



Unduna wa zaulimi

# Kayera ndi Nyemba(Mbeu za njere)

## Buku Lophunzitsa Zakalimidwe



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**EAT HEALTHY  
EAT DIVERSE  
EAT DIFFERENT  
FOOD GROUPS**

## Buku lophunzitsa kalimidwe ka mbeu za njere

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Federal Ministry for Economic Cooperation and Development (BMZ)

Germany

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Kupangangidwanso kaya kulembanso bukuli mobwereza, kwathunthu kapena pang'ono chabe kuyenera kuchula mutu wa bukuli ndi kupereka ulemu kwa wolemba bukuli pokhala mwini wake.

# Za Bukuli

Bukuli ndi limodzi mwa zinchito za bungwe la FANSER. FANSER inakhazikitsidwa ndi unduna wa mgwirizano wa za chuma ndi chitukuko wa dziko la Germany (BMZ) kukhala ngati ganizo limodzi lapadera lochedwa DZIKO LIMODZI – Lopanda Njala, lomwe cholinga chake ndi kugwebana ndi bvuto la njala ndi kuchepekera kwa chakudya mthupi. Chigawo cha GIZ chinapatsidwa mphamvu kuti chiyendetse ndondomeko iyi pa dziko lonse.

Mdziko la Zambia, ndondomeko ya FANSER ili ndi cholinga chofuna kupititsa patsogolo nkhani ya kadyedwe ka thanzi pakati pa azimai omwe ali pa msinkhu waubeleki komanso ana, mnjira zitatu:

1. Kulimitsa njira zopangira mapulano komanso mgwirizano wa zigawo zosiyana siyana mu maboma ang’ono ang’ono
2. Kuyamba kudya zakudya zosiyana siyana komanso kutuntha makhalidwe aukhondo okhuzana ndi kadyedwe ka thanzi
3. Kupitiriza komanso kukopera makhalidwe abwino

FANSER ikugwira nchito ndi azimai a msinkhu waubeleki okwanira 72,000 azaka zapakati pa (15 – 49) ndiponso ana okwanira 52,000 ochepekera pa zaka ziwiri, ku madera a ku m’wawa ndiponso ku Luapula mdziko la Zambia. Cholinga cha bukuli, ndikufuna kupititsa patsogolo mphamvu za mabanja kulima mbeu zosiyana siyana kuti mabanja azidya zakudya za thanzi, zosiyana siyana polingalira magulu azakudya osiyana siyana.

Tikhulupirira, kuti bukuli lizathandiza alimi ang’ono ang’ono ndiponso mabanja osauka kulima Kayera ndi Nyemba

# Mndandanda wa mau Ofupikitsa

BMZ	German Federal Ministry for Economic Cooperation
FANSER	Food and Nutrition Security, Enhanced Resilience Project
GIZ	Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH
MoA	Ministry of Agriculture
NFNC`	National Food and Nutrition Commission
ZARI	Zambia Agriculture Research Institute
SEWOH	Special Initiative ONE WORLD - No Hunger

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# 1. Mau Oyamba



Moni!

Dzina langa ndine Dalitso Zulu. Uyu ndi Mkazi wanga Enelesi ndipo awa ndi ana athu atatu, Musa, Misozi ndi Zelipa. Tikhala ku m'mawa kwa dziko la (Zambia) ndipo tilima Kayera ndi Nyemba kuphatikizapo chimanga. Kayera ndi Nyemba, si mbeu za mtengo wapamwamba chabe ai, komanso ndi zakudya zambwino

zofunikira kuthandiza kubweretsa thanzi pa banja. Kayera ndi nyemba sizabwino chabe pakudya pa banja ai, kulima mophatikiza pamodzi ndi mbeu zina mu munda kumathandiza kuteteza chonde mu dothi. Tinayamba kulima, kayera ndi nyemba zaka zapita kumbuyoku ndipo sitinalekepo kuchoka nthawi yomweyo. Ana athu akumva bwino ndi zakudya zathu zosiyana siyana ndipo anzathu ena anatengera kale njira zathu.

M'bukuli, ndizagawana nanu molimira, mokololera ndiponso mosungira kayera ndi nyemba. Ndichikhulupiriro changa kuti muzaphunzira zambiri kuchokera m'bukuli la maphunziro ndi kuyamba kulima kayera ndi nyemba inunso.

Kulima mbeu komanso zamasamba, zonsezi ziyamba ndi dothi ...

## 2. Kusamalira dothi



### Phindu la dothi lamoyo



KUKOLOLA  
ZOUCHULUKA.



KUTETEZA  
CHILALA.



KUGWIRITSA NCHITO  
MANKHWALA NDI  
FATALEZA WOCHIPA.  
⇒ KUSUNGA NDALAMA



KUCHEPEKERA KWA  
TUDOYO NDI MATENDA!



Zinthu  
zachilengedwe



Tudoyo  
ting'ono



Mphamvu  
zamdothi

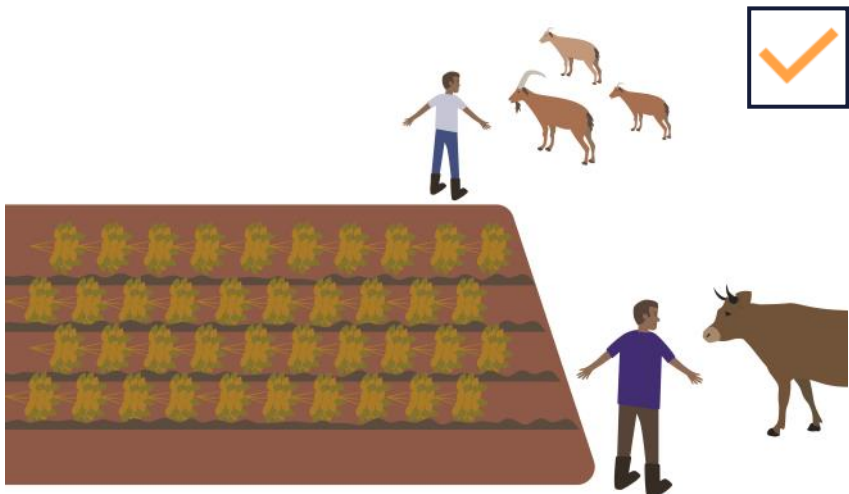


Tudoyo  
tamoyo

## 2.1 Momwe tingathandizire dothi lathu lamoyo

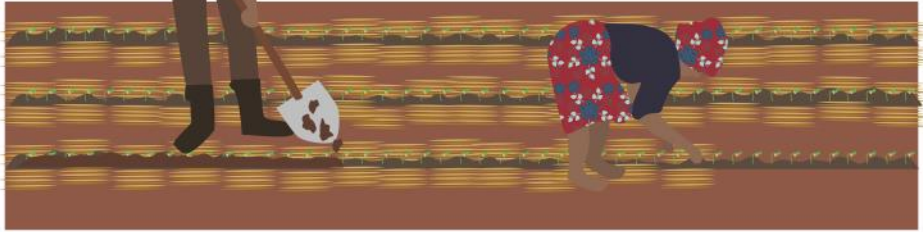


Tinayamba kuonjeza zinthu zachilengwe mdothi posiya zomera zakufa m'munda ndi kuthiramo zoolera za masamba.



Timasunga ziweto kutali ndi munda wathu ndipo sitilora kuti zizidyerera mu munda mwathu. Ziweto zimadya zomera mu munda mwathu. Ichi chimapangitsa munga kubereka pang'ono.





Timaphimba mizere ya gamphani/magampho ndi zosala za mbeu kapena zomera zina monga udzu kapena masamba kuchokera ku mitengo yomwe ili pafupi. Ichi chimateteza kukokoloka kwa dothi komanso kumathandiza kusunga mnyonho m'munda.

### Chifukwa nciani timaphimbira dothi lathu



KUMACHEPETA KUTENTHA MDOTHI NDI KUTHANDIZA KUSUNGA UNYINJI WA TUDOYO TAMOYO MDOTHI.



KUMALORA MADZI AMVULA KULOWA MDOTHI MOSAONONGA PAMWAMBA PA DOTH MOTERO KUTHANDIZA MBEU KUMERA.

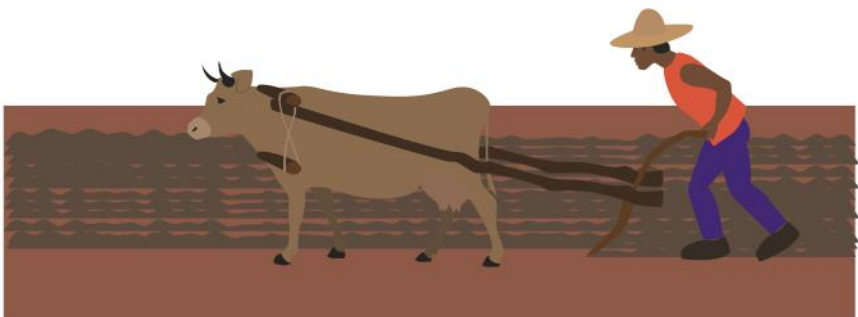


KUMACHEPETSANSO MAUDZU NDIPONSO KUTHANDIZIRA KUBWEZERA CHONDE MDOTHI. UDZU UMALIMBIRANA ZAKUDYA ZOPEZEKA MDOTHI NDI MBEU.

## 2.2 Zinthu zomwe tifunika kupewa kuti titeteze dothi lathu



Sitientha zosala za mbeu chifukwa ndizo zimateteza ku mphepo ya mkhuntho, kutentha kwa dzuwa, ndiponso kukokoloka kwa dothi.



Timapewa kugaula nthaka, chinthu chimene chimaika dothi pa dzuwa, mphepo ya mkuntho yomwe ikhoza kutenga mphamvu zopezeka mdothi, ndiponso kupha tudoyo tokhala mudothi.



Sitigwiritsa nchito mankhwala ambiri, kuphatikizapo fataleza mu munda wathu. Koma timathira ndowe monga zoolera za masamba mu munda wathu.

## Chifukwa nciani, timapewa fataleza



MANKHWALA ENA AMAONONGA MPHAMVU YA DOTHI LATHU KUTI LITHANDIZE MBEU.



FATALEZA WA MANKHWALA NGOKWERA MTENGO. NDALAMA ZOMWE TIMAONONGA POGUA FATALEZA WA MANKHWALA TINKHOZA KUZIGWIRITSA NCHITO PA ZINTHU ZINA.



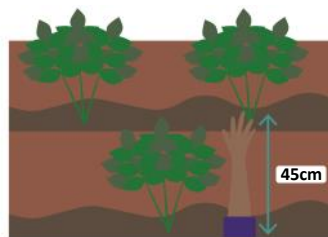
KUGWIRITSA NCHITO FATALEZA WA MANKHWALA MOPITIRIRA MYESO KUKHOZA KUPHA TUDOYO TOKHALA MDOTHI TOMWE DOTHI LIFUNA KUTI LITHANDIZE KUKULA KWA MBEU.

## 2.3 Kusamalira dothi

✓ Timasunga minda yathu popanda maudzu. Maudzu amachotsa mphamvu zabwino mdothi ndipo ichi chimasokoneza kukula kwa mbeu.



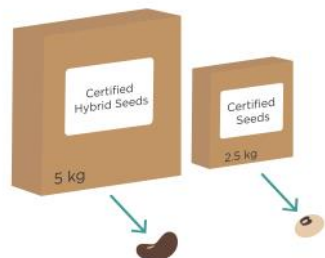
✓ Timabyala pa myeso wa ma centimitara 45 pakati pa mizere kuti tichepetse maudzu ndi kusiya malo abwino kuti mbeu zikul.



✓ Timabyala mbeu zathu kulingana ndi nyengo yobyalira.

Jan	Feb	Mar	Apr
★	★		

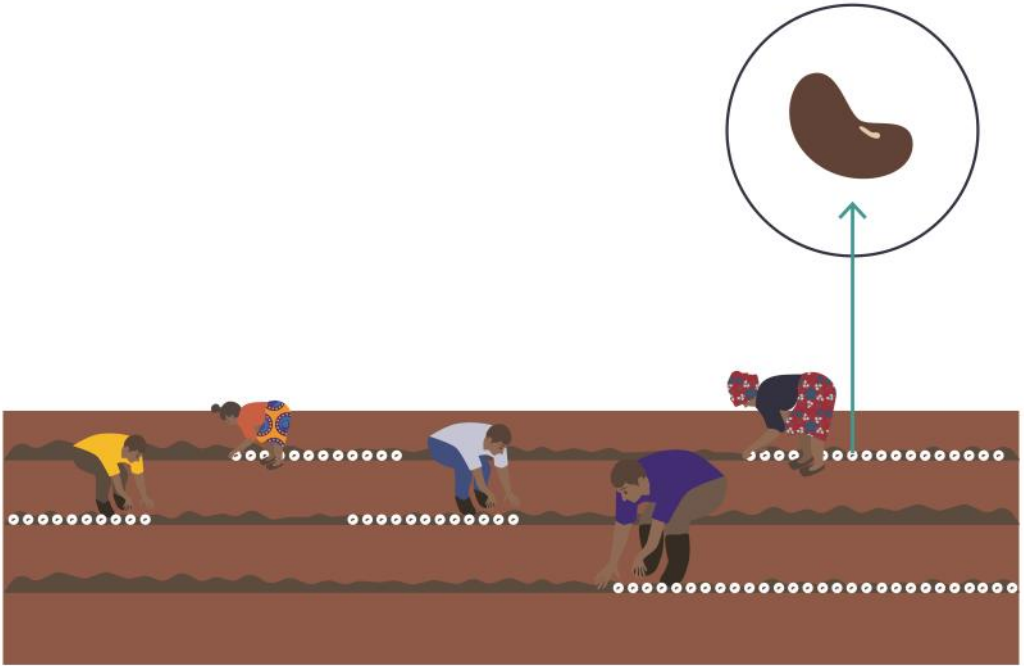
✓ Timabyala mbeu zathu pogwiritsa nchito mbeu yopimidwa. Nthawi iliyonse yobyala timagula mbeu ina yopimidwa.



✓ Timasintha sintha mbeu mu minda yathu kuti tilole dothi kukhalanso ndi mphamvu. Mbeu zosiyana siyana zimabweretsa mphamvu zosiyana siyana mdothi.



### 3. Ulimi wa Kayera



Takhala tikulima kayera kwa zaka zambiri tsopano ndipo tapezapo maphindu ambiri pa banja lathu:

- +** Kayera ali ndi thanzi. Umatipatsa mphamvu zofunikira kwambiri zopititsa patsogolo thanzi.
- +** Kayera akhoza kuchita kasintha sintha ndi mbeu zina kuti tithandize umoyo wa dothi.
- +** Kayera umathandiza kubwezera mphamvu ya nitrogen mdothi ndipo pakutero umathandiza kubwezera mphamvu mdothi.
- +** Kayera akhoza kugulitsidwa ndikubweretsa ndalama mu banja lathu.

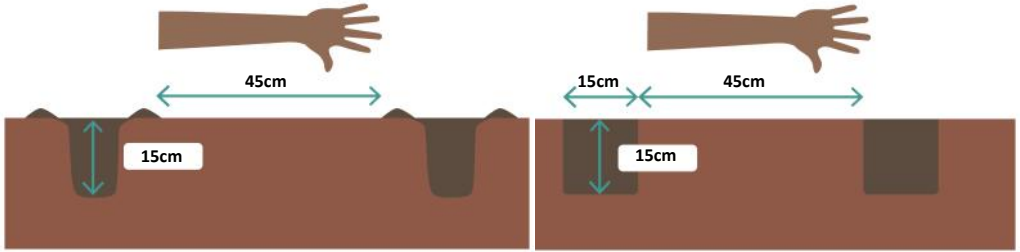
### 3.1 Momwe timakonzera Munda



Pofuna kukonza nthaka yathu pokonzekera nthawi yobyala, timayamba kusewenza m’munda wathu kuchokera mu mwezi wa October, November ndi December.

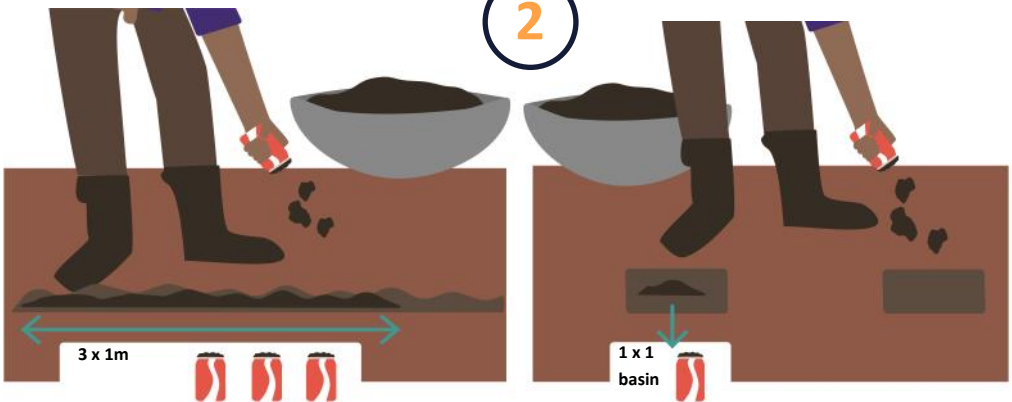
Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
									★	★	★

1



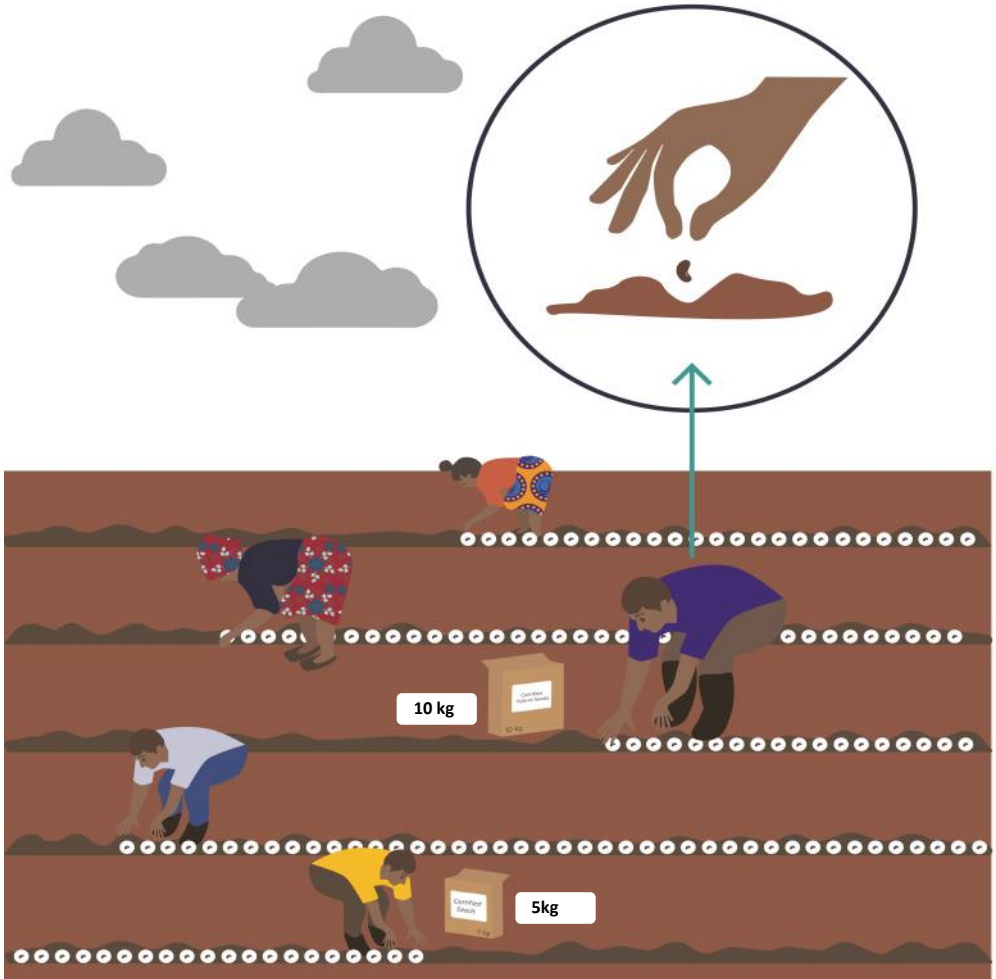
Tikachotsa maudzu m'munda, timakumba mizere ya gamphani kapena magampho. Mizere ya gamphani ifunika kukhala yolowa pa myeso ya ma sentimitala 15. Magampho akhala aatali ma sentimitala 30, kulowa pansu 15 ndiposo 15 kukula kwake. Pakati pa mizere timasiya mpata wa ma sentimitala 45.

2



Tikatero basi timathira zoolera zamasamba kapena ndowe zouma mu mizere ya gamphani kapena magampho. Gwiritsani nchito kakopo ka Coca Cola kamodzi kodzadza pa gampho limodzi, kapena tukopo tutatu pa mitala limodzi mu mzere wa gamphani.

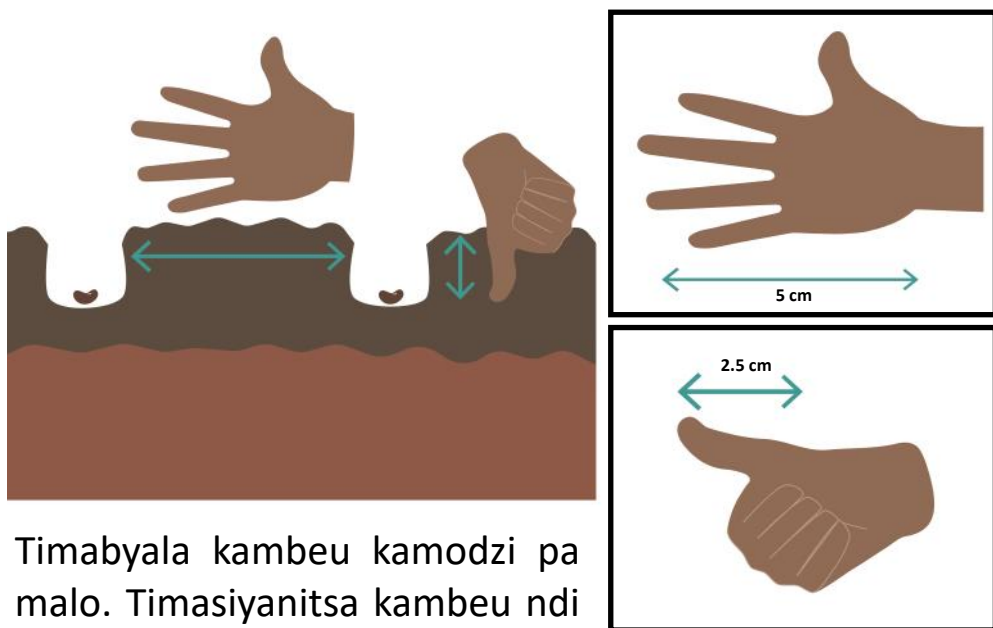
## 3.2 Momwe timabyalira Kayera



Tikatha kukonza munda, timabyalira kayera pambuyo pa mvula yoyamba yokhazikika bwnio mu mwezi wa January kapena February. Makamaka timagwiritsa nchito mbeu zolembera makilo 15 pa lima imodzi.

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
★	★										



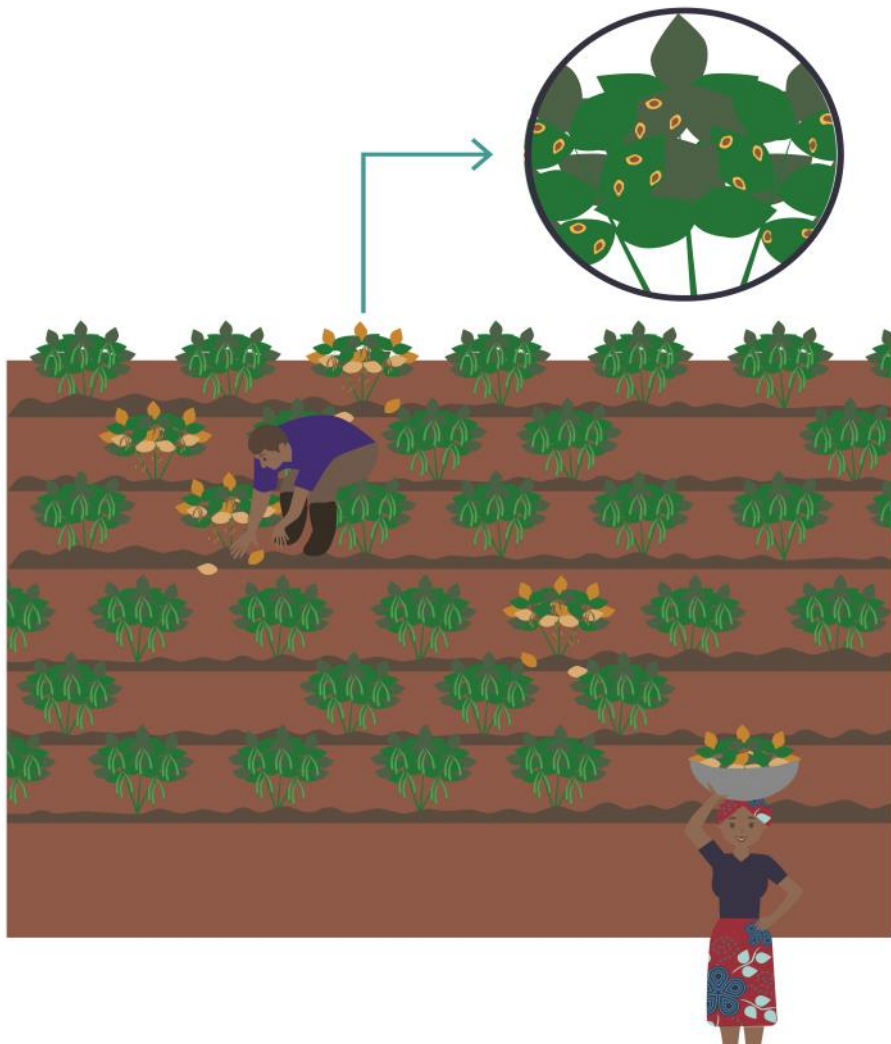


Timabyala kambeu kamodzi pa malo. Timasiyanitsa kambeu ndi kanzake pa mtunda wa macentimitila 5, ndipo macentimitala 2.5 kulowa pansu.

### Kodi tsiku labwino lobyalira Kayera nli?

- ⊕ KAYERA AMAKHALA BWINO KUUBYALA MU SABATA LOYAMBA LA JANUARY/FEBRUARY, NDI KUTSIRIZA MUNDA UMODZI SABATA LISANATHE.
- ⊕ MWACHIDULE, NTHAWI YOBYALIRA INKHOZA KUSINTHIKA MALINGA NIKUONETSETSA KUTI MUZAKOLOLA PAMENE MVULA YENI YENI YAPITA.
- ⊕ KUBYALA KWA M'MALANGA KUKHOZA KUCHITIKA KUMATHERO KWA MWEZI WA JULY KAPENA KUMAYAMBIRIRO KWA MWEZI WA AUGUST M'MISHAMBO KAPENA MOCHITA KUTHIRIRA.

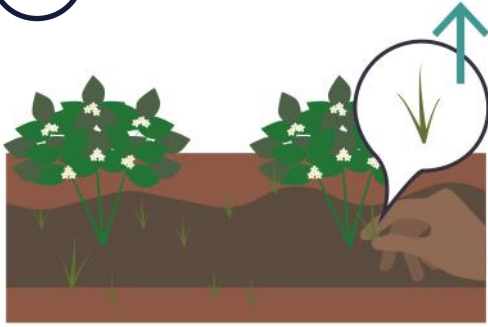
### 3.3 Momwe Timasamalira Tudoyo ndi Maudzu



Panthawi yonse pamene kayera wathu anali kukula, tinali kuyanganira minda yathu ndi kuonesetsa kuti mbeu zathu zili ndi moyo wabwino. Tinachotsa mbeu zodwala mwa msanga msanga.

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
★	★	★									

1



Kupalira ndi manja kumafunikira pa nthawi imene kayera ali ndi maluba kuti titeteze kugwetsa maluwa. Kupalira kumachotsa mpikisano wa zakudya, madzi komanso dzuwa.

Mutabyala	Sabata	Sabata	Sabata	Sabata	Sabata
Kupalira koyamba	★	★			
Kupalira kwachiwiri				★	★

2



Mbeu zodwala zifunika kudzulidwa ndi mizyu yake mosachedwa. Ndipo timaziundira kubwalo kwa munda. Tikaundira pafupi ndi munda wathu kaya dimba lathu zikhoza kupereka matenda ku mbeu zolimba ngakhale zili zoundiridwa. Momwe mungadziwire mbeu zodwala. (ANNEX 1)

Muta-byala	Sabata 1	Sabata 2	Sabata 3	Sabata 4	Sabata 5	Sabata 5	Sabata 6	Sabata 7	Sabata 8	Sabata 9
Sandani		★	★	★	★	★	★	★	★	★

### 3.4 Zomwe Timachita Tikakolola



Timakolola pomwe makoko akhwima ndipo auma. (Pamene makoko asandulizika kukhala ofuwira, ndipo masamba atagwa pansi). Nthawi zina, kukolola kwachibwereza nkwabwino pofuna kuonesetsa kuti tikolola kayera pomwe wakhwima kofikapo. Sitizula mitengo ai, chifukwa mizyu zimaola ndipo zimabwezera mphamvu ya Nitrogen mdothi chomwe ndi chinthu chabwino ku dothi.

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
			★	★	★						

1



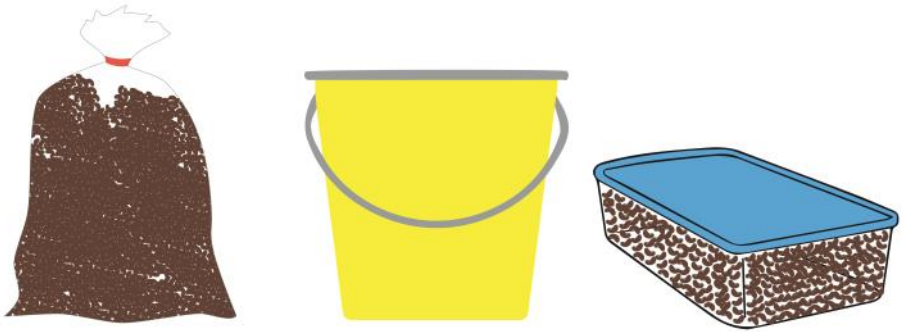
Tikakolola, timabula kayera ndi kamtengo. Timapepeta kayera ndikuchotsako makoko. Pofuna kupatula kayera wabwino ndi okongola timagwiritsa nchito manja.

2



Tikapepeta kayera ku makoko ndinso timitengo, timaumika pa dzuwa. Timausamala pafupi pafupi ndi kuchotsamo fumbi ndi za dothi zina zonse.

### 3.5 Momwe Timasungira Kayera



Timasunga kayera mu zinthu zaukhondo ndiponso zouma bwino mkati mwake. Tikhoza kugwiritsa nchito ma pepala a pulasitiki omangirira kumlomo, ma beketete a pulasitiki kapena ma bini a pulasitiki. Pakutero banja lizakhala ndi chakudya cha thanzi chaka chonse chathunthu ndipo tikhoza kugulisapo kayera wina. Kodi mudziwa kuti kayera ouma ukhoza kusungidwa kwa miyezi 8 mpaka 12?

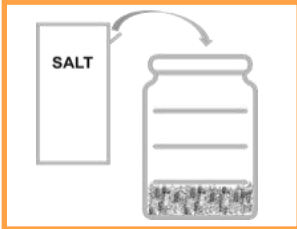




Kayera umafunika wauma mokwanira mukalibe kuuika m'malo mosungira. Tingadziwe izi pogwiritsa nchito mayeso a mchere.



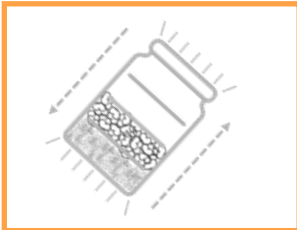
Tizafunika kapu youma yaukhondo, mchere ndi kayera ouma.



Tiyika mchere mu kapu, osafika pa theka la kapu koma pango'no chabe



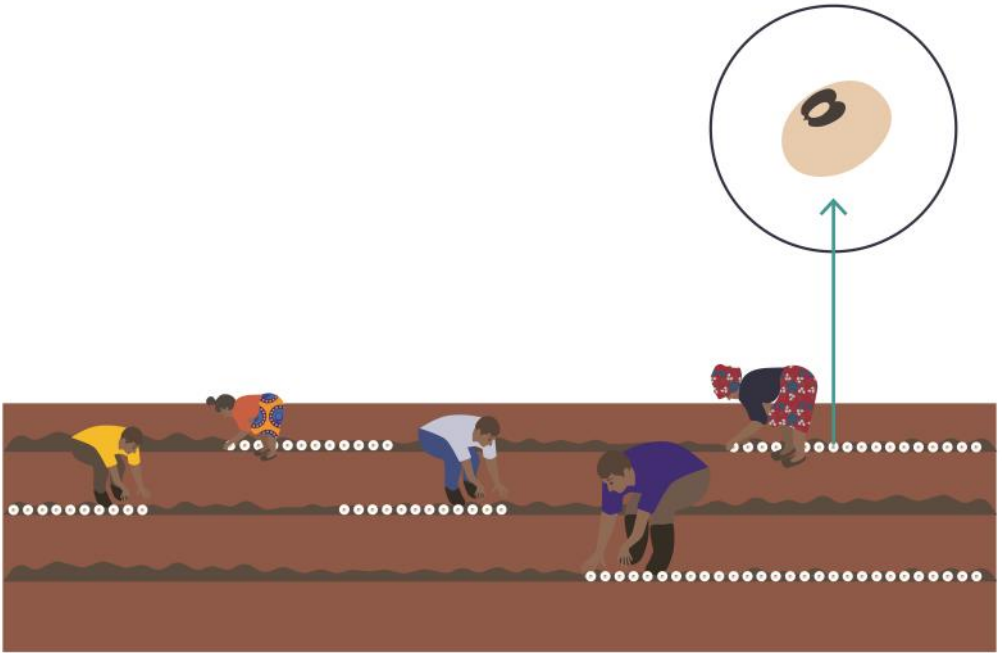
Ndipo tiikamo kayera kufika pa theka la kapu.







Pambuyo pake, titseka pakamwa pa kapu ndi kukuchumula ndi kusiya kuti zonse zikhazikike patapita mphindi khumi.

Ngati mchere wamadzi wagwirira mphepete mwa kapu ndiye kuti kayera ukali ndi madzi.

## 4. Ulimi wa Nyemba



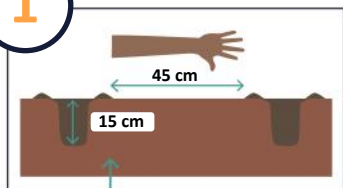
M'malo mwa kayera, ntahwi zina timabyala nyemba. Ni kasintha sintha wa bwino mu ulimi wathu:

-  Nyemba ndi za phindu kwambiri ku chakudya chathu, maka maka pakuti ngakhale masamba ake adyewa.
-  Nyemba zikhoza kugwiritsidwa nchito ngati mbeu yophimbira m'munda kuteteza kukokoloka kwa dothi komanso kuteteza kumela kwa maudzu m'munda.
-  Nyemba zimabwezera Nitrogen mdothi ndipo zimathandiza kubwezera chonde mdothi.
-  Nyemba zikhoza kugulitsidwa ndi kubweretsa chuma ku banja.



## 4.1 Momwe Timakonzera Munda

1



Tikachotsa maudzu m'munda, timakumba mizere ya gamphani kapena magampho. Mizere ya gamphani ifunika kukhala yolowa pa myeso ya ma sentimitala 15.

Magampho akhala aatali ma sentimitala 30, kulowa pansu 15 ndiposo 15 kukula kwake. Pakati pa mizere timasiya mpata wa ma sentimitala 45.

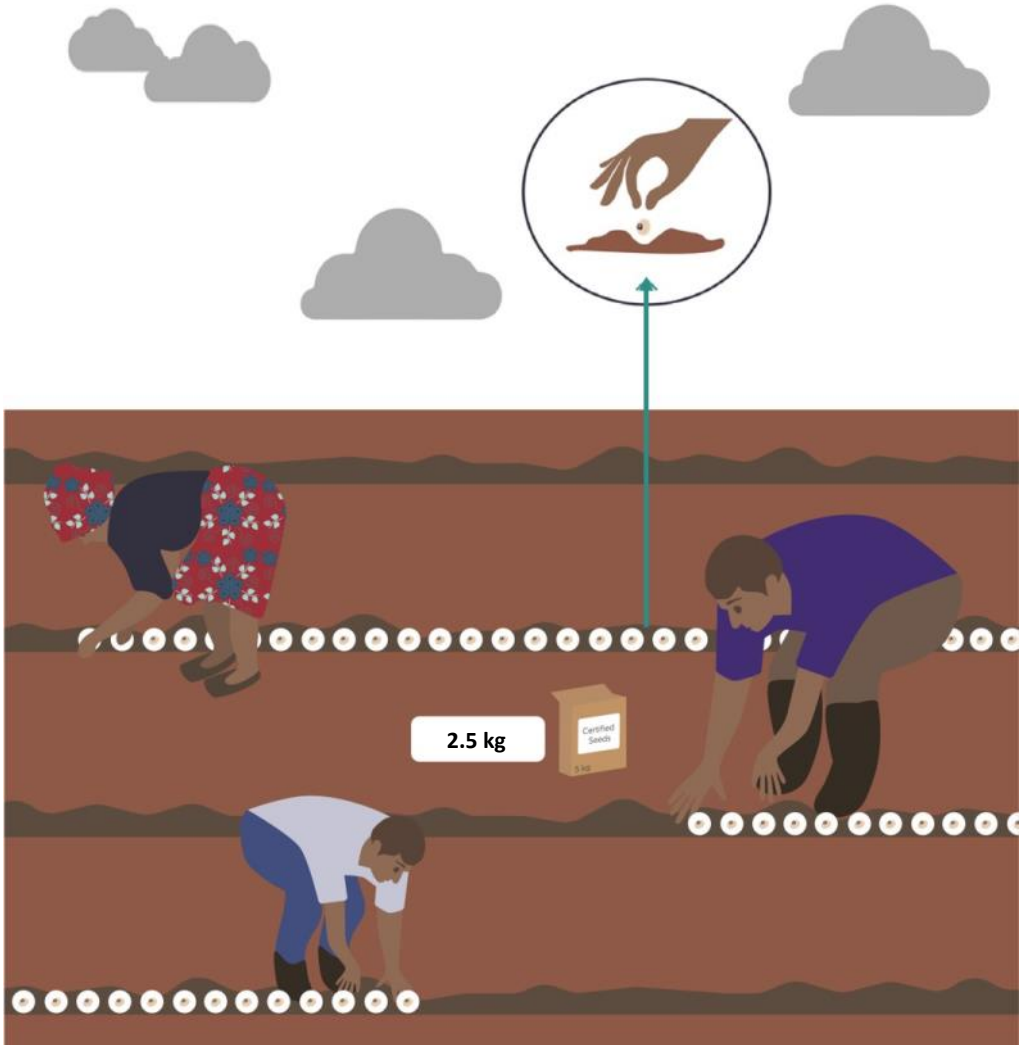
2



Tikatero timathira zoolera za masamba kapena ndowe mu mizere ya gamphani. Kakopo kamodzi pa gampho, kapena tukopo tutatu pa mitala imodzi m'mzere wa gamphani.

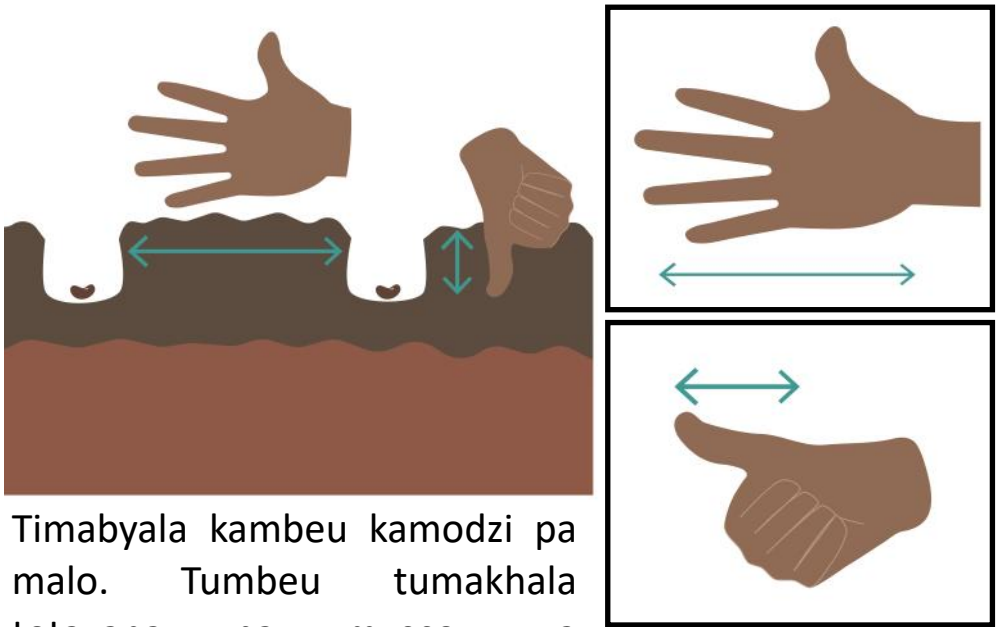
Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
									★	★	★

## 4.2 Momwe Timabyalira Nyemba



Tikatsiriza kukonza munda tiyamba kubyala nyemba pa mvula yoyamba yokhazikika. Nthawi zambiri timagwiritsa nchito myeso wa makilo Awiri ndi Theka (2.5) pa Lima.

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
★											★



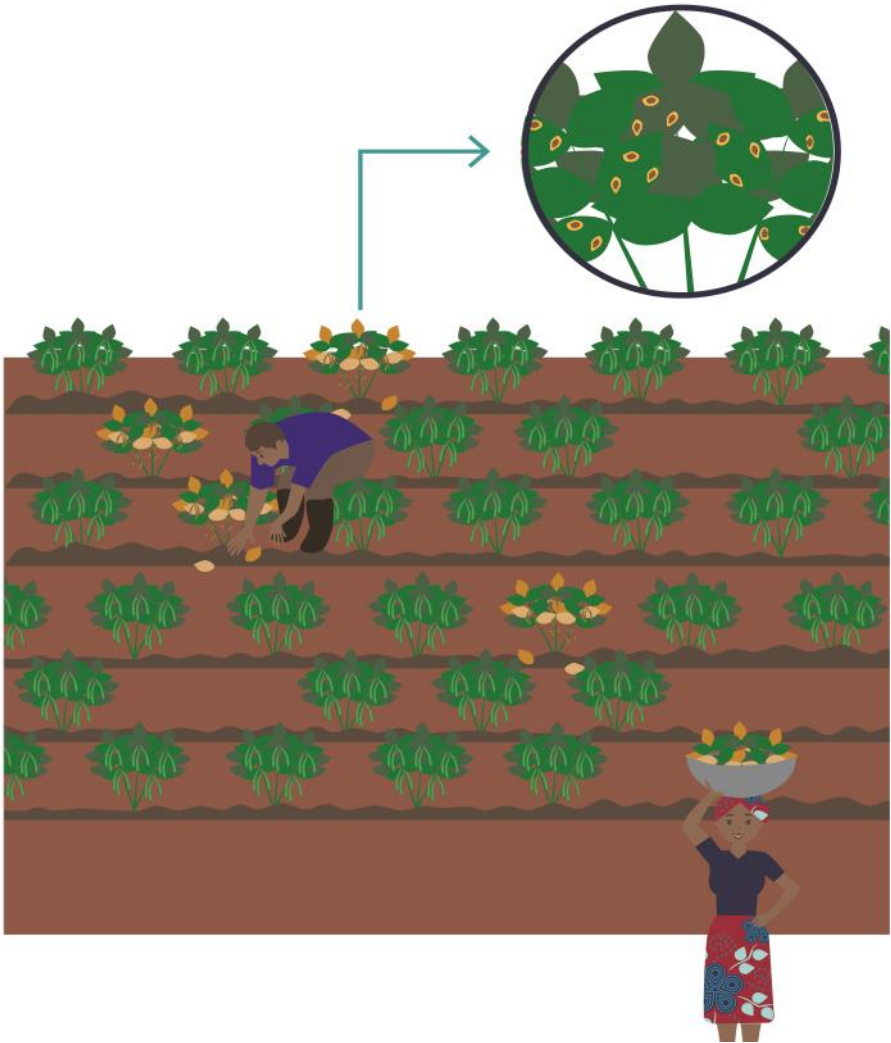
Timabyala kambeu kamodzi pa malo. Tumbeu tumakhala totayana pa myeso wa macentimitala 5 ndi kubyalidwa pa myeso wa macentimitala 2.5 pansi.

### Kulimira pamodzi ndi mbeu zina



- ⊕ NGATI MBEU YOPHIMBA NTHAKA, NYEMBA ZIKHOZA KULIMIDWA PAMODZI NDI CHIMANGA, MAPILA KAPENA MAWERE.
- ⊕ NGATI MULIMIRA PAMODZI NDI MBEU ZINA, NYEMBA ZIFUNIKA KUBYALA PATAPITA MASABATA 4 KAPENA 6 MUTABYALA CHIMANGA, MAPILA KAPENA MAWERE NDIPO PAKHALE KUSIYANA KWA MACENIMITALA 20 PAKATI PA MIZERE.
- ⊕ NGATI MUFUNA KULIMA NYEMBA NGATI MBEU, SITIMALIMIRA PAMODZI NDI CHIMANGA.

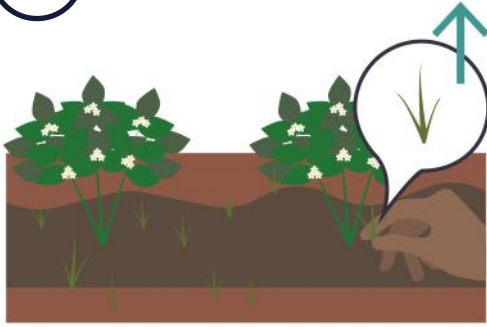
## 4.3 Momwe tingatetezere tuduyo ndi maudzu



Pomwe nyemba zathu zinali kukula tinali kuyendera munda wathu ndi kuonesetsa kuti mbeu zathu zili ndi moyo wabwino, pochotsa maudzu ndi mbeu zodwala

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
★	★	★									★

1



Kupalira ndi manja kumafunikira pa nthawi imene kayera ali ndi maluba kuti titeteze kugwetsa maluwa. Kupalira kumachotsa mpikisano wa zakudya, madzi komanso dzuwa.

Mutabyala	Sabata Loyamba	Sabata Lachiwiri	Sabata Lachitatu	Sabata Lachinai	Sabata Lachisanu
Kupalira koyamba		★			
Kupalira kwachiwiri				★	★

2



Mbeu zodwala zifunika kudzulidwa ndi mizyu yake mosachedwa. Ndipo timaziundira kubwalo kwa munda. Tikaundira pafupi ndi munda wathu kaya dimba lathu zikhoza kupereka matenda ku mbeu zolimba ngakhale zili zoundiridwa. Momwe mungadziwire mbeu zodwala. (ANNEX 1)

Muta-byala	Sabata 1	Sabata 2	Sabata 3	Sabata 4	Sabata 5	Sabata 5	Sabata 6	Sabata 7	Sabata 8	Sabata 9
Sandani			★	★	★	★	★	★	★	★

## 4.4 Zomwe Timachita Tikakolola?



Timakolola pomwe makoko akhwima ndipo auma. (Pamene makoko asandulizika kukhala ofuwira, ndipo masamba atagwa pansi). Nthawi zina, kukolola kwachibwereza nkwabwino pofuna kuonesetsa kuti tikolola nyemba pomwe zakhwima kofikapo. Sitizula mitengo ai, chifukwa mizyu zake ndi zabwino ku dothi. Kuchedwa kukolola kumabweretsa tudoyo mu munda.

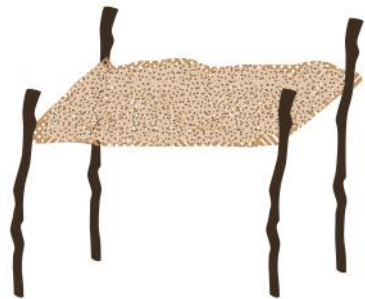
Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
			★	★	★						

1



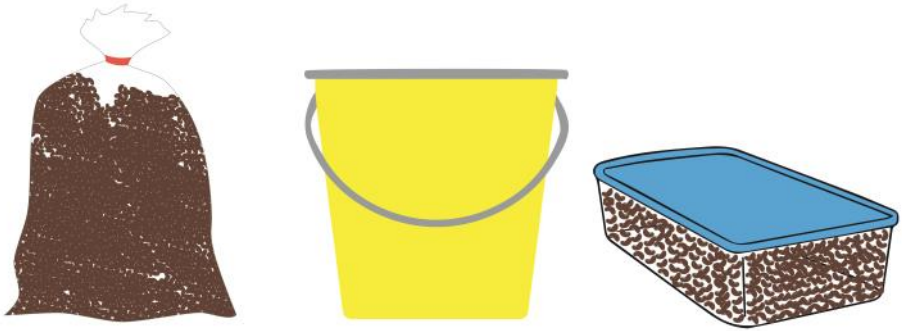
Tikakolola, timabula nyemba ndi ka mtengo. Timapepeta nyemba kuchotsako makoko ndi zoola. Kenaka timaziumika pa dzuwa. Timazisamalira pafupi pafupi ndi kuchotsako fumbi ndi za dothi zina ziri zonse.

2



Tikapatula (tikapepeta) nyemba kuchotsako makoko ndi mbeu zina zoola timaziumika pa dzuwa. Timazipepeta pafupi pafupi ndi kuchotsako fumbi ndi madothi ena.

## 4.5 Momwe Timasungira Nyemba



Timasunga nyemba mu zinthu zaukhondo ndiponso zouma bwino mkati mwake. Tikhoza kugwiritsa nchito ma pepala a pulasitiki omangirira kumlomo, ma bekete a pulasitiki kapena ma bini a pulasitiki. Pofuna kusimikizira kuti nyemba zathu zauma bwino timagwiritsa myeso wa mchere.

### Nyemba zogwidwa ndi matenda (Kapena Kayera)



- ⊕ NGATI NYEMBA ZATHU ZAPEZEKA ZOBOOKA TITAZIIKA M'MALO OSUNGIRA NTHAWI YOMWEYO TIMACHOTSA NYEMBA ZOOLA ZIJA PA ZINA NDI KUZIIKANSO BWINO PAKUSANKHULA.
- ⊕ KUTI TICHOTSE TUDOYO MU NYEMBA, TIMATHILAMO PHULUSA KAPENA KUIKAMO MATEPO A MTENGO WA GLIRICIDIA .





Kodi mudziwa kuti nyemba zouma mukhoza kuzisakaniza ndi phulusa ndi kuzisunga kwa myezi 8 mu chosungira chabwino momwe simulowa mphepo monga masaka kapena mabutiza. Masamba a Nyemba naonso akhoza kusungidwa powazako madzi a mchere ndi kuwaika mosungira mwa bwino mouma monga saka kapena chibutiza kuti mukazigwiritse nchito pa nthawi ya m'malanga pomwe ndiyo za masamba ndi zobvuta.

# **ANNEX I: Dzindikirani matenda ndi tudoyo ta mbeu**

## **TUDOYO TODZIWIKA BWINO**

Nyemba imakoka tudoyo tambiri. Tudoyo todziwika bwino pa nthawi ya kukula kwa nyemba ndi utu:

1. Nsabwe za m' masamba
2. Kachibungu komwa madzi a nyemba
3. Zozo
4. Kachibungu koboola makoko

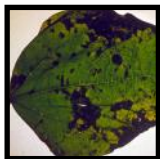
Kuteteza tudoyo pogwiritsa nchito njira za chilengedwe imodzi kapena ziwiri nkofunikira kwambiri.

Mukhoza kuteteza tudoyo ndi matenda mu mbeu zanu pogwiritsa nchito njira izi; Kasintha sintha wa mbeu, kulima mbeu ziwiri pa malo amodzi, kulima mbeu zosiyana siyana m'munda umodzi, pogwiritsa nchito manja, ndiponso kusakaniza zinthu/mitengo yachilengedwe ndi kuthira mu mbeu zanu monga iyi:

- ⊕ Tephrosia
- ⊕ Sabola osinja
- ⊕ Fodya osinja
- ⊕ Ufa wa mtengo wa Moringa
- ⊕ Ufa wa Garlic
- ⊕ Madzi a mitengo ya Neem kapena mbulu gum (Blue gum)



**Anthracnose:** Kufuwira kwa mizipe ya masamba kungsi kwa tsamba. Izi zimafalikira pa mwamba pa tsamba, kumakoko, ndi njere.



**Angular leaf spot:** Tumadontho tofuwira komanso toyera pa mizipe ya tsamba. Ngati matendawa apita patsogolo masamba amasanduka achikasu nathodoka nthawi yake isanakwane



**Scab:** Kubooka booka kwa tsamba monga mphele.



**Bean Rust (Nyerere ya Nyemba):** Madontho ofuwira fuwira pamwamba ndi pansu pa tsamba, ku mtengo ndinso kumakoko.



**Bean common mosaic virus:** Kukwingwinyala ndi kupirimbondira kwa masamba.



**Common bacterial blight:** Mathuza pa tsamba. Mathuzawa amakula nakumana kumana pa tsamaba lonselo.



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