- Isimo sezulu esipholile siyayikhuthaza
- Iphila ezinsaleleni zezitshalo nokhula
- Isatshalaliswa yimvula nomoya

Ukulawula:

- Izimbewu ezelashiwe
- Hlakula ukhula
- Shintshanisa izitshalo
- Susa zonke izitshalo esezi gula kanye nemvundo

Erwinia rot



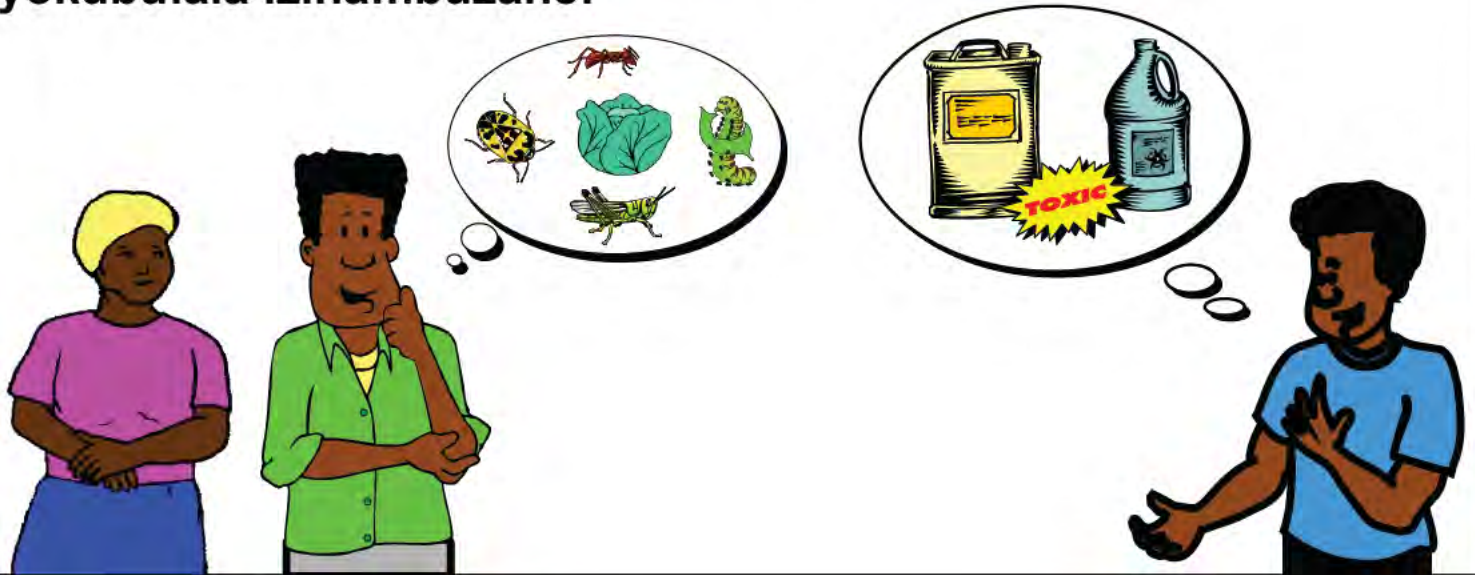
- Ukubola okunuka kabi
- Okubolayo kuba nolwelwe oshelelayo
- Ihlala ezitshalweni ezifile nasenhlabathini
- Ihlasela izitshalo ezilimele

Ukulawula:

- Gwema ukulimala kwezitshalo
- Zigcine izitshalo zipholile futhi zomile
- Shintshanisa izitshalo

UKULAWULWA KWEZIFO NEZINAMBUZANE (Kuyaqhutshwa)

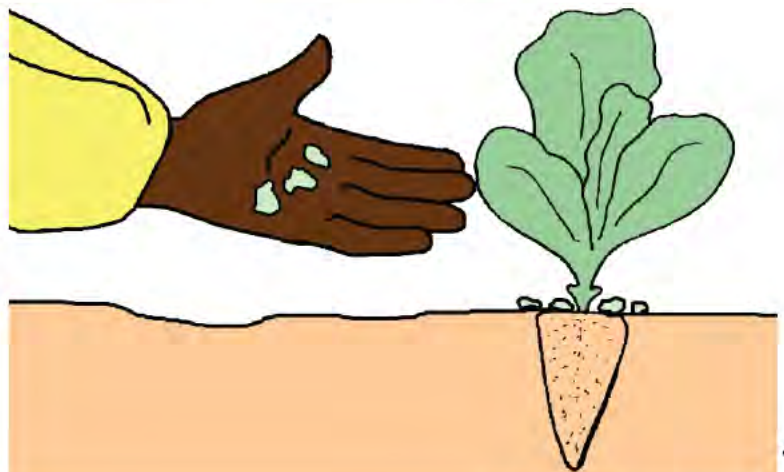
Xhumana nomeluleki ngaphambi kokusebenzisa imithi yokubulala izinambuzane.



Chela mgemithi ebhalisiwe kuphela.



Uma kunesidingo, sebenzisa udobo lomswenya lapho uqeda nje ukutshala isithombo.



UKUVUNA

Ukuvuna:

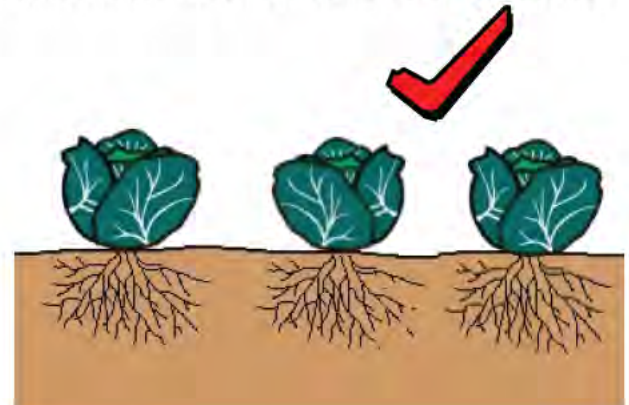
Ungasheshi ukuvuna uma kade uchela ngemithi yokubulala izinambuzane.

Landela imiyalelo

Ungavuni singaka pheli isikhathi okufanele silindwe. Lokhu kungaba yizinsuku noma amaviki.



Vuna lapho izigaxa sezigcwele. Izitshalo kufanele zilingane zonke.



Sheshisa ulidayise iklabishi ngemuva kokulivuna noma uligcine endaweni epholile ukuze lingabuni.



Physical Address

01 Cedara Road
Pietermaritzburg
3200

Postal Address

KZN Department of Agriculture & Rural Development
Private Bag X9059
Pietermaritzburg
3200

Tel: 033 355 9100/Fax: 033 355 9122

Toll-Free: 0800 000 996

Email: callcentre.agriculture@kzndard.gov.za

Internet: kzndard.gov.za

Intranet: <http://home.kzndard.gov.za>



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